**Functional Requirements**

**Provision of Comprehensive Cloud-based Digital Platform**   
**for Gerontech Education and Rental Service *(RFP Ref: HKCSS-RENTAL-SYSO39)***

A description of each checklist column is provided below:

|  |  |
| --- | --- |
| **Column Name** | **Description** |
| Description | This provides a description of requirements of the System. |
| P (Priority) | This indicates the priority of each requirement. The three categories of priority are:   * M – Mandatory: the features must be provided by the System * P – Phase 2: the features to be provided in 2nd phase by the System * O – Optional: if the feature is not available, there would be no negative feedback in the evaluation. Optional functions will only be considered for the awarded vendor. |
| Comply | To be completed by the Vendor. Please mark “” under the appropriate box:   * “Y” if the requirement can be complied * “F” if only fractional requirements can be complied * “N” if requirement cannot be complied   If “F” or “N” is checked, please provide justifications under “Workaround / Comments.” |
| Workaround /  Comments | To be completed by the Vendor.  To provide comments or be used to cross reference to more extensive explanation or other sections where appropriate. |

A. Preparation & Customization Strategy 3

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J. Marketing & Event 50

K. Security & Privacy Protection 55

| **Item** | **Service and System Requirements** | **P –** Priority **| Y –** Yes **| F –** Fractional **| N –** No  **M** – Mandatory | **P** – Phase 2 | **O -** Optional | | **P** | **Comply** | | | **Workaround / Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Y** | **F** | **N** |
| **A** | **PREPARATION & CUSTOMIZATION STRATEGY** | |  |  |  |  |  |  |
| **A1** | **Existing System Review** | | |  |  |  |  |  |
|  | Workflow Diagrams **-** Review the Client's existing and proposed workflow diagrams to gain insights into their current structure and identify future needs | | | M |  |  |  |  |
|  | Existing eRent Platform **-** Access the Production accounts of the existing platform to review its functionality and limitations | | | M |  |  |  |  |
|  | Operational Google Sheets and Forms **-** The existing platform functions with the aid of Google Sheets and Forms for daily operations. The Vendor is expected to review and identify integration strategies for the new platform. | | | M |  |  |  |  |
|  | Existing Websites **-** Review the organization's existing websites to understand their current structure, functionalities, and limitations. Assess how the newly proposed workflow diagrams align with the requirements for the new website. | | | M |  |  |  |  |
| **A2** | **Gap Analysis** | | |  |  |  |  |  |
|  | Analyze the Client's proposed workflow diagrams, provide expert recommendations, and optimize the workflow to align with the SaaS solution's capabilities, minimizing customization for efficiency. | | | M |  |  |  |  |
|  | Identify functional gaps between the current system and the proposed SaaS solution and propose recommendations to bridge these gaps with minimal modifications. | | | M |  |  |  |  |
| **A3** | **Feasible Workflow & Prototype Development** | | |  |  |  |  |  |
|  | A step-by-step workflow design that incorporates the proposed SaaS solution's capabilities and aligns with the operational needs of the project. | | | M |  |  |  |  |
|  | Develop a functional prototype of the system to showcase its usability, accessibility and core functionalities. This serves as a tangible representation of the system for stakeholder engagement and public awareness. | | | M |  |  |  |  |
| **A4** | **Implementation Plan** | | |  |  |  |  |  |
|  | Develop a phased module deployment plan that prioritizes foundational components and essential workflow functionalities. | | | M |  |  |  |  |
|  | Define time estimates for each phase of development and deployment. | | | M |  |  |  |  |
|  | Develop a plan for transitioning from the old system to the new platform without disruption in operations. | | | M |  |  |  |  |
|  | Include risk mitigation strategies to address potential disruptions during the transition phase. | | | M |  |  |  |  |
| **B** | **CRM** | |  |  |  |  |  |  |
| **B1** | **User Subsections** | | |  |  |  |  |  |
|  | Guest Users - public users who can access the web platform without login | | | M |  |  |  |  |
|  | Member users - registered rental service users | | | M |  |  |  |  |
|  | Service provider users - Individuals such as therapists, professionals, drivers and trainers whose accounts are activated via an invitation link or by an administrator. They have access to their own accounts and limited information necessary for facilitating service provision to their assigned cases, ensuring privacy and compliance | | | M |  |  |  |  |
|  | NGO users: They have full administrator rights to manage their own services, but their access to user information from other NGOs is restricted and only permitted when a shared user is involved. | | | M |  |  |  |  |
|  | Funder users: Users representing funding organizations who oversee program status and resources. | | | O |  |  |  |  |
|  | B2B users: including other NGOs and merchants who are external participants offering or requesting services on the platform | | | P |  |  |  |  |
| **B2** | **User Role Management** | | |  |  |  |  |  |
|  | Allow administrators to assign and manage roles for each user, ensuring appropriate access and permissions based on their responsibilities. | | | M |  |  |  |  |
|  | Implement role-based access control to restrict or grant access to specific features and data | | | M |  |  |  |  |
|  | Enable bulk actions for managing multiple users at once, such as batch updates, role assignments, or deletions. | | | P |  |  |  |  |
|  | Provide tools for importing and exporting user data to facilitate large-scale user management tasks. | | | M |  |  |  |  |
| **B3** | **Member Registration** | | |  |  |  |  |  |
|  | Personal Information - Allow new users to register with information included but not limited to:   1. Full name (in English and Chinese) 2. Title and gender 3. First 4 digits of the ID card number 4. Date of birth and auto age calculation 5. Contact phone number 6. Alternative/emergency/carer’s contact phone number 7. Delivery and billing addresses and address proof upload 8. Email address 9. Preferred monthly payment method 10. Questionnaires related to user tiers with the option to attach scanned documents for record proof | | | M |  |  |  |  |
|  | Duplicate Registration Prevention   1. Implement a mechanism to detect and reject duplicated registrations by checking unique identifiers, such as phone numbers, email addresses etc. 2. Provide clear error messages to inform users of duplicate registrations and guide them on how to recover or access their existing accounts. | | | M |  |  |  |  |
|  | Validation and Error Handling   1. Ensure all fields are properly validated to prevent incorrect or incomplete submissions 2. Provide clear and user-friendly error messages to guide users in correcting any issues with their registration forms, including self-help options when necessary. | | | M |  |  |  |  |
|  | Privacy and Security   1. Ensure that all personal information collected through the registration forms is securely transmitted and stored, using encryption to protect user data. 2. Comply with relevant data protection and privacy regulations, providing users with clear information on how their data will be used and obtaining their consent. | | | M |  |  |  |  |
|  | User Experience   1. Design the registration forms to be user-friendly and intuitive, with a clear and responsive layout. 2. Include progress indicators to show users the steps involved in the registration process. | | | M |  |  |  |  |
|  | Accessibility   1. Ensure the registration forms are accessible to users with disabilities, including compatibility with screen readers and other assistive technologies 2. Provide options for adjusting text size and high-contrast modes to enhance readability. | | | M |  |  |  |  |
| **B4** | **Relationship Binding** | | |  |  |  |  |  |
|  | Validation of Related Persons   1. When a user indicates any related person (e.g., carers, care recipients, or referrers) in the registration form, the system will check for the existence of an account or contact for these individuals by matching unique identifiers such as phone numbers or email addresses. 2. If a match is found, the system will link the related person to the user's account and tag the person with the appropriate role(s) (e.g., carer, PT, nurse, referrer). Roles can be assigned using multiple tags to allow flexibility in defining the relationship 3. The system will notify the related person (if they have a registered email or phone number) about the new relationship and their role | | | M |  |  |  |  |
|  | Automatic Contact Creation with Role Tags   1. If no existing account / contact is found, the system will automatically create new user contact for those additional persons. 2. The system will also assign the specified role(s) to the newly created contact by tagging them appropriately | | | M |  |  |  |  |
|  | Consent Management   1. Obtain consent from related persons before creating their contact or tagging them with roles 2. Workflow for consent rejection handling:  * Flag the relationship in the system as "Consent rejected" to ensure the relationship is recorded but remains inactive. * Remove any role tags to prevent unauthorized access or role-based activities  1. Notify the user who initiated the relationship binding that the related person has rejected the consent. Provide them with options to:  * modify relationship binding * resend consent request * proceed without linking the related persons if operationally permissible  1. Notify administrators about the consent rejection for further review and intervention, if necessary | | | O |  |  |  |  |
|  | Conditional Account Activation - New account activation of new contacts under relationship binding will occur only when the operation reaches the appropriate stage (e.g. requiring therapist assessment). | | | M |  |  |  |  |
|  | Role and Relationship Management   * Administrators will have the ability to view, edit, and manage the relationships and roles associated with a user’s account, to ensure data remains accurate and reflects the current relationships * The system will display relationships visually, showing the user, related persons, and their assigned roles in a clear and navigable format. | | | M |  |  |  |  |
|  | Support Multiple Tagging   * The system will allow multiple tags per related person to define all the roles they fulfill * These tags will be searchable and filterable to aid administrators in managing and analyzing user relationships effectively | | | M |  |  |  |  |
| **B5** | **Single Sign-on Membership (SSO)** | | |  |  |  |  |  |
|  | Unified Access and Cross-Provider Integration   * Allows rental users to log in with one set of credentials to access services from multiple NGOs or providers participating in the platform. * The system integrates with all participating NGOs and service providers to ensure rental users can seamlessly move between services offered by different providers | | | M |  |  |  |  |
|  | Role-Based and Provider-Specific Access - Ensures that SSO access rights are role-based and provider-specific. Rental users can only view or manage their leases, services, or interactions with the NGOs or providers they are directly engaged with | | | M |  |  |  |  |
| **B6** | **Centralized User Profile & History** | | |  |  |  |  |  |
|  | Users' profiles are centralized under the SSO system. Provide a Profile Page for viewing user information, including but not limited to personal details, registration data, program applications, and activity history. | | | M |  |  |  |  |
|  | Existing information can be securely shared where necessary when users engage with new providers. | | | M |  |  |  |  |
|  | Enable users to update their profiles, including personal details, contact information and password changing | | | M |  |  |  |  |
|  | Track and log user activities, such as logins, data modifications, and program interactions, for security and auditing purposes. | | | M |  |  |  |  |
|  | Provide administrators with access to activity logs to monitor user behavior and identify any suspicious activities | | | M |  |  |  |  |
| **B7** | **Member Login and Guest Access** | | |  |  |  |  |  |
|  | Member Login   1. *Social Media Login* - Designed for general browsing, allowing users to explore the platform with minimal barriers to entry while maintaining basic security and user activity logging 2. *Mobile Phone Login* - Provides a secure login option for users requiring access to sensitive features such as service registration or payment. Multi-factor authentication (MFA) is implemented for enhanced security | | | M  M  P |  |  |  |  |
|  | Guest Access   1. Guest can access web platform for non-members contents and online activities 2. Clearly inform guest users of the limitations and encourage them to register for full access. | | | M |  |  |  |  |
|  | Session Management   1. Implement session management to ensure users are automatically logged out after a period of inactivity 2. Provide a "Remember Me" option for users who wish to stay logged in, with security measures in place | | | P |  |  |  |  |
| **B8** | **Notification Center Integration** | | |  |  |  |  |  |
|  | Consolidate updates, approvals, and pending actions from multiple providers into one unified dashboard | | | M |  |  |  |  |
|  | Notifications must be dynamically linked to the appropriate sections of the platform, enabling users to navigate directly to the relevant service or action when a notification is clicked | | | M |  |  |  |  |
|  | Implement a notification system to inform users of important updates, such as changes to their account status, new program opportunities, payment status, registration confirmation and event reminders in multiple formats including email, SMS and WhatsApp. | | | M |  |  |  |  |
|  | Allow administrators to customize and send notifications to specific user groups. | | | M |  |  |  |  |
| **B9** | **Automated Workflows** | | |  |  |  |  |  |
|  | Workflow Customization - Allow administrators to define, modify, and manage multiple workflow stages for different processes, such as rental approvals, equipment returns, and service requests. Each stage should be customizable to reflect the specific operational requirements. | | | M |  |  |  |  |
|  | Automated Stage Transitions - Enable automated transitions between stages based on predefined trigger points, ensuring that workflows adapt to varying needs and compliance requirements.   1. *Condition-Based Triggers*: Define specific conditions that must be met for a transition to occur, such as equipment passing a quality check or a replacement part is available. These conditions can be set based on predefined thresholds or data inputs 2. *Approval-Based Triggers*: Require approval from a designated user role (e.g., supervisor or administrator) before transitioning to the next stage. 3. *QR Scan or IoT Integration*: Integrate with QR Code scan or IoT devices to trigger transitions. 4. *Manual Overrides with Authorization*: Provide an option for authorized personnel to manually trigger transitions in exceptional cases, ensuring flexibility while maintaining control 5. *External System Integration*: Link with external systems (e.g. WhatsApp Business and Payment System) to trigger transitions based on external inputs, such as rental order confirmation and payment completion. 6. *Time-Based Triggers*: Tasks automatically move to the next stage after a predefined period 7. *Exception-Based Triggers*: Allow transitions to be triggered when exceptions or specific issues are flagged, such as identifying a critical defect or receiving users' complaints that require immediate action. | | | M |  |  |  |  |
| 1. *Time-Based Triggers*: Tasks automatically move to the next stage after a predefined period 2. *Exception-Based Triggers*: Allow transitions to be triggered when exceptions or specific issues are flagged, such as identifying a critical defect or receiving users' complaints that require immediate action. | | | P |  |  |  |  |
|  | Stage-Specific Permissions - Assign specific roles to each stage of the workflow, ensuring that only authorized users can perform actions or access information at a given stage | | | M |  |  |  |  |
|  | Permission Levels - Provide permission control over who can initiate, modify, or approve actions within the workflow, based on their roles and organizational affiliation. | | | P |  |  |  |  |
|  | Real-time Notifications   * Allow administrators to define notification rules based on specific triggers * Administrators can configure the type of notifications sent (e.g., email, SMS, in-app notifications) * Admins can set the frequency of notifications * The system should notify admins if a notification fails to send * Provide a centralized dashboard where admins can view, manage, and adjust notification settings easily * Include customizable templates for common notifications, such as approval reminders or issue alerts * Maintain a log of all sent notifications, including timestamps, recipients, and content, for auditing purposes and tracking communication effectiveness | | | M |  |  |  |  |
| * Allow admins to see whether notifications have been viewed or acted upon, facilitating better follow-up | | | P |  |  |  |  |
|  | Audit Trail and Reporting   1. Maintain an audit trail to log changes, task transitions, and user actions at each stage for accountability and compliance purposes | | | M |  |  |  |  |
| 1. Generate stage-wise reports to identify bottlenecks and monitor workflow performance | | | P |  |  |  |  |
| **B10** | **Task Assignation Rules** | | |  |  |  |  |  |
|  | Role-Based Task Assignment - Support role-specific task assignment, ensuring tasks such as rental approvals, inventory updates, and notifications are allocated to predefined roles. Access to tasks must be restricted based on user roles and permissions. | | | M |  |  |  |  |
|  | Automated Task Allocation   1. Tasks should be automatically assigned to users or teams based on predefined workflows 2. Implement dynamic reassignment rules to reassign tasks if the original assignee is unavailable or if the task remains incomplete after a specified timeframe | | | M  P |  |  |  |  |
|  | Multi-Level Approval Workflow   1. Tasks requiring approvals must follow a multi-level approval hierarchy, ensuring they are routed to appropriate approvers based on role and task type 2. Notifications should inform the next approver when a task progresses to their approval stage | | | M |  |  |  |  |
|  | Monitoring and Reporting   1. Include a task dashboard for users to view assigned tasks, their statuses, and deadlines 2. Audit log to track task assignments, actions taken, and timestamps for accountability and compliance | | | M |  |  |  |  |
| **B11** | **Calendar and Scheduling** | | |  |  |  |  |  |
|  | Unified Calendar Integration - Provide a centralized calendar that integrates scheduling data, including task deadlines, rental appointments, and user-specific events, into a unified view | | | M |  |  |  |  |
|  | Scheduling Features   1. Enable users to schedule tasks, appointments, and events directly from the calendar interface, with options to assign roles and set reminders 2. Enable functionality for recurring events with customizable recurrence rules to reduce manual effort | | | M |  |  |  |  |
| 1. Option to configure and manage public holidays in the calendar to ensure no events or appointments are scheduled on these dates. 2. Enable the setting of event durations, buffer times, and custom time slots for each role or resource | | | P |  |  |  |  |
|  | Availability and Conflict Management - Detect and notify users of overlapping schedules or double bookings | | | P |  |  |  |  |
|  | Notifications and Reminders - Allow users to configure the frequency and delivery method of automated notifications and reminders. | | | M |  |  |  |  |
| **B12** | **E-Signature** | | |  |  |  |  |  |
|  | Signature Input - Implement Handwritten Digital Signature Input as the primary signing method, allowing users to sign documents directly on a touchscreen using a finger or an e-pen | | | M |  |  |  |  |
|  | Secure and Verifiable Signing   1. Incorporate advanced authentication methods, such as secure email links or optional SMS verification, to ensure the identity of the signatory before initiating the handwritten digital signature process 2. Log all signing activities, including timestamps, IP address and user actions, to ensure traceability | | | M |  |  |  |  |
|  | Workflow Integration   * Integrate e-signature into the rental agreement workflow, enabling users to sign documents seamlessly without printing or scanning * Auto-generate agreements in PDF format, and ensure signed copies are securely stored and available for download by all related parties * Allow users to preview documents before signing and provide a confirmation step to avoid accidental submissions * Ensure document integrity by applying cryptographic methods to verify that signed documents remain unaltered post-signature | | | M |  |  |  |  |
|  | Legal Compliance - Ensure compliance with the Electronic Transactions Ordinance (ETO) of Hong Kong | | | M |  |  |  |  |
| **B13** | **Data Migration & Data Export** | | |  |  |  |  |  |
|  | Data Migration   1. *Complete and Accurate Migration* - Ensure all relevant data, including user information, transaction records, and historical logs, is transferred without loss or duplication 2. *Data Validation*  * Implement validation processes during migration to maintain data integrity and minimize errors. * Conduct thorough post-migration testing to confirm data accuracy and proper functionality  1. *Backup and* *Monitoring*  * Maintain regular backups of the old system during migration to prevent data loss * Use monitoring systems to track migration and export activities, triggering alerts for any errors | | | M |  |  |  |  |
|  | Data Export and Exchange   1. *Flexible Data Formats* - Support common export formats (e.g., CSV, Excel, JSON) and standardized exchange protocols (e.g., JSON/XML) for compatibility with external tools and research partners 2. *Customizable Output* - Allow selection of specific data fields and filters for tailored export and sharing needs 3. *Secure Data Handling* - Ensure data privacy through encryption, access controls, and anonymization of personally identifiable information (PII) for compliance during exports and exchanges 4. *Access Management* - Restrict data export and sharing to authorized users with role-based access controls | | | M |  |  |  |  |
| **B14** | **Security and Mobile Access Compliance** | | |  |  |  |  |  |
|  | Security Measures   1. *Encryption* - All data in transit and at rest must be encrypted to prevent unauthorized interception or access, e.g., implement TLS (Transport Layer Security) for data in transit and AES encryption for data at rest 2. *Access Control* - Implement role-based access control (RBAC) to ensure that users only access data and functionalities relevant to their roles. 3. *Two-Factor Authentication (2FA)* - Incorporate 2FA as a mandatory security layer for administrator logins to enhance protection of sensitive data stored in the CRM | | | M |  |  |  |  |
|  | Compliance with Privacy Regulations   1. *Personal Data Protection* - Implement measures to safeguard user data and comply with Hong Kong’s Personal Data (Privacy) Ordinance (PDPO), including proper data anonymization where necessary 2. *Audit Trail* - Maintain an audit trail of key activities in the CRM that are essential for tracking, accountability, and compliance with security and privacy regulations, including but not limited to user logins, data modifications, and administrative actions. 3. *Obtaining and Managing* *Consent*  * Display a clear privacy notice to users before collecting any data, ensuring compliance with regulations * Allow users to change or withdraw consent at any time through their profile  1. *Data Retention and Erasure* - Enable administrators to set timeframes for data retention, automatically marking retired personal data for deletion or anonymization based on predefined policies | | | M |  |  |  |  |
|  | Mobile-Specific Access Control   1. Include a device registration process to ensure that only authorized administrators' mobile devices can access the CRM system 2. Restrict access to sensitive CRM modules (e.g., financial data or personal user records) on mobile devices unless explicitly required by the admin's role. This minimizes exposure of critical data on potentially less secure devices 3. Provide a secure process for device deregistration, allowing administrators or system administrators to remove devices (e.g., in case of loss or replacement). 4. Maintain a audit trail to log all mobile device-related activities, including registration, authorization, access attempts, and deregistration. | | | M |  |  |  |  |
| **B15** | **Centralized Data Integration & Analysis** | | |  |  |  |  |  |
|  | Data Consolidation   1. Gather and centralize data from multiple sources, including all other function modules of the system (e.g., Rental and Inventory modules), and data from external parties (e.g., vendors or service providers), ensuring a unified view of operations across the platform 2. Support both real-time data synchronization and scheduled updates, allowing flexibility based on operational needs and cost considerations. | | | M |  |  |  |  |
|  | Integration with Third-Party Systems - Provide APIs to integrate with external systems, such as payment gateways and advanced analytics tools. | | | M |  |  |  |  |
|  | Cloud-Based Analytic Reporting Tools - Enable advanced analytic reporting capabilities in the cloud to provide real-time insights and performance monitoring. | | | P |  |  |  |  |
|  | Data Analytics & Reporting   1. The system must provide a customizable dashboard that allows users to view, filter, and sort collected data in real-time. 2. Users should be able to export data in multiple formats, including CSV, Excel, and graphical reports (charts, graphs, tables). 3. The system should support cross-module reporting, allowing users to generate insights by combining different datasets (e.g., demographic data, rental records, activity logs). 4. Users should have the ability to define custom parameters for generating reports and visualizations. | | | M  P |  |  |  |  |
| **B16** | **Offline Mode with Synchronization** | | |  |  |  |  |  |
|  | Provide an offline mode to ensure uninterrupted access during power or connectivity failures. It will coordinate offline functionality across all internal modules and automatically synchronize upon reconnection. | | | M |  |  |  |  |
| **C** | **FORMS & SURVEYS** | |  |  |  |  |  |  |
| **C1** | **Form and Survey Creation** | | |  |  |  |  |  |
|  | Creation of Master Templates   * Only designated administrators have the rights to create master templates that cannot be edited by others. These master templates serve as standardized forms for consistent use across organizations and ensure compliance with internal policies * Designated administrators can also approve and manage the master templates, ensuring they meet organizational standards before being made available to other staff members * Permissions for creating and editing master templates should be restricted to supervisory roles, with the option to grant temporary access to specific users if approved by administrator. * The system must allow administrators to modify, add, or remove any data fields dynamically across all relevant modules, including forms, CRM, and dashboards. * Forms and data collection fields should be editable even after initial deployment, ensuring flexibility in data management. | | | M |  |  |  |  |
|  | User friendly interface   * Provide an intuitive interface for staff to design forms and surveys without technical expertise. * Support customizable templates for common use cases (e.g., assessments, feedback surveys) to streamline the creation process | | | P |  |  |  |  |
|  | General Form Creation and Sharing   * All staff members have permission to create new forms and surveys for specific purposes as needed. These forms are distinct from master templates and can be fully customized by the creator. * Staff members are allowed to share their created forms with other users. Access permissions (view, edit, or share) for these forms should be configurable by the creator to maintain control over the content | | | P |  |  |  |  |
|  | Support for Both Visual and Code-Based Editing - Provide an additional mode for advanced users or IT staff to modify forms using HTML or scripting when necessary. This ensures flexibility for creating highly customized forms while maintaining accessibility for general users | | | M |  |  |  |  |
| C2 | **Form Management** | | |  |  |  |  |  |
|  | Collaboration Tools   * Handling of multiple users to co-create forms and surveys * Integrate the form-building platform with internal communication tools (e.g., email notifications or chat systems) to facilitate discussions related to specific forms or surveys. * Provide a commenting feature within the form builder, allowing collaborators to leave notes or suggestions on specific sections of the form. * Notifications should be sent to relevant users when comments are added or addressed, ensuring timely feedback and revisions | | | O |  |  |  |  |
|  | Preview and Testing - Enable staff to preview forms and surveys before publishing them, ensuring accuracy and proper functionality. | | | M |  |  |  |  |
|  | Versioning and Updates   1. Allow staff to save versions to track changes and revert to earlier versions if necessary. 2. Support the ability to update live forms without disrupting ongoing responses | | | P  M |  |  |  |  |
|  | Form Deployment and Availability   1. Provide options for embedding forms directly onto the platform or sharing them via unique links 2. Ensure forms are optimized for mobile responsiveness and support for assistive technologies | | | M |  |  |  |  |
|  | Cross-Browser and Device Compatibility   1. The web application should be fully functional on the latest 3 major versions of popular browsers, such as Google Chrome, Mozilla Firefox, Microsoft Edge, and Safari 2. Compatibility should be extended to both desktop and mobile browsers, with proper testing on each to ensure consistent performance and appearance 3. Ensure the platform is optimized for major operating systems, including Windows 10 and macOS, and for mobile devices using browsers on Android 8 (Oreo) or higher and iOS 12 or higher. | | | M |  |  |  |  |
|  | Accessibility Features for Elderly Users   1. Incorporate accessibility features, including adjustable text sizes, high-contrast modes, and screen reader compatibility, to cater to elderly users. 2. These features should be easily accessible via the settings page of the platform and should comply with accessibility standards provided by the Digital Policy Office of Hong Kong 3. Include a help section with FAQs, guides, and contact options to assist users in resolving issues | | | M |  |  |  |  |
|  | Multilingual Support - Provide multilingual support and allow users to switch between languages easily based on their preferences. | | | M |  |  |  |  |
| **C3** | **Advanced Question Design and Interaction Features** | | | M |  |  |  |  |
|  | Offer multiple question types, including multiple-choice, open-ended text, numerical inputs, and rating scales | | | M |  |  |  |  |
|  | Enable dynamic conditional logic to allow question flows to adapt based on user responses | | | M |  |  |  |  |
|  | Allow administrators to configure scores for each question and define the summation rules for each section | | | M |  |  |  |  |
|  | Include support for multimedia elements to make forms more interactive and informative | | | M |  |  |  |  |
|  | Supports sectional breakdowns to improve clarity and user experience | | | M |  |  |  |  |
|  | Implement validation mechanisms in the form builder, including checking the ID, address and global phone numbers conform to the expected format. | | | M |  |  |  |  |
|  | Provide user-centric widgets or designs, including but not limited to Date-Picker, Number Pad, Accordion, Auto-Complete Text Fields, Progress Bar, and Option Text on Buttons, to streamline form interactions, enhance accessibility, and ensure an intuitive experience tailored to elderly users | | | M |  |  |  |  |
| **C4** | **Data Accessibility and Reporting** | | |  |  |  |  |  |
|  | Real-time Monitoring and Analytics   * Include tools for staff to monitor form completion rates and response statuses in real-time * Provide basic analytics, such as response rates and common trends, to support decision-making * Provide a centralized interface for administrators to access completed forms and survey responses, with easy-to-use filters for sorting data by date, user demographics, or equipment type | | | M |  |  |  |  |
| * Restrict access to form and survey data based on user roles. | | | P |  |  |  |  |
|  | Customizable Reporting for Forms and Surveys   1. *Customized* *Reports*  * Allow administrators to generate tailored reports based on specific survey or form data * Allow viewers to adjust parameters with interactive filters and visualizations for scenario-based insights  1. *Export Reports in Different Formats for* *Review*  * Enable export options in common formats such as PDF, Excel, and CSV * Maintain report formatting during export, ensuring visual elements like charts, graphs, and tables are preserved for clear interpretation * Enable admins to customize the print report format to meet specific requirements, such as adjusting layouts, selecting data fields, and adding annotations for tailored outputs  1. *Export Raw Data in Various Formats for Third-Party Analytics or Research Tools*  * Provide raw data export in additional formats, such as JSON, XML, and SQL Dump, to meet the needs of ad hoc analysis and research partners. * Include metadata (e.g., timestamps, user demographics) for traceability and research accuracy * Implement customizable export parameters to filter data (e.g., by date range, user group) as needed * Offer anonymization options to comply with privacy regulations while sharing data with third parties | | | M |  |  |  |  |
| **C5** | **Integration and System Interoperability** | | |  |  |  |  |  |
|  | Dynamic Form Configuration - Enable administrators to build and customize forms dynamically by pulling in fields from any module (e.g., "User Details" from CRM, "Equipment Details" and "Availability" from Inventory), also allow customizing field labels and descriptions for clarity | | | M |  |  |  |  |
|  | Real-time Preview - Enable administrators to see a real-time preview of the form as they build it, so they can confirm if the layout and fields are correct before publishing | | | M |  |  |  |  |
|  | Conditional Logic Integration with Modules - Support conditional logic that interacts with data from other modules. Example: If a user selects a specific piece of equipment in the form, the inventory module should check its availability and automatically display "Unavailable" or "Available" within the form. Administrators can then set the subsequent paths based on availability status. | | | M |  |  |  |  |
|  | Publishing Forms on the Website   1. Enable forms and surveys to be published directly on the website as interactive widgets 2. Each form or survey should generate a unique sharable link that can be distributed via email or social media | | | M |  |  |  |  |
|  | Data Sharing for Service Recommendations   1. Allow data collected from forms and surveys to feed into the program matching or recommendation engine. 2. Data collected through the survey module should feed into the CRM, enabling administrators to analyze user feedback or satisfaction levels for decision-making purposes | | | P  M |  |  |  |  |
|  | Integration with Member Profiles   1. Link forms and surveys with the CRM module to auto-fill user details based on their member profiles. 2. Include the option to edit auto-filled information within the form, with validated changes synced back to the CRM module to keep the profile updated and prevent errors or duplication 3. Data collected through forms / surveys should automatically update the corresponding user's profile in the CRM module, allowing administrators to access historical data for analysis when needed | | | M |  |  |  |  |
|  | 1. Survey results can be used to trigger CRM workflows, such as follow-up actions or service recommendations | | | P |  |  |  |  |
|  | Data Validation Across Modules - Forms and surveys should include validation rules that check data against other modules. Example: When a user submits a rental application, the system should validate the user’s eligibility from the CRM module and equipment availability from the Inventory module before submission is accepted | | | M |  |  |  |  |
| **D** | **WEBSITE & CONTENT MANAGEMENT** | |  |  |  |  |  |  |
| **D1** | **Website Builder** | | |  |  |  |  |  |
|  | Drag-and-drop Editor - Build and customize web pages with a simple drag-and-drop interface, enabling easy structuring of pages without requiring coding knowledge | | | M |  |  |  |  |
|  | Building Blocks System - Add and edit text, graphics, links, and calls-to-action directly on the pages using pre-made building blocks | | | M |  |  |  |  |
|  | Themes - Choose from a variety of pre-designed themes and layouts to customize the website's appearance. | | | M |  |  |  |  |
|  | Design Flexibility - Provide flexibility for admins to adjust key design parameters such as layout structure, color schemes, and visual elements to align with the Project brand identity and aesthetic preferences. | | | M |  |  |  |  |
|  | Preview Modes - Inclusion of a switch between mobile and web preview. Allow admins to make real-time adjustments to the website's layout, fonts, and images while in the mobile or web preview mode | | | M |  |  |  |  |
|  | Search Engine Optimization (SEO) Tools - Provide SEO tools to optimize content for search engines by customizing titles, meta tags, and image attributes. | | | M |  |  |  |  |
|  | Multi-Websites Capability - Allows the management of multiple websites from a single database, making it possible to share products, content, or settings between websites | | | M |  |  |  |  |
| D2 | **Dynamic Content Management** | | |  |  |  |  |  |
|  | Create, edit, and delete multimedia content including text, images, videos, and downloadable documents related to product rentals, user guides, and courses.   1. *Text & Image*: Rich text editing capabilities and the ability to embed multimedia within text-based content. 2. *Videos*: Integration with a video-serving solution to embed or user guides or promotional videos 3. *Downloadable Documents*: Easy addition of PDFs or other files, such as equipment manuals or terms 4. *File size optimization* to prevent excessively large uploads | | | M |  |  |  |  |
|  | Content Publishing - Administrators should have the ability to instantly publish updates or schedule content for later. The system should also allow archiving of outdated content, such as old user guides or expired rental terms, for future reference | | | M |  |  |  |  |
|  | Support role-based access control   1. *Content editor* - create, and edit content 2. *Content publisher* - delete, publish, schedule publish and unpublish content 3. *System administrator* - all rights | | | M |  |  |  |  |
|  | File Management System   1. Effectively organizes media files, such as images, videos, and documents, in a structured hierarchy based on the website's web structure and content categories. 2. Allows administrators to replace existing media files for maintaining up-to-date content without disrupting the website's structure or requiring extensive re-uploads. 3. Allow bulk uploads of media file 4. Automated file size optimization to reduce the load times for large media files while maintaining quality | | | M |  |  |  |  |
| **D3** | **Product and Service Catalogue Updates** | | |  |  |  |  |  |
|  | Website to Modules Sync - Allow administrators to make changes to the catalogue on the website (e.g., adding a new product), the system will push these updates to other integrated modules (e.g., inventory and rental) in real time to maintain consistency across the system | | | M |  |  |  |  |
|  | Modules to Website Sync - When changes occur in integrated modules (e.g., a product becomes unavailable due to inventory updates), the website must pull this updated information and display it dynamically | | | M |  |  |  |  |
|  | Confirmation Step Before Synchronization - Include a confirmation step for administrators to review and approve the updates. This ensures that changes are intentional and avoids accidental modifications | | | M |  |  |  |  |
|  | Role-Based Permission Control for Updates - Only authorized administrators should have the ability to update the Product Rental Catalogue. | | | M |  |  |  |  |
|  | Audit Logs - Maintain detailed audit logs of all updates made to the Product Rental Catalogue, specifying who made the changes, when, and what was updated | | | M |  |  |  |  |
|  | Real-time Notifications for Changes - Whenever updates are synced across modules, the system should send real-time notifications to relevant administrators. | | | M |  |  |  |  |
|  | User-Friendly Interface   1. The interface for managing the Product Rental Catalogue should be intuitive and user-friendly. 2. To provide clarity for administrators managing updates and product status, visual indicators such as icons and color codes can be effectively utilized. | | | M |  |  |  |  |
| **D4** | **Course and Event** | | |  |  |  |  |  |
|  | Course and Event Management   1. Enable administrators to manage courses and activities including adding new courses, managing schedules, and updating content dynamically 2. The schedule management feature is linked to the event calendar under of the Marketing Module. Detailed requirements would be specified under Marketing > Event section. | | | M |  |  |  |  |
|  | Course and Event Registration   1. Allow users to register via the web platform with a simple and intuitive interface for each course and event 2. The registration process should include:  * Collection of essential user details and allow admins to add fields as needed * Verification via email or OTP for account security * Allow organizers to include custom questions during the registration process to gather specific information. * Allow admins to register for service users | | | M |  |  |  |  |
|  | Manual Issue Tracking and Status Update   1. Provide an admin-only notes section where admins can document issues, resolutions, or follow-up actions. This ensures that all relevant information is centralized and easily accessible for future reference 2. Allow admins to manually update user registration and payment status for workflows that involve offline processes or external systems not connected to our platform. | | | M |  |  |  |  |
|  | Payment for Course and Event   1. *Free Courses /* *Events*  * Users should receive an instant confirmation upon submission of the registration form. * The system should automatically reserve a seat for the user * Send an automated email / SMS / WhatsApp to confirm registration and provide event details  1. *Paid Courses / Events*  * Upon completion of the registration form, a seat is reserved temporarily for the user. * The system generates a payment link and provides a defined grace period set by admins for payment fulfillment * During the grace period, the reserved seat remains unavailable to others. If payment is not completed before the deadline, the reservation is automatically canceled * Allow administrators to extend grace period * Automated reminders should be sent during the grace period to prompt users to complete payment. Upon successful payment, send a confirmation email / SMS / WhatsApp with event details and receipt | | | M |  |  |  |  |
|  | Discounted Courses/Events (Eligibility Required)   1. Users registering for discounted courses/events must complete an eligibility check:  * *Upload proof*: Users upload required document or image. File size optimization to prevent excessively large uploads. Manual review required. System sends notification to admins to review. * *Eligibility checkbox with CRM cross-check*: Users tick an eligibility checkbox to confirm they meet the criteria. The system performs an automated cross-check with the CRM to verify their profile data. If the CRM confirms eligibility, the user is allowed to proceed.  1. If either document validation required or CRM cross-check fails, the system flags the application for manual review by an admin. If approved, the user is notified to proceed with payment or seat reservation. If rejected, the system sends a notification with the reason and suggested next steps 2. The system should reserve the seat or equipment temporarily while the eligibility validation is in progress. If the application is approved, the seat remains reserved, and the user proceeds with the payment. Payment flow and seat status will be the same as under Paid Courses / Events. 3. If the application is rejected, the reservation is canceled, and the seat or equipment is released back into the pool for other users | | | P |  |  |  |  |
| D5 | **Analytics and Reporting** | | |  |  |  |  |  |
|  | Analytic Tools - Install or include analytic tools and report modules to provide comprehensive data  insights and support the generation of required reports. Suggested tools included but not limited to:   1. Google Analytics 4 (GA4) 2. Google Tag Manager (GTM) 3. Microsoft Power BI 4. Kibana 5. Prisma | | | M |  |  |  |  |
|  | Real-time data and historical analysis - Provide capabilities for both real-time data analysis and historical trend analysis to offer comprehensive insights into the platform's performance and user behavior. | | | P |  |  |  |  |
|  | Visual Dashboards - Integrate visual dashboards to present key metrics and insights in an easily digestible format. Include charts, graphs, and tables to enhance data visualization and interpretation. | | | P |  |  |  |  |
|  | Export and Sharing Options - Enable export options for reports in various formats (PDF, Excel, CSV) to facilitate data sharing and presentation to stakeholders. | | | M |  |  |  |  |
|  | Report Generation - Generate reports to meet the needs of funders, system performance evaluation, user behavior analysis, and beneficiary demand trends. Examples of required parameters included but not limited to:   1. *User Demographics* – For examples, age, gender, location, medical conditions and socioeconomic status. 2. *User Registration and Growth* - Trends in user registration over time, highlighting growth patterns and key periods of increased sign-ups by campaigns. 3. *User Engagement* - Analysis of how public users interact with the platform, including time spent on the platform, most visited pages, and frequent actions. 4. *NGO Performance*:  * The effectiveness of NGO users in managing programs, including success rates of programs and user feedback on NGO support. * Summary of activities performed by NGO users, including program management, user interactions, and resource allocation | | | M |  |  |  |  |
|  | Platform Usage - Overall platform usage, including the number of active users, sessions, and page views | | | M |  |  |  |  |
|  | Feature Utilization - Analysis of the usage of specific platform features, such as the assessment tool, course and event registration, rental and delivery. | | | M |  |  |  |  |
|  | Search Behavior – Data of search activities, e.g., popular search terms, filter usage, and search success rates | | | M |  |  |  |  |
|  | Subsidy Distribution - Breakdown of subsidy distributions, including the total amount distributed, beneficiaries, and types of subsidies provided | | | M |  |  |  |  |
|  | Digital Coupon Redemption - Analysis of digital coupon usage, including redemption rates, types of coupons used, and most popular equipment / services | | | P |  |  |  |  |
|  | Demand Analysis - Identification of the most requested equipment / services, highlighting trends and changes in user needs over time. | | | M |  |  |  |  |
|  | User Needs Assessment - Summary of the results from eligibility assessments, identifying common needs and gaps in services. | | | M |  |  |  |  |
|  | User Retention and Churn - Analysis of user retention rates and churn, identifying factors that influence user loyalty and reasons for leaving. | | | P |  |  |  |  |
| D6 | **Website Performance and Accessibility Standards** | | |  |  |  |  |  |
|  | Fast Loading Time:   1. The website should ensure a loading time of under 3 seconds for optimal user experience, as recommended by Google PageSpeed Insights. 2. Implement performance optimization techniques such as caching, image compression, and Content Delivery Network (CDN) integration | | | M |  |  |  |  |
|  | Multi-Language Support - Support multiple languages, including Traditional Chinese and English, and allow users to seamlessly switch between languages and ensure that all text, including error messages and notifications, is consistent and accurate in each language | | | M |  |  |  |  |
|  | Uptime Standards:   1. Ensure an uptime of at least 99.7%, which translates to an average downtime of about 2 hours per month. 2. Implement robust server infrastructure, load balancing, and regular system monitoring to detect and resolve issues proactively 3. Maintain a transparent maintenance schedule, set reminders for patch updates, and notify users in advance about scheduled downtime | | | M |  |  |  |  |
|  | Device and Browser Compatibility - The platform must be compatible with major operating systems, such as Windows 10 and macOS, and should support the latest three major versions of popular browsers like Google Chrome, Safari, Mozilla Firefox, and Microsoft Edge | | | M |  |  |  |  |
|  | Accessibility Standards - The website should comply with the Web Accessibility Handbook provided by the Digital Policy Office of Hong Kong, to ensure usability by elderly individuals and those with disabilities | | | P |  |  |  |  |
| D7 | **Integration and System Interoperability** | | |  |  |  |  |  |
|  | Inventory Module - Synchronize product details such as descriptions, pricing, and rental terms between the inventory module and the website to ensure real-time updates and accurate availability information. | | | M |  |  |  |  |
|  | Event and Marketing Module - Pull event-related posts, schedules, and promotional banners from the event and marketing module to display on the website dynamically. | | | M |  |  |  |  |
|  | CRM Module - Integrate with CRM module to analyze user data such as assessment result, rental history, preferences, and browsing behavior to provide personalized content recommendations dynamically | | | M |  |  |  |  |
|  | External Video and Multimedia Hosting Integration - Integrate with third-party video-serving solutions for hosting and embedding video content directly on the platform | | | M |  |  |  |  |
|  | Third-Party CMS Integration - Integrate with a third-party CMS to allow advanced content management capabilities via APIs, and synchronize content created in the external CMS with the website | | | P |  |  |  |  |
| **E** | **LIVE CHAT & CHATBOT** | |  |  |  |  |  |  |
| E1 | **Chat Logic Builder Interface** | | |  |  |  |  |  |
|  | Workflow Editor   1. Provide a user-friendly interface for administrators to design and update chatbot workflows, ensuring that non-technical staff can easily manage chatbot logic. 2. Support drag-and-drop functionality for creating and connecting conversation nodes, allowing workflow adjustments such as adding new responses, updating FAQs, or configuring escalation paths. | | | M |  |  |  |  |
|  | Predefined and Custom Nodes - Enable admin users to create and configure custom nodes tailored to specific equipment rental queries. | | | O |  |  |  |  |
|  | LLM Agent Integration - Adopt an LLM agent that combines NLP with autonomous decision-making to address the queries from chatbot users. The topics shall be controllable, such as knowledge-based content management from FAQs | | | O |  |  |  |  |
| E2 | **Template Responses and Dynamic Content** | | |  |  |  |  |  |
|  | Predefined Template Responses   1. Provide predefined message for common reply via WhatsApp (e.g. greeting messages, FAQs) 2. Create the initial library of predefined responses for essential queries, such as rental policies, equipment catalogue, and support contact details. | | | M |  |  |  |  |
| 1. Ensure templates can be updated easily by administrators to reflect changes in policies or promotions. | | | P |  |  |  |  |
|  | Dynamic Content Integration   1. Enable responses to include dynamic data, such as customer names, order IDs, or rental dates, to personalize interactions. 2. Support placeholders in templates that automatically populate with relevant data fetched from the system or user inputs. | | | P |  |  |  |  |
|  | Keyword Triggers   1. Support automated replies to common inquiries based on keyword triggers 2. Enable routing of complex and specific inquiries to appropriate live agents | | | P |  |  |  |  |
| E3 | **Rental Assistance & Order Tracking** | | |  |  |  |  |  |
|  | Predefined responses would include the following types: | | |  |  |  |  |  |
|  | Rental Assistance   1. Address frequently asked rental-related questions and provide clear guidance on topics such as assessment, eligibilities, rental process, delivery options, payment methods and refund process. 2. Offer comprehensive equipment details, including specifications, pricing, rental terms, and usage instructions, to help users make well-informed decisions. | | | M |  |  |  |  |
|  | Order Tracking   1. Enable order tracking with status updates for agents, including OT/PT assessments, training sessions and delivery status 2. Provide payment status updates (e.g., pending, completed, or overdue) 3. Send due date reminders to ensure timely payments | | | M |  |  |  |  |
|  | Payment Guidance and Order Summary   1. Send payment details, including QR codes, payment links, and step-by-step payment instructions to users 2. Enable users to retrieve order summary, including rental duration, item details, payment history | | | M  O | ​​ |  |  |  |
|  | Notifications and Alerts   1. Send reminders for important events, such as upcoming deliveries, pickups or overdue payments 2. Notify users of any changes to their orders, including rescheduling or cancellations. | | | M |  |  |  |  |
| E4 | **User Registration** | | |  |  |  |  |  |
|  | Registration via Live Chat   1. Allow users to register through live chat sessions with the assistance of live agents. 2. Enable live agents to:  * Send invitations during the live chat to initiate the registration process via WhatsApp. * Collect essential user data, including carer and elderly names, contact details, and address. All confirmed data shall be synchronized to the backend CRM. | | | M |  |  |  |  |
|  | Data Collection and Consent   1. Utilize WhatsApp flow for data collection, providing step-by-step prompts to gather required information. 2. Present explicit consent prompts via WhatsApp to ensure users agree to data collection and usage, including links to the platform’s Privacy Policy for review. 3. Able to log user consent to comply with privacy and data protection regulations, consent data with timestamp shall be synchronized to backend CRM | | | M |  |  |  |  |
| E5 | **Multilingual Customer Support** | | |  |  |  |  |  |
|  | Language Coverage - Support multiple languages, including Chinese (Traditional) and English, to cater to Hong Kong’s bilingual elderly population. | | | M |  |  |  |  |
|  | Live Agent Handoff   1. Enable a smooth handoff from chatbot to live agents for complex or unresolved queries. 2. All relevant details, such as user profile and query history, are visible to the live agent | | | M |  |  |  |  |
|  | Agent Support Tools   1. *Chat Management Dashboard*:  * Provide agents with a dashboard to monitor active chats, queues, and chat histories. * Include tools for tagging chats, adding notes, or categorizing queries  1. *Ticket Assignment* - Allow agents to assign tickets to other departments or teams directly within the chat interface | | | M |  |  |  |  |
| 1. *Predefined Responses and FAQs* - Equip agents with a library of predefined responses and an FAQ repository for quick replies | | | P |  |  |  |  |
|  | Notifications and Alerts   1. *User Notifications* - Notify users about agent availability, queue status, and expected waiting times. 2. *Agent Notifications* - Alert agents of new chat requests, user replies, or pending chats requiring action. | | | P |  |  |  |  |
|  | Internal Chat - Provide an internal chat feature for internal staff communication | | | M |  |  |  |  |
|  | Web chat Support - Enable a web chat feature that allows users to interact with the chatbot for FAQs and rental assistance | | | M |  |  |  |  |
| E6 | **Analytics and Reporting** | | |  |  |  |  |  |
|  | Agent and Chatbot Performance Metrics   1. Track agent performance, including handling time, resolution rate, and user satisfaction rate 2. Monitor chatbot usage, such as common queries, daily interactions and number of active users 3. Capture chatbot bounce/ retention rate, interaction rate, interested topics for future analysis | | | M |  |  |  |  |
|  | User Feedback Collection - Capture user feedback on rental services during or after the rental period to assess satisfaction and identify areas for improvement | | | M | ​​ |  |  |  |
|  | Visual Dashboard   1. Provide an interactive dashboard with charts, graphs, and tables to present key metrics 2. Allow internal user roles or subsidiary settings to control data segment accessibility. | | | M | ​​ |  |  |  |
| 1. Include advanced filtering options (e.g., by channel or time frame) for detailed insights | | | P | ​​ |  |  |  |
| E7 | **Integration and System Interoperability** | | |  |  |  |  |  |
|  | WhatsApp Integration   1. The chatbot/live chat platform must be fully integrated with WhatsApp, allowing users to inquire about rental services and resolve issues directly via WhatsApp 2. Support message formats and types, including text and voice message, quick reply button and interactive list, images and video, document (e.g. pdfs for invoices and rental agreements), sticker and emojis 3. Support template messages 4. Enable WhatsApp notifications for key updates such as order confirmations and payment reminders | | | M | ​​ |  |  |  |
| 1. Support automated follow-ups, such as sending feedback requests after a rental is completed | | | P | ​​ |  |  |  |
|  | Integration with Internal Systems   1. *CRM* *Module*  * Provide agents with user profiles, rental histories, and past interactions * Able to sync collected data with the CRM module to create user profiles * Integrate with CRM module to analyze user data, such as satisfaction rates, interaction history.  1. *Short-cut to core system* - In operator display panel, provide short-cut links/buttons to open detail user profile/ order tracking modules for easy data manipulation 2. *Direct marketing broadcast* - Allow broadcast messaging to targeted users initiated by CRM marketing campaign module | | | M | ​​ |  |  |  |
| 1. *Rental Module, Delivery* *Module*  * Provide accurate rental information and updates on orders, OT/ PT assessments, training, deliveries, payment status, rental duration, and due dates * Facilitate admin user to confirm, cancel or reschedule rentals via reminder (embedded order link) | | | P | ​​ |  |  |  |
| **F** | **INVENTORY** | |  |  |  |  | ​​​ |  |
| F1 | **Stock Management** | | |  |  |  |  |  |
|  | Inventory Tracking - Provide a dashboard to display all stock statuses and locations. | | | M |  |  |  |  |
|  | Item Entry and Modification - Allow entry and modification of items, including basic information, attributes, supporting materials, pricing, dimensions, packed/unpacked information, item levels, etc. Item level includes:   * Level 1 - No special requirements * Level 2/3 - Requires assessment approval * Level 3 - Requires OT/PT training before use | | | M |  |  |  |  |
|  | Item Input and Mapping - Input item categories, subcategories, asset code mapping, and location code mapping. | | | M |  |  |  |  |
|  | Temporary Option Pool - Enable operational users to propose new options, which will be stored in a temporary pool for administrators' review and approval. | | | P |  |  |  |  |
| F2 | **Reservation System** | | |  |  |  |  |  |
|  | Automatic Reservation - Support automatic reservations upon order confirmation. | | | M |  |  |  |  |
|  | Manual Reservation - Support manual reservations for ad-hoc purposes, such as repair, showroom display, or other miscellaneous uses. | | | M |  |  |  |  |
|  | Physical Movement Tracking   1. Update stock status with every change in physical location. 2. Capture item movements due to orders or miscellaneous usage. | | | M |  |  |  |  |
|  | Stock Receiving and Delivery   1. Stock receiving by order. 2. Facilitate stock packing and delivery based on orders. | | | M  P | ​​ | ​​ | ​​ |  |
|  | Item Status Views   1. Enable capturing and retrieving both physical and logical statuses of items. 2. Provide customizable views for different operational needs. | | | M |  |  |  |  |
| F3 | **Batch Creation & Management** | | |  |  |  |  |  |
|  | Batch Updates - Enable bulk updates of item details for easier management, such as quantity or other attributes | | | M |  |  |  |  |
|  | Stock Calculation - Calculate safety stock levels and provide order suggestions, e.g. consumable items | | | O | ​​ |  |  |  |
|  | Search & Filter   1. Enable quick searches for general inventory items. 2. Support advanced search options with filters for criteria such as brand, model, location, reusable status, and rental history. | | | M |  |  |  |  |
| F4 | **Analytics and Audit Reporting** | | |  |  |  |  |  |
|  | Usage Data Dashboard   1. Support data segment views for different user role levels. 2. Enable capturing demand patterns and comparing them with current inventory availability to facilitate better inventory planning. | | | M  P | ​​ | ​​ | ​​ |  |
|  | Audit Trail - Capture all in/out transactions, including:   1. Stock change reports 2. Regular stock take reports 3. Miscellaneous transaction reports 4. Inventory adjustments | | | M |  |  |  |  |
| F5 | **Integration and System Interoperability** | | |  |  |  |  |  |
|  | Integration with Internal Systems   1. *Rental Module* - Sync inventory with the rental module to ensure users can only book available items. 2. *Delivery Module* - Share inventory details with the delivery module to track which items are scheduled for delivery or pickup. | | | M |  |  |  |  |
|  | Integration with Third-Party Systems   1. Enable API calls for available stock or status checking 2. Barcode Reader Support  * Support BYOD-compatible 1D and 2D barcode scanners. * Allow barcode generation for asset code mapping and integration with barcode printers. * Enable export/import of asset codes | | | M |  |  |  |  |
|  | Mobile access - Ensure responsive design compatible with common mobile devices. | | | M |  |  |  |  |
| **G** | **RENTAL** | |  |  |  |  |  |  |
| **G1** | **Product/Service Discovery** | | |  |  |  |  |  |
|  | Self-Assessment   1. The Form Module (Section B) will be utilized to design and manage assessment forms. 2. Create the initial assessment form templates, which will be based on the logic diagram of the existing assessment structure. 3. Provide an intuitive interface for administrators to add, edit, and remove forms as needed 4. Pre-configured rules will link specific assessment results to corresponding equipment or services. | | | M |  |  |  |  |
| 1. Recommendations will include an option for users to save items directly to a Wishlist for future reference 2. Users can refine their recommendations based on additional preferences, such as price, brand, or availability, while still leveraging the predefined logic to maintain alignment with their assessment results | | | P |  |  |  |  |
|  | Search Functionality   1. Keyword search with predictive search and autocomplete features to assist users in finding the correct terms 2. Based on the initial typed characters, return a list of relevant options matching keywords, tags or product names. Refine suggestions dynamically as user types more characters. 3. Allow users to select one of the suggested options in the typing process to complete their search query | | | M |  |  |  |  |
| 1. Implement Advanced Filtering Options using filters and allow multi-criteria filtering. | | | P |  |  |  |  |
|  | Chatbot   1. *Webchat to handle basic* *inquiries*  * Guide users in discovering products by asking structured questions. * Provide answers to predefined FAQs related to rental policies and process  1. *WhatsApp* *integration*  * WhatsApp platform integration and customization * Set up a real-time product data feed from the rental platform to WhatsApp using secure APIs to ensure the chatbot has access to updated product details  1. *Follow-up* *Request*  * Provide option for service user to input their contact details for follow-up purposes, and auto confirmation message once the request is logged. * Auto Notifications to relevant support team or agent to follow up. | | | M |  |  |  |  |
|  | Wishlist   1. Implement the Wishlist feature across essential sections where users are most likely to interact with products, including search results, recommendation lists returned after assessments, and product detail pages. 2. Enable users to access a consolidated Wishlist from their account dashboard, where they can view, organize, or remove saved items | | | P |  |  |  |  |
| **G2** | **System Availability Check** | | |  |  |  |  |  |
|  | Automated Inventory Check - Once the user selects the desired service or product, the system automatically checks availability in real-time for the requested rental period. | | | M |  |  |  |  |
|  | Handling Equipment Unavailability - If an item is marked as unavailable, users will see:   1. A button requesting follow up, clicking this button will prompt the user to provide basic details including preferred contact method and additional notes for the requested item. Once the request is submitted, the system displays a confirmation message to reassure the user that their request has been logged and is being processed by the administrative team. 2. Recommendation of equivalent or similar products that meet the user's needs, based on pre-configured product mappings. Users can select one of the suggested alternatives to proceed immediately | | | M  O | ​​  ​​ | ​​  ​​ | ​​  ​​ |  |
| **G3** | **Product-specific Professional Assessment** | | |  |  |  |  |  |
|  | Assigning Product Types That Require Professional Assessment   1. Allow administrators to assign specific product types as requiring professional assessment. 2. Allow administrators to update the product list and their corresponding assessment types as needs change | | | M |  |  |  |  |
|  | Automated Stage Flow for Follow-Up Actions - Provide an automated workflow stage flow to guide users and staff through the professional assessment process   1. *Partner NGO* *Workflow*: Automatically notify the selected NGO to arrange the appointment and confirm the details with the user 2. *User’s Own Professional Workflow*: Notify staff to verify the credentials of the user’s professional and approve the assessment request | | | M |  |  |  |  |
|  | Verification of User-Provided Professionals   1. Require users to input information with the optional upload of documents related to their chosen professional. 2. Automatically notify staff to review the uploaded documents and verify the professional’s authenticity. The system will not perform automated checks but will log the information for manual follow-up | | | P |  |  |  |  |
|  | Appointment Management - Provide a user-friendly interface for scheduling appointments (Details refer to [B11 Calendar and Scheduling](#B11) of CRM Module) | | | M |  |  |  |  |
| **G4** | **Advancing Pricing Management** | | |  |  |  |  |  |
|  | Price Reduction based on Eligibility - Support tiered price reductions tied to specific assistance schemes:   1. Type of Government Assistance Program they are enrolled 2. Relevant personal attributes such as age and disabilities | | | M |  |  |  |  |
|  | Eligibility Validation - The system must validate user eligibility by:   1. Require applicants to upload all mandatory supporting documents during the application process 2. Auto alert the user to act if there are any missing documents or discrepancies in the user’s profile information 3. Cross-checking the user’s personal profile to ensure there are no conflicts with the eligibility requirements | | | M |  |  |  |  |
|  | Staff Review and Decision-Making - After the system confirms the user has provided all required documents and their personal information aligns with eligibility criteria:   1. The system will notify staff to review the application manually 2. After the staff makes decision (approval or rejection), the system should log the outcome into the user’s application history, including timestamps and reviewer details 3. If approved, the system updates the user’s profile to reflect their eligibility status and applies the corresponding price reduction automatically during future transactions 4. If rejected, the system sends a notification to the user explaining the decision | | | M |  |  |  |  |
| **G5** | **Application Tracking, Approval & Agreement** | | |  |  |  |  |  |
|  | Tracking & Notification   1. Implement notification systems to keep all parties informed (refer to [B8 Notifications Center Integration](#Notification) of the CRM Module). 2. Track progress through the workflow stages to ensure transparency and compliance | | | M |  |  |  |  |
|  | Approval Workflow Configuration - Configure workflows tailored to different user groups based on combinations of assessment type and pricing type.   1. *Assessment type*: Self | Professional 2. *Pricing*: Full | Campaign Discounts | Eligible for Price Reduction | | | M |  |  |  |  |
|  | Agreement Management   1. Configure the initial dynamic agreement templates that serve as the basis for all user agreements 2. Include placeholders for dynamic fields such as:  * *User Details*: Name, contact information. * *Order Details*: Product selected, rental period, pricing, and any discounts applied. * *Agreement-Specific Data*: Terms and conditions, applicable policies, and return/delivery details"  1. Support multiple agreement templates for different scenarios, such as agreements for standard pricing, discounted pricing, or professional-assessed orders 2. Provide users with a digital copy of the agreement via email or in their user portal after it is generated. 3. Integrate e-signature functionality for users to sign agreements digitally 4. Provide a “Print” button on the administrator dashboard and user portal that generates a printable version of the agreement 5. Allow administrators to upload scanned or photographed images of signed agreements through the administrator dashboard. Implement file size optimization to ensure uploaded files are stored efficiently 6. Once the signed agreement is uploaded, the system should automatically attach it to the corresponding user’s profile for future reference 7. Maintain a record of all uploaded agreements, including timestamps and the administrator who uploaded them. | | | M |  |  |  |  |
| **G6** | **Deposit & Payment** | | |  |  |  |  |  |
|  | Transaction Data Compilation - The system must compile relevant transaction data, including:   1. User Information: Name, contact details, and unique user ID. 2. Order Details: Product name, rental period, and pricing breakdown. 3. Payment Details:  * Deposit amount * Outstanding balance (if applicable) * Payment Method  1. Transaction Status: Pending | Completed | Partially Paid 2. Unique Transaction Identifier: A unique ID for each transaction to ensure traceability | | | M |  |  |  |  |
|  | Batch Processing for Export   1. support batch processing to allow administrators to handle multiple payment summaries simultaneously. 2. Including all fields required by the payment system, ensuring compatibility with external payment solution | | | P |  |  |  |  |
|  | Integration with External Payment System   1. Integrate with an external payment settler platform that supports multiple online payment methods and ensures smooth data transfer 2. Use APIs where feasible for real-time data exchange between the platform and the payment system | | | M |  |  |  |  |
|  | Data Security and Compliance - Ensure compliance with financial regulations and standards, such as:   1. Protection of Personally Identifiable Information (PII). 2. Encryption of sensitive data during export and import. 3. Two-factor authentication for administrative access to payment data | | | M |  |  |  |  |
|  | Importing Payment Receipt Data - The external payment system processes the transactions and sends receipt data back to the platform via API or uploadable file. The platform must process the data to:   1. *Update Order* *Status*: Mark the order as "Paid" or update the payment status if partial payments are allowed. 2. *Generate Receipts for Users*: Create receipt showing payment details and send it to the user via email, SMS or WhatsApp 3. *Record and Store* *Data*: Store receipt data in the system for future reference and for auditing purposes | | | M |  |  |  |  |
|  | Error Handling and Notification   1. Allow the payment system/admins to report failed transactions. The system will flag the order and notify the user and amin for further action. 2. Automatically notify users of successful payments or errors with clear instructions for next steps | | | M |  |  |  |  |
| **G7** | **Return & Refund** | | |  |  |  |  |  |
|  | Workflow Configuration - Support configurable workflows to handle various return scenarios including:   1. Service Term Ended 2. Early Return 3. Late Return 4. Equipment Exchange  * Same equipment model exchange * Different equipment model exchange | | | M |  |  |  |  |
|  | Functional Requirements for Different Return Scenarios   1. *Automatic* *Trigger* - Automatically initiates the return workflow under specific conditions, such as when the rental period ends, or a user requests an early return or exchange. 2. *Inventory* *Update* - Upon completion of the return process, the system must update the inventory to mark the returned product as "available" for future rentals. 3. *Approval Workflow* - For scenarios like early return or exchange, the system must support an approval workflow to validate the request. 4. *Pro-Rated Refund*  * Calculate and process pro-rated refunds for early returns based on the remaining rental period. * Specific payments, such as administrative fees, delivery fees and setup fees, may be deemed non-refundable, even in the event of an early return  1. *Late Fee Calculation* - Calculate late fees automatically, based on the number of overdue days and configured fee policies. 2. *Handling of Product Model Change Request* - If users request to exchange for product model change, it will require the termination of existing rental and the creation of a new rental order | | | M |  |  |  |  |
| **G8** | **Rent-to-Buy Option** | | |  |  |  |  |  |
|  | Include an option for eligible rental products to transition into a rent-to-buy arrangement. | | | P |  |  |  |  |
|  | Provide calculation reference based on predefined formula, such as depreciation and equipment nature. | | | P |  |  |  |  |
|  | Support rental order transform to purchase order. | | | P |  |  |  |  |
|  | Provide users with a summary of the rent-to-buy terms and purchase agreement. | | | P |  |  |  |  |
| **G9** | **Integration and System Interoperability** | | |  |  |  |  |  |
|  | Communication Channels - The system must integrate with multiple communication channels to facilitate seamless interaction with renters:   1. *WhatsApp Integration* - Business WhatsApp function will be customized by an external service provider. It serves as the main communication platform, facilitating interactions between users and staff. 2. *Web-Chat* - Live Chat module of the system will provide basic functionalities, focusing on inquiry submissions and self-service options. Details refers to [Section E Live Chat](#E) 3. *Email* - Email will serve as a formal communication channel within the platform, focusing on structured updates, detailed correspondences, and follow-ups. 4. *Centralized Logging* - Log all communications within the renter’s profile for staff reference and tracking | | | P  O  M  M | ​​ | ​​ | ​​ |  |
|  | CRM   1. *Customer Profile* *Synchronization*  * Synchronize customer profiles with the CRM system to maintain a unified renter database * Updates in customer profiles must be reflected in both the rental and the CRM module in real time * Consolidated view of rental history and agreements to provide staff with a comprehensive view of customer interactions  1. *Automated Workflows with Customizable Stages* - Integrate with the staged workflow with the CRM system will optimize the rental process 2. *E-Sign* - Integrate e-signature functionality for users to sign agreements digitally | | | M |  |  |  |  |
|  | Inventory and Delivery - Integrate with the Inventory module for real-time stock updates and availability tracking, ensuring accurate equipment management, and with the Delivery module to manage fleet bookings and tracking processes, providing seamless operational flow and timely updates. | | | M | ​​ |  |  |  |
| **G10** | **Finance and Transaction Management** | |  |  |  |  |  |  |
|  | * The system must include transaction management features, allowing users to track payments, sales records, and refunds securely. * Finance reporting tools should be available, enabling revenue tracking, expenditure logs, and transaction history export. * The system should provide manual financial data export options (Excel, CSV or other integration option) to facilitate integration with external financial systems * The finance module should include both frontend (for user transactions) and backend (for finance management) features, ensuring a seamless financial workflow. | | | M |  |  |  |  |
| **H** | **CLEANING & REPAIR** | |  |  |  |  |  |  |
| **H1** | **Staged Workflow Management** | | |  |  |  |  |  |
|  | Workflow Stages Setup   1. Allow flexibility in defining and customizing workflow stages to suit different cleaning and repair scenarios 2. Support the addition or removal of stages as operational needs change | | | M |  |  |  |  |
|  | Automated Stage Transitions - Customize the automated stage transitions feature of the CRM module (refers to [B9](#Stage)) to meet the specific needs of cleaning and repair workflows. | | | M |  |  |  |  |
|  | Task Tracking and Status Updates   1. Provide a status dashboard for tracking workflow stages (e.g., inspection, cleaning, repair, approval) 2. Enable real-time task updates (e.g., Pending, In Progress, Completed) to enhance accountability 3. Maintain an audit trail to log changes, task transitions, and user actions at each stage to ensure compliance | | | M |  |  |  |  |
|  | Integration of Checklists   1. Enable the creation of checklists at each stage of workflow to guide staff in completing essential tasks 2. Checklists are configurable to adapt to different equipment types and cleaning requirements. 3. Allow inspection staff to upload photos or videos showing the condition of equipment to enhance documentation and accountability | | | M |  |  |  |  |
| **H2** | **Task Scheduling and Dispatch** | | |  |  |  |  |  |
|  | Task Management   1. Allow the assignment of time slots for tasks and ensure that only authorized staff can add, edit or remove 2. Allow task categorization by priority to optimize resource allocation 3. Include automated notifications to remind staff of upcoming or overdue tasks | | | P |  |  |  |  |
|  | Mobile and Tablet Support   1. *Task Management Accessibility* - Allow cleaning and repair staff to access assigned tasks, update task status, and upload relevant information (e.g., photos, videos) directly from their work mobile or tablet devices 2. *QR Code Scanning* - Implement QR code scanning functionality to quickly identify equipment and retrieve related cleaning or repair task details using mobile or tablet cameras 3. *Device Compatibility* - Ensure compatibility with commonly used mobile/tablet operating systems (e.g., iOS and Android) to maximize accessibility for field staff | | | M |  |  |  |  |
| **H3** | **Integration and System Interoperability** | | |  |  |  |  |  |
|  | Forms & Surveys   1. Configure equipment assessment forms and reports using the Form and Survey module ([Section C](#C) refers), ensuring alignment with existing operations and documentation processes 2. Allow administrators to modify form structures to adapt to changing requirements | | | M |  |  |  |  |
|  | Inventory   1. Track the stock of spare parts, cleaning supplies, and repairing tools to support maintenance operations 2. Update equipment inventory status after cleaning or repair to reflect availability for rental 3. Provide real-time inventory tracking and notifications for low-stock or updated inventory needs | | | M |  |  |  |  |
|  | CRM - Support the initial configuration of related features of the CRM Module ([Section B](#B) refers) for clean and repair operations including but not limited to:   1. Provide customizable stage workflows to define and track stages such as inspection, cleaning and repair 2. Include an analytics dashboard that allows administrators to monitor task performance and key metrics relevant to clean and repair processes 3. Offer integrated calendar and scheduling tools to plan, assign, and manage tasks effectively | | | M |  |  |  |  |
| **I** | **DELIVERY** | |  |  |  |  |  |  |
| **I1** | **Scheduling and Task Management** | | |  |  |  |  |  |
|  | Match Address to Delivery District   1. Initially, administrators will manually assign delivery requests to service districts based on their experience and knowledge of the boundaries. 2. When the GIS mapping system (external service) is implemented, it will automatically determine the corresponding service district for each address and pass this information to the delivery system | | | M  P | ​​  ​​ | ​​  ​​ | ​​  ​​ |  |
|  | Provide Available Delivery Timeslots for Selection - Suggest delivery timeslots based on multiple criteria:   * Delivery district by the day-of-week schedule * User preference for delivery timing (day of the week, am/pm) * Internal driver availability * Request urgency | | | M |  |  |  |  |
|  | Dynamic Timeslot Update - The system will dynamically update timeslot availability in real-time to reflect any changes, ensuring only valid timeslots are displayed for selection | | | M |  |  |  |  |
|  | Administrator Selection and User Confirmation - 2 scenarios:   1. *Timeslot meet user's preference* - The administrator selects and reserves timeslot, and the system will automatically send a confirmation message to the service user. 2. *Timeslot does not meet user's preference*  * Suggest additional timeslot options that may require further liaison with the user. * Prompt the administrator to mitigate the issue | | | P |  |  |  |  |
|  | Allow Delivery Time Changes   1. Allow both admins and users to request changes to delivery times, subject to a configurable deadline to avoid last-minute disruptions 2. Notifications must be sent to both users and admins regarding the change request, along with any follow-up actions required to ensure smooth coordination | | | M |  |  |  |  |
|  | Handling Internal Transport Limitations   1. Notify the administrator to arrange for external delivery services as a fallback option if the internal transport fleet cannot meet the delivery demand 2. Allow manual input of external service details to track and manage the associated delivery request effectively 3. Include an export function to generate delivery information in a standardized format (e.g., CSV or PDF) to facilitate the booking process with external service providers | | | M |  |  |  |  |
|  | Printable Delivery Schedule - Generate a PDF delivery schedule that includes updated delivery assignments, times, and driver details to support the management of the internal driver roster. | | | M |  |  |  |  |
|  | Proof of Delivery   1. Collect users' signature on the delivery note  * *Online Mode*: Enable service users to provide e-signature on digital delivery note. A secure digital link should be provided for the recipient to access and sign the document. Additional SMS verification may be required as an optional security measure * *Offline Mode*: Allow staff to take a photo of and upload the signed printed delivery note to the system for records. The uploaded document should be linked to the corresponding delivery record  1. *Record Geolocation Data* - Record geolocation data of the delivery with the date and time, ensuring accurate and verifiable proof of delivery 2. *Photo Feature for Delivery Verification*  * If the signing person is not present at the delivery location, the system will allow the delivery personnel to take a photo using a mobile device and attach it to the delivery note. * This photo should include metadata such as timestamp and geolocation to ensure authenticity * The attached photo should be linked to the corresponding delivery note for easy retrieval | | | P  M  P  M  P  M | ​​ |  |  |  |
| **I2** | **Mobile Access for Drivers** | | |  |  |  |  |  |
|  | Mobile-Friendly Delivery Schedule - Allow drivers to have access to their delivery schedules via a mobile-friendly platform. This includes details such as delivery addresses, contact information, and time slots. | | | M |  |  |  |  |
|  | Proof of Delivery Tools - Enable drivers to collect proof of delivery directly from their mobile devices. This includes options like e-signatures and the ability to take and upload photos to the system, which can then be attached to the corresponding delivery record for verification. | | | M |  |  |  |  |
|  | Mobile Navigation Integration   1. Integrate with GPS functionality to capture the driver's real-time location. 2. Automatically generate a clickable link for suggested driving routes using Google Maps or Gaode (高德) Maps, based on delivery address data. | | | O |  |  |  |  |
| **I3** | **Integration and System Interoperability** | | |  |  |  |  |  |
|  | CRM Integration   1. Utilize the CRM's calendar and scheduling tools to manage delivery appointments and tasks 2. Synchronize Customer Information and Preferences 3. Integrate the CRM’s e-signature functionality to collect proof of delivery electronically. 4. Leverage CRM's automated notifications to inform customers of delivery updates 5. Customize the CRM’s pipeline stages to reflect the delivery workflow 6. Use CRM tools for planning follow-up tasks after delivery completion. | | | M |  |  |  |  |
|  | Rental and Inventory Module Integration   1. Automatically populate delivery request forms with relevant data (e.g., customer information, equipment details, delivery addresses, and schedules) from Rental and Inventory modules to reduce manual errors and expedite the request process. 2. Automatically update inventory status post-delivery | | | M |  |  |  |  |
| **J** | **MARKETING & EVENT** | |  |  |  |  |  |  |
| **J1** | **Campaign Management** | | |  |  |  |  |  |
|  | Online Marketing - This includes activities such as email marketing, online advertisements, and search engine optimization (SEO) to promote campaigns effectively | | | M |  |  |  |  |
|  | Interactive Banner - Support for creating, managing, and displaying dynamic promotional banners on the website to engage users and enhance visibility | | | M |  |  |  |  |
|  | Social Media Management - Tools to manage, schedule, and track social media posts across multiple platforms | | | P |  |  |  |  |
|  | Digital Coupons   1. *Coupon Creation and* *Customization*  * Support various types of digital coupons, such as percentage discounts, fixed amount discounts, free trials, or bundled offers, to cater to different user needs and scenarios * Allow customization of coupon terms, such as validity period, usage limits (per user or overall), and eligibility criteria (e.g., for new users or specific user groups) * Include options to design visually appealing coupons with branding elements, such as logos, colors, and promotional messages  1. *Coupon* *Distribution*  * Distribute coupons to specific user segments based on criteria such as demographics, program participation, or user behavior * Enable bulk coupon distribution across multiple channels, including email, SMS, WhatsApp, and major social media platforms * Provide functionality to generate unique URL links for each digital coupon, and allow the customization of coupon links (e.g., shortening URLs or adding branding elements) * Embed UTM parameters or other tracking mechanisms in the coupon links to monitor distribution performance across different channels * Implement security measures to prevent misuse, such as restricting the number of redemptions per link or requiring user verification before redemption  1. *Redemption and Validation*    * QR Code/Barcode Integration - Generate unique QR codes or barcodes for each coupon to facilitate easy redemption and tracking    * Real-time Validation - Implement real-time validation during coupon redemption to confirm authenticity and usage status    * Automatic Expiry - Automatically deactivate expired or fully redeemed coupons 2. *Analytics and Reporting* - Track and report on key metrics, such as distribution counts, redemption rates, and user engagement, to measure coupon effectiveness 3. *Event Integration* - Tie coupon offers to specific events or campaigns, such as providing discounts for event registrations or rentals during promotional periods 4. *Automation and* *Scheduling*    * Allow administrators to schedule coupon link distribution    * Automate coupon link sharing based on user actions or user profiles, such as sending a discount code after a user abandons their cart or for special occasions like birthdays | | | M  M  O  P  M  M  M  M  M  M  M  M  M  P  O | ​​ | ​​ | ​​ |  |
| **J2** | **Event Management** | | |  |  |  |  |  |
|  | Event Scheduling and Setup   1. *Integration with Calendar under CRM* - The Event Scheduling feature will integrate seamlessly with the Calendar under the CRM module to provide a unified and efficient way of managing events 2. *Fixed Date and Time Set by Administrator* - Administrators define the exact date and time for the event, and users can register to attend 3. *Provide Available Time Slots for Users to Choose* - First Come, First Serve (FCFS): once a slot is booked, it is removed from availability to prevent double booking 4. *Time Slot with Administrator Confirmation* - Users select a preferred time slot, but the booking requires administrator approval to confirm availability | | | M |  |  |  |  |
|  | User-initiated Rescheduling   1. Users access their confirmed booking and select the rescheduling option 2. Users choose a new time slot from the available options:  * FCFS: The new slot is automatically booked, and the previous slot is released * Administrator Confirmation: The rescheduling request is sent to the administrator for approval  1. Users receive a notification confirming the rescheduling or informing them if the request is rejected | | | M |  |  |  |  |
|  | Admin-initiated Rescheduling   1. Admins reschedule bookings and select a new time slot 2. Users are notified of the updated booking details via email or WhatsApp | | | M |  |  |  |  |
|  | Change Management and Notification   1. Change Handling    * Changes to event details are immediately reflected in the calendar and communicated to affected users    * Admins can define conditions for cancellations or modifications, such as deadlines for changes 2. Automated Notifications    * Confirmation emails: Sent upon successful booking or after administrator approval    * Reminder notifications: Sent via email/WhatsApp before the scheduled event or appointment    * Allow the setting up of follow-up messages templates to collect feedback from users | | | M |  |  |  |  |
|  | External Calendar Sync - All bookings, changes, or cancellations are synchronized with external calendars such as Google or Outlook, ensuring users stay updated on their schedules | | | P |  |  |  |  |
| **J3** | **Attendance Tracking** | | |  |  |  |  |  |
| a. | QR Code Scanning - Utilize QR codes for attendees to check in at the event. | | | P |  |  |  |  |
| b. | Manual Check-In - Provide administrators with an option to manually mark attendance for participants who may face difficulties with QR codes | | | M |  |  |  |  |
| c. | Absence Follow-ups - For no-shows, send notifications for follow-up actions | | | P |  |  |  |  |
| **J4** | **Analytics and Reporting** | | |  |  |  |  |  |
| a. | Attendance Report - Generate detailed reports showing the number of attendees, no-shows, and late check-ins for each event or appointment | | | M |  |  |  |  |
| b. | Engagement Metrics   1. Attendance data will be linked to user profiles in the CRM system, allowing admins to track participant involvement across multiple events 2. Provide insights into attendance trends, such as participation peak times or user preferences for event types | | | M |  |  |  |  |
| **J5** | **Integration and System Interoperability** | | |  |  |  |  |  |
|  | CRM Integration   1. *Cross-Checking Event Registration Data with* *CRM*    * When a user registers for an event, the system will automatically cross-check the provided data (e.g., email address or phone number) with the CRM database to identify if the user is an existing member. If the user is an existing member, their profile data in the CRM will pre-fill the event registration form.    * For new users, the system will create a new profile in the CRM upon registration, ensuring that no duplicate records are created by validating unique identifiers like phone numbers or email addresses    * When a user registers for an event, their participation data is automatically updated in the CRM 2. *Updating User Profiles After Events* - After an event, the system will automatically update the user's profile in the CRM with their attendance status. 3. *Workflow stages and related triggers* - Each stage is associated with predefined actions and triggers to automate the appointment scheduling process such as:    * Once a rental request is approved in the CRM, the system auto-triggers the scheduling of a delivery appointment    * After delivery confirmation, the system schedules a training appointment to teach the elderly user how to use the rented equipment    * As the rental period nears completion, the system triggers appointments for equipment pick-up and cleaning/maintenance | | | M |  |  |  |  |
|  | Integration with Form and Survey Module   1. Provide a user-friendly registration form to capture essential details 2. Create customizable email and SMS templates to send automated notifications, including registration confirmations, event reminders, and updates 3. Implement questionnaires to assess user needs or eligibility for specific events 4. Enable live surveys during events to collect participant feedback in real-time. | | | M |  |  |  |  |
|  | Integration with Website   1. Create a dedicated section on the website to list upcoming events 2. Embed registration forms directly on event pages, enabling users to sign up without leaving the website 3. Implement auto-synchronization to ensure changes made to event details are reflected on the website. | | | M |  |  |  |  |
|  | Integration with Live Chat   1. Include a live chat feature within the event section to assist users with questions about event details or registration processes in real-time 2. Use WhatsApp Business API to integrate with the website’s live chat system. Users can chat directly with support agents or automated chatbots via WhatsApp 3. Sync WhatsApp conversations with the platform’s live chat system, allowing support agents to manage all communications from a single dashboard for efficiency and better tracking | | | P  O  O | ​​  ​​    ​​ | ​​  ​​    ​​ | ​​  ​​    ​​ |  |
| K | **SECURITY & PRIVACY PROTECTION** | |  |  |  |  |  |  |
| **K1** | **Data Integrity and Security during Data Migration** | | |  |  |  |  |  |
|  | Data profiling and Cleansing   1. Assign unique identifiers to each member and verify that these identifiers are consistent and not duplicated during data profiling. 2. Define and implement strict validation rules for membership data during data cleansing to identify potential mismatches. Before deploying any changes, thoroughly test data matching algorithms and validate results against a known set of correct matches. 3. Utilize tools like SQL Data Compare for database comparison and cleansing scripts. 4. Obtain explicit consent from existing members to migrate their data to the new system and assure them of privacy safeguards. | | | M |  |  |  |  |
|  | Backup Strategy - Implement a comprehensive backup strategy before starting migration. In case of unexpected issues, the system can be reverted to the previous state without significant consequences. | | | M |  |  |  |  |
|  | Data validation - Implement data validation checks during migration to verify data accuracy. These checks may include data checksums, data type validation, and data completeness validation. | | | M |  |  |  |  |
|  | Incremental Migration - Transfer data in smaller batches rather than all at once to minimize the risk of data loss. | | | M |  |  |  |  |
|  | Encryption - Implement robust encryption protocols (such as AES-256) to protect data both in transit and at rest. | | | M |  |  |  |  |
|  | Access Control - Restrict access to data during migration. Continue to monitor user access to critical systems and data and detect unauthorized access attempts or unusual behavior after migration. | | | M |  |  |  |  |
|  | Post-Migration Data Integrity Checks - Perform data integrity checks, using tools like database integrity check commands and custom scripts to verify that data has been accurately transferred and remains unaltered. | | | M |  |  |  |  |
| **K2** | **User Data Protection and Privacy** | | |  |  |  |  |  |
|  | Implement below measures to ensure user data protection and privacy: | | |  |  |  |  |  |
|  | Ensure secure authentication mechanisms such as **Multi-Factor Authentication (MFA)** and **Role-Based Access Control (RBAC)** to prevent unauthorized access. | | | M |  |  |  |  |
|  | Implement **data masking** to hide sensitive data, and **anonymization** to remove personally identifiable information from datasets used for testing, analytics, and research purposes. | | | M |  |  |  |  |
|  | Implement **encryption** for both database storage and data interchange across systems to safeguard sensitive data. | | | M |  |  |  |  |
|  | Set up **real-time monitoring** for suspicious activities, failed login attempts, and unauthorized access. | | | M |  |  |  |  |
|  | Implement a **Virtual Private Network (VPN)** for administrators' access control to ensure secure, encrypted connections to the organization’s internal network. | | | M |  |  |  |  |
|  | Comply with the regulations under the **Personal Data (Privacy) Ordinance** of Hong Kong. When handling user data, the process must be also governed by the data privacy policy provided. | | | M |  |  |  |  |
| **K3** | **Threat Assessment and Risk Mitigation** | | |  |  |  |  |  |
|  | To ensure platform security and compliance with industry best practices, a third-party Cybersecurity expert will conduct threat assessments. The Vendor must facilitate the process and implement necessary risk mitigation measures. The assessments by a third-party Cybersecurity expert will include: | | | M |  |  |  |  |
|  | Pre-launch IT security risk assessment, particularly focuses on critical components, data flows, and potential attack vectors. | | | M |  |  |  |  |
|  | Conduct an IT security audit review of through industry best practices e.g. HKSAR Government S17 and G3 | | | M |  |  |  |  |
|  | Perform Cloud Risk Security Assessment according to Cloud Security Alliance Cloud Control Matrix or other recognized Cloud Audit program. | | | M |  |  |  |  |
|  | Conduct system, network, and application Penetration Test. | | | M |  |  |  |  |
| **K4** | **Infrastructure Security** | | |  |  |  |  |  |
|  | Implement the following measures to ensure infrastructure security: | | |  |  |  |  |  |
|  | Host the platform on cloud services or secure servers. Use secure protocols, such as **HTTPS** (Hypertext Transfer Protocol Secure) and **Secure Data Transfer Protocols**, to provide a secure and encrypted connection between our system and the third-party integration. | | | M |  |  |  |  |
|  | **Server-to-Server Token**: These tokens are unique and securely generated for each integration, and they authenticate and authorize the communication between our system and the third-party integration. | | | M |  |  |  |  |
|  | Regularly apply **security patches** and updates to the underlying infrastructure. | | | M |  |  |  |  |
|  | Implement **Web Application Firewall (WAF)** and **Intrusion Detection systems (IDS)** to monitor and protect against attacks. | | | M |  |  |  |  |
|  | Conduct regular **code reviews** to identify and fix security flaws. | | | M |  |  |  |  |
|  | Implement **IP whitelist** mechanism to restrict access to the integration. Only predefined IP addresses can communicate with the third-party integration, providing additional security against unauthorized access attempts. | | | M |  |  |  |  |
| **K5** | **Incident Response Plan** | | |  |  |  |  |  |
|  | The Incident Response Plan will be developed collaboratively between the client and the vendor, ensuring all necessary considerations are addressed. | | |  |  |  |  |  |
|  | Develop incident response plans (with contingency plan) that outline procedures for different security incidents, e.g. data breaches, system outages, malware attacks. | | | M |  |  |  |  |
|  | Define incident severity levels (e.g., low, medium, high) based on impact and urgency. Clearly specify how each level should be handled, including service level agreements for response and resolution timeframes. | | | M |  |  |  |  |
|  | Define roles and responsibilities for incident management.  Define an escalation matrix that outlines who needs to be informed at different stages of an incident. | | | M |  |  |  |  |
|  | Establish communication channels for reporting and addressing security breaches. Prepare templates covering different scenarios for notifying affected parties, stakeholders, and customers. | | | M |  |  |  |  |