Siloam Xperience PRD 1

Epic name	Siloam Xperience Volunteer/Donor Management Systems
Target release	Sep 29, 2025
Document status	Drafting
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Feature owners (Product Associates / Head)	VMS: Luyav and Yiting DMS: Samantha and Cho
Designers (UI/UX Designers)	@xxx
Tech Lead/ Rep	@xxx
QA	

😈 Problems Being Solved

Siloam Vocational and Life Skills Training Institute (SVLTI) at Learners' Village aims to provide both short courses (e.g., English, Computer Skills) and a two-year vocational program in Tourism and Hospitality. While the school will be built in 2025–2026, having a website is already essential for compliance, teacher recruitment, Google Classroom integration, announcements, and marketing. At present, the organization lacks an official branding guide and struggles with low-cost, mobile-friendly web solutions that can clearly present policies and procedures, especially given Cambodia's internet infrastructure.

Beyond the website, current volunteer and donor management processes remain heavily manual, relying on paper records and spreadsheets managed by the founder. This results in inefficiencies in data collection, event coordination, and donor/volunteer engagement. The organization therefore seeks a cost-efficient, user-friendly Volunteer Management System (VMS) that can automate sign-ups, communications, and event scheduling, with clear roles (e.g., Super Admin, Volunteer Manager, Finance Manager, Volunteer, Donor). These digital solutions, developed with input from supporting nonprofit partners in Singapore and Cambodia, will address the pressing need for streamlined operations, reduced administrative burden, and improved stakeholder engagement.

🎯 Objectives

The objective of this proposal is to present a structured plan for the design and implementation of a Volunteer Management System (VMS) and a Donor Management System (DMS) for Siloam Xperience. Current reliance on manual and fragmented processes creates inefficiencies, hinders coordination, and limits the organization’s ability to fully engage its volunteers and sustain meaningful donor relationships.

The proposed systems will establish a centralized and technology-enabled platform that streamlines data management, improves tracking and reporting capabilities, and automates key administrative functions. The VMS will support recruitment, scheduling, and retention of volunteers, while the DMS will enhance donor engagement and stewardship through better communication and oversight. Collectively, these systems will increase operational efficiency, provide real-time insights, and strengthen the foundation of Siloam’s mission by ensuring that both volunteers and donors are effectively managed and meaningfully engaged.

😄 User Personas

Who is the feature being built for? In general terms (personas) and specific customer names.

Types of Users	Description	Implication
1. Partner	Partners have 2 roles/capabilities: ● Individuals who offer their time and effort to support Siloam's programs and activities without monetary compensation. ● Providers of funds that allow Siloam to operate. Donors come from different demographics internationally, functions, and differ in donor size amounts granted.	● Need clear task assignments, scheduling visibility, and communication channels to stay engaged and productive. The system should track their hours, roles, and availability, and ensure they feel recognized for their contributions. ● Experience pleasant greetings, proof of donations, and on-request receipts generated by the system. A recurring donor partnership is anticipated.
2. Project Manager	Promoted from a partner (volunteer/donor) to project manager when involved in one specific project, having permission to access details of the project. No longer a volunteer or donor	The project manager is able to propose a project that goes to the super admin/general manager to get approval. After getting approval, they become a project manager and no longer a partner, managing this project by themselves by managing the volunteers involved, the timing, the dates, and the number of hours they participated. Once the project is over, they will become partners (volunteer/donor) again.
3. General Manager	Assigned/created by the super admin. Their role is to manage and overlook all analytics and activities of the systems.	The General Manager is able to review the projects submitted by the Project Manager. They also have access to all tools and information of the system EXCEPT the finance side. E.g total donations, amount of donations made by a partner etc. Any analytical data that could reveal financial information should be restricted for General Managers.

4. Finance Manager		The Finance Manager is responsible only for the finance side of the system. They can view and reconcile donations, issue receipts, manage project budgets, and schedule disbursements for approved projects, using minimal donor details (email and donor ID) solely to identify the donor (no addresses or other sensitive personal data). They cannot access volunteer rosters, project operations, or general analytics, and they work with tokenised payment info only, focusing purely on financial accuracy and compliance.
5. Super Admin	Possesses all the access permissions and capabilities of Volunteer Managers and more as well as the authority to reassign roles in the system	The Super Admin can monitor activity within the two subsystems, advising and organizing Volunteer Managers where necessary. They can also access finance-related items, and volunteer/donor personal information that no other user can do..

New changes to be made: partner (donor + volunteer), project manager, GM, Fin manager, super admin

👣 User Journeys (to change)

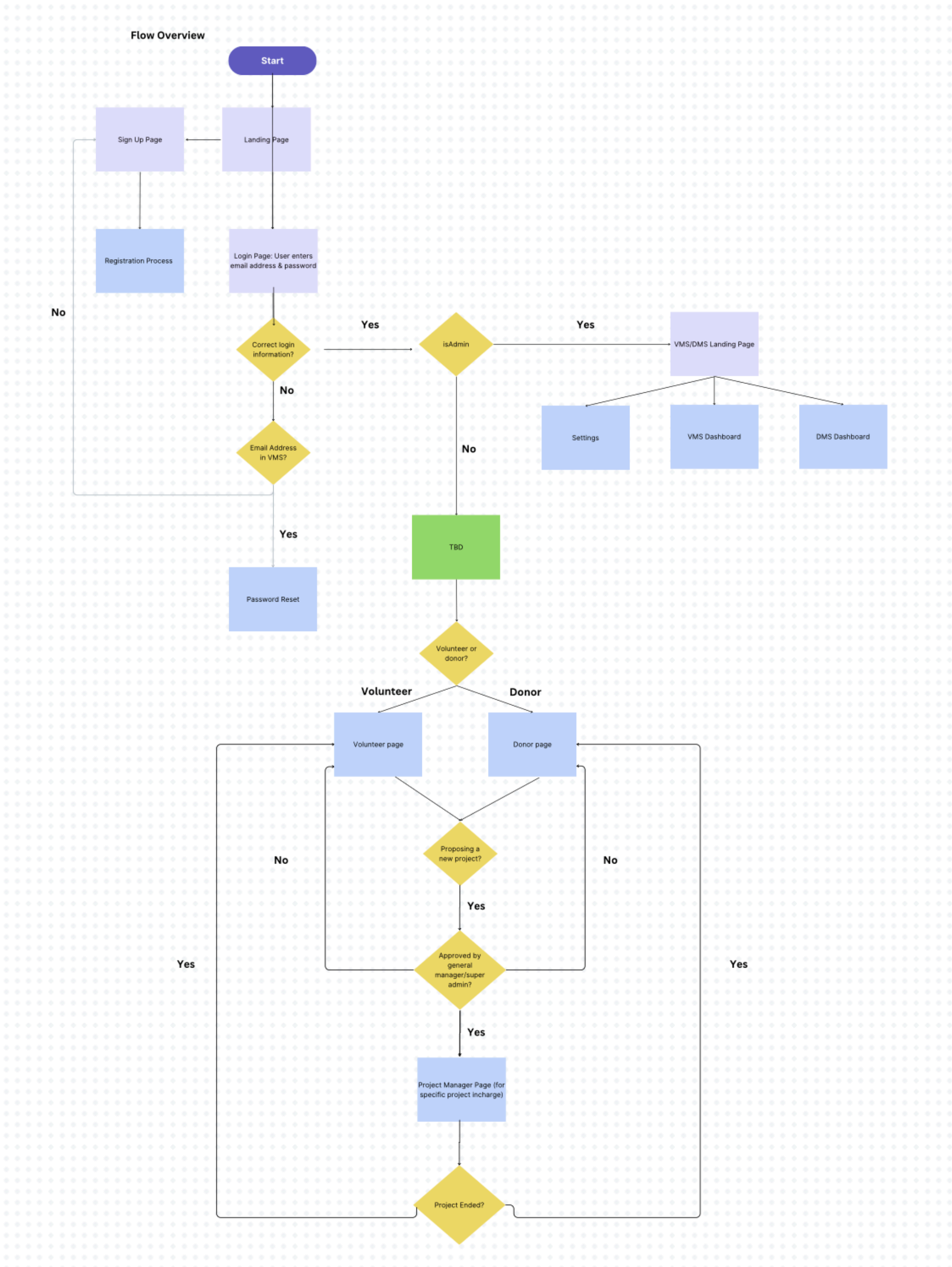
Visualize the stages of each key process using diagrams: https://www.canva.com/design/DAG0ai-FmiI/945I-IYRJioBYiyBsNDRJA/edit

REname DMS/VMS: Partner Management System (overarching term) → functionality of dms and vms remains

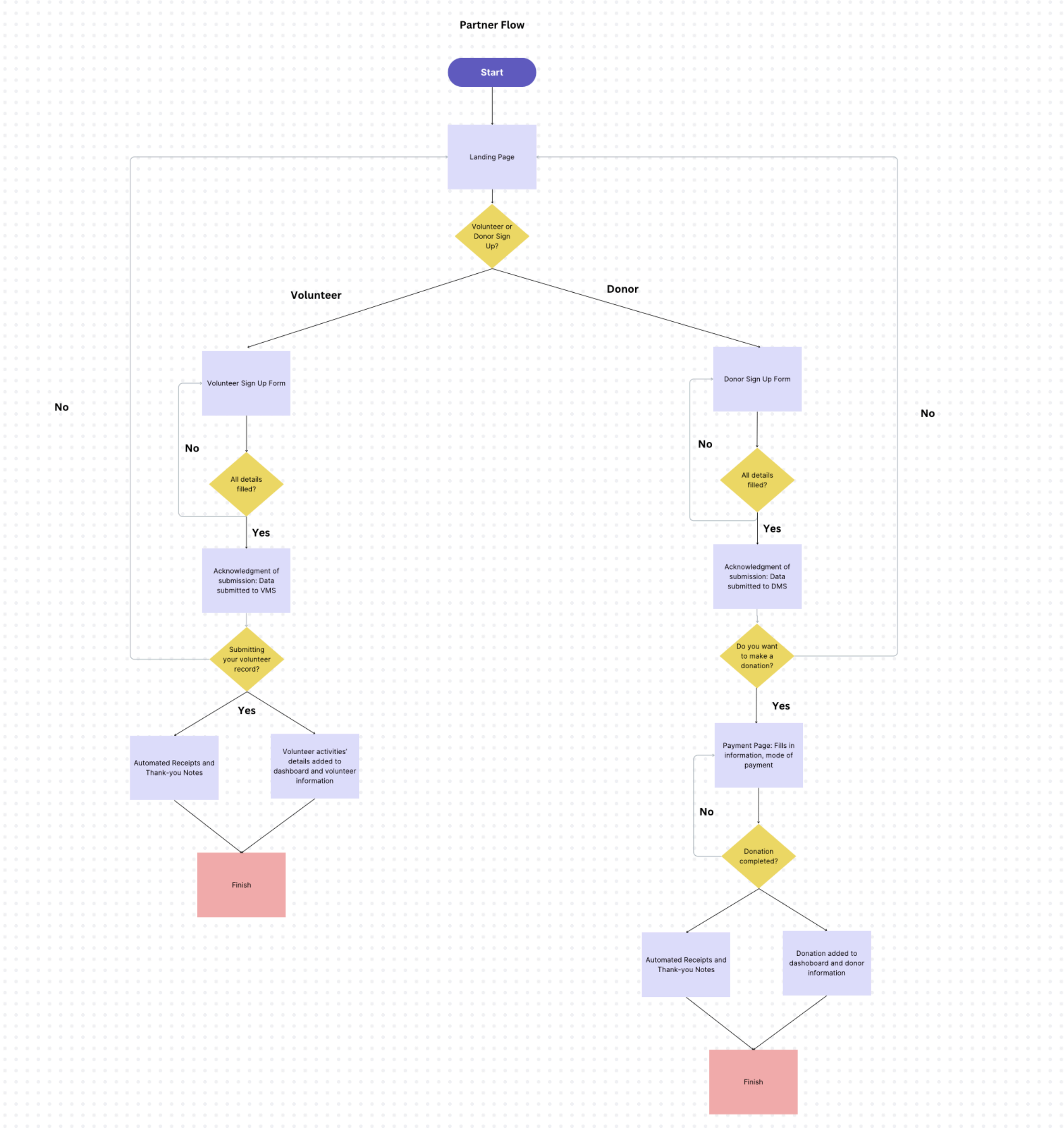
// one flow for each access level

//note: updated flows by access levels

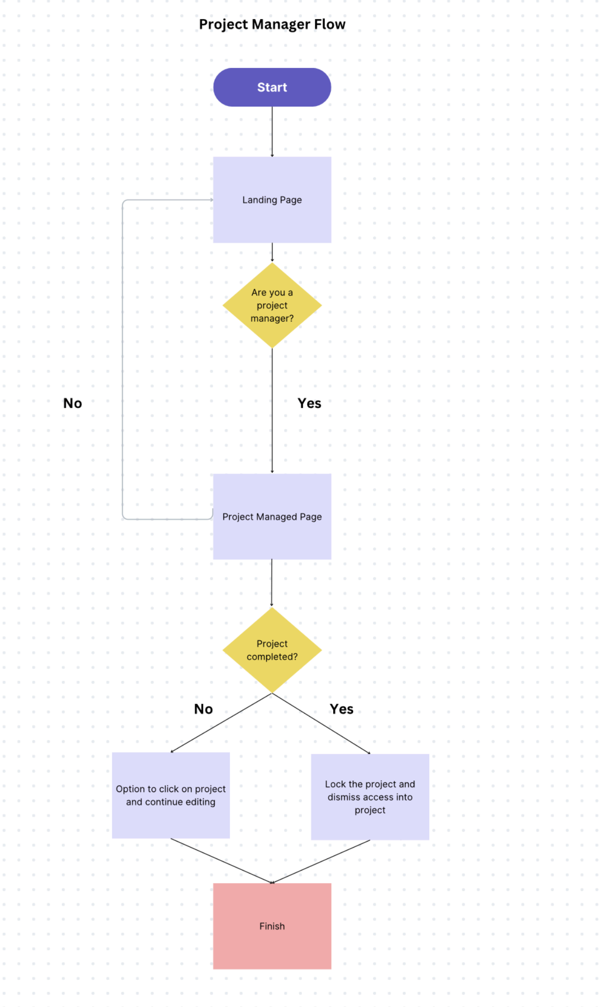
Overview Flow


Flow Overview
Start
Sign Up Page
Landing Page
Registration Process
Login Page: User enters email address & password
No
Yes
Yes
Correct login information?
isAdmin
VMS/DMS Landing Page
No
Settings
VMS Dashboard
DMS Dashboard
Email Address in VMS?
No
Yes
TBD
Password Reset
Volunteer or donor?
Volunteer
Donor
Volunteer page
Donor page
No
No
Proposing a new project?
Yes
Yes
Yes
Approved by general manager/super admin?
Yes
Project Manager Page (for specific project incharge)
Project Ended?

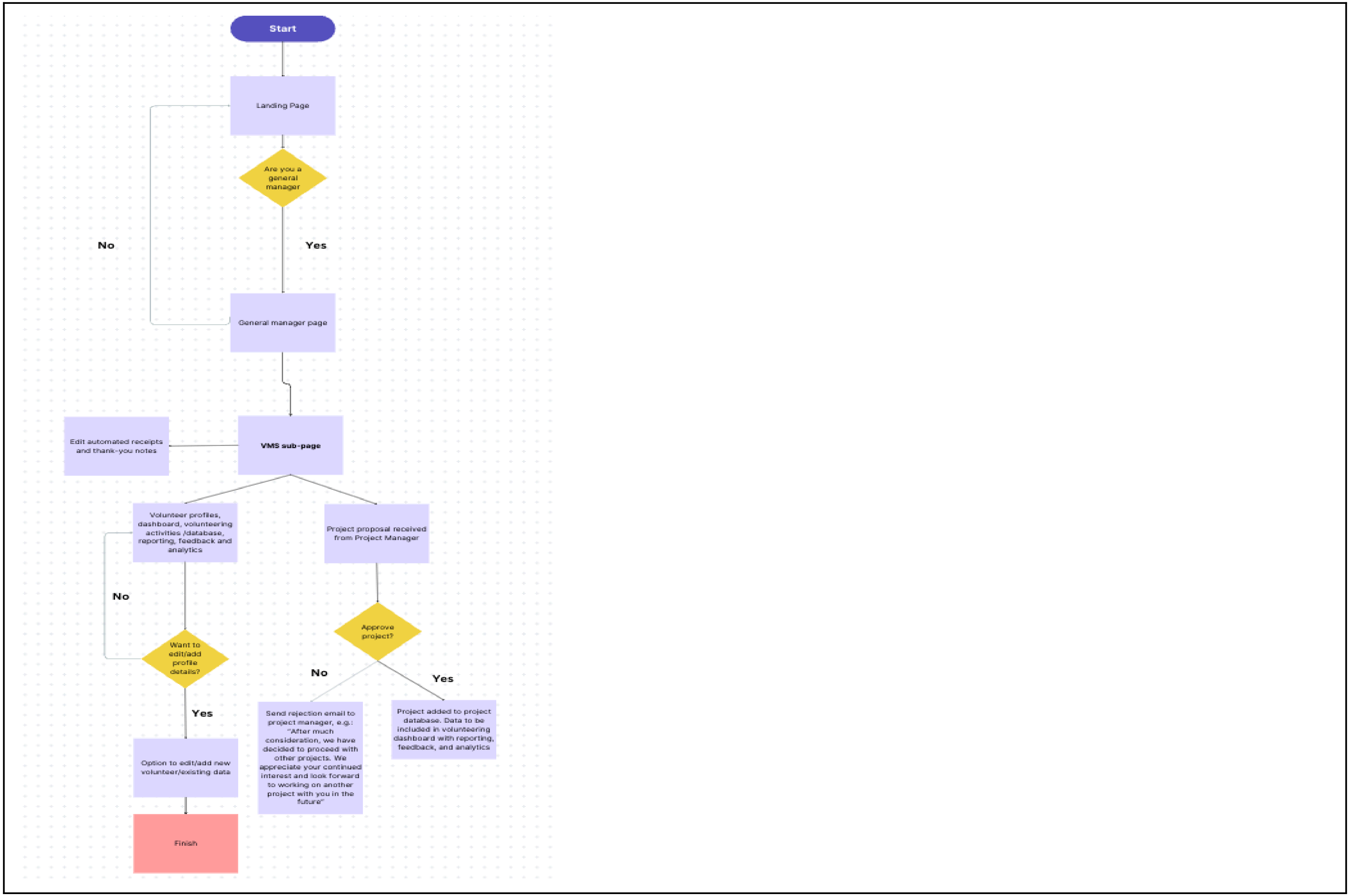
Flow 1: Partner



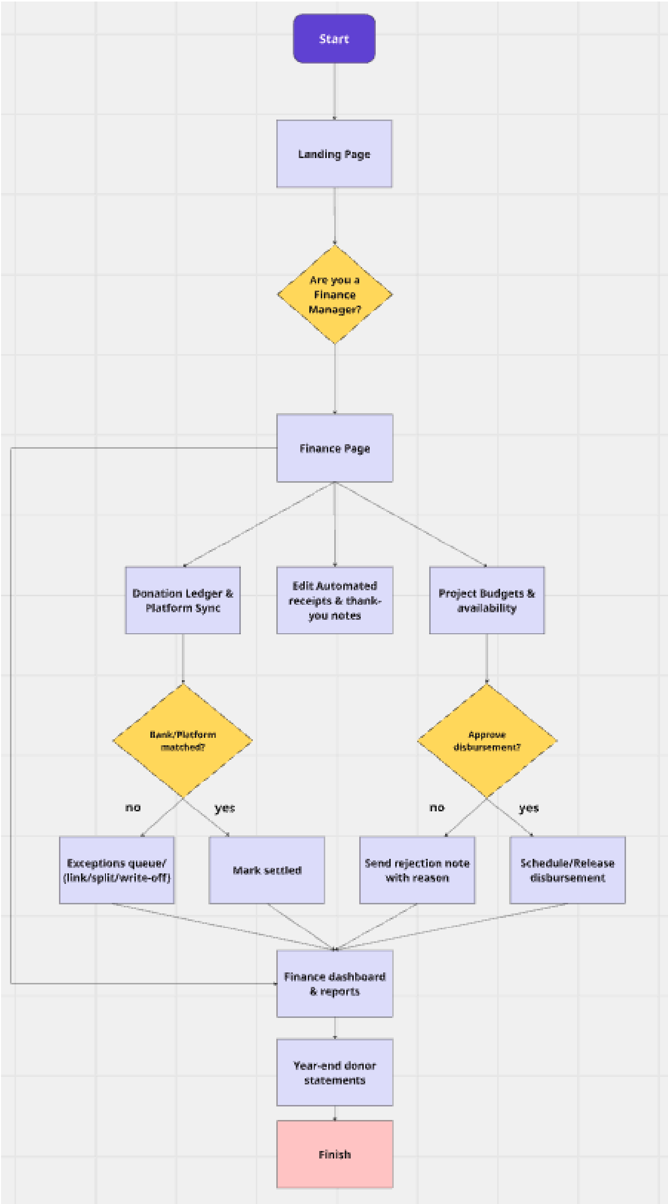
Flow 2: Project Manager



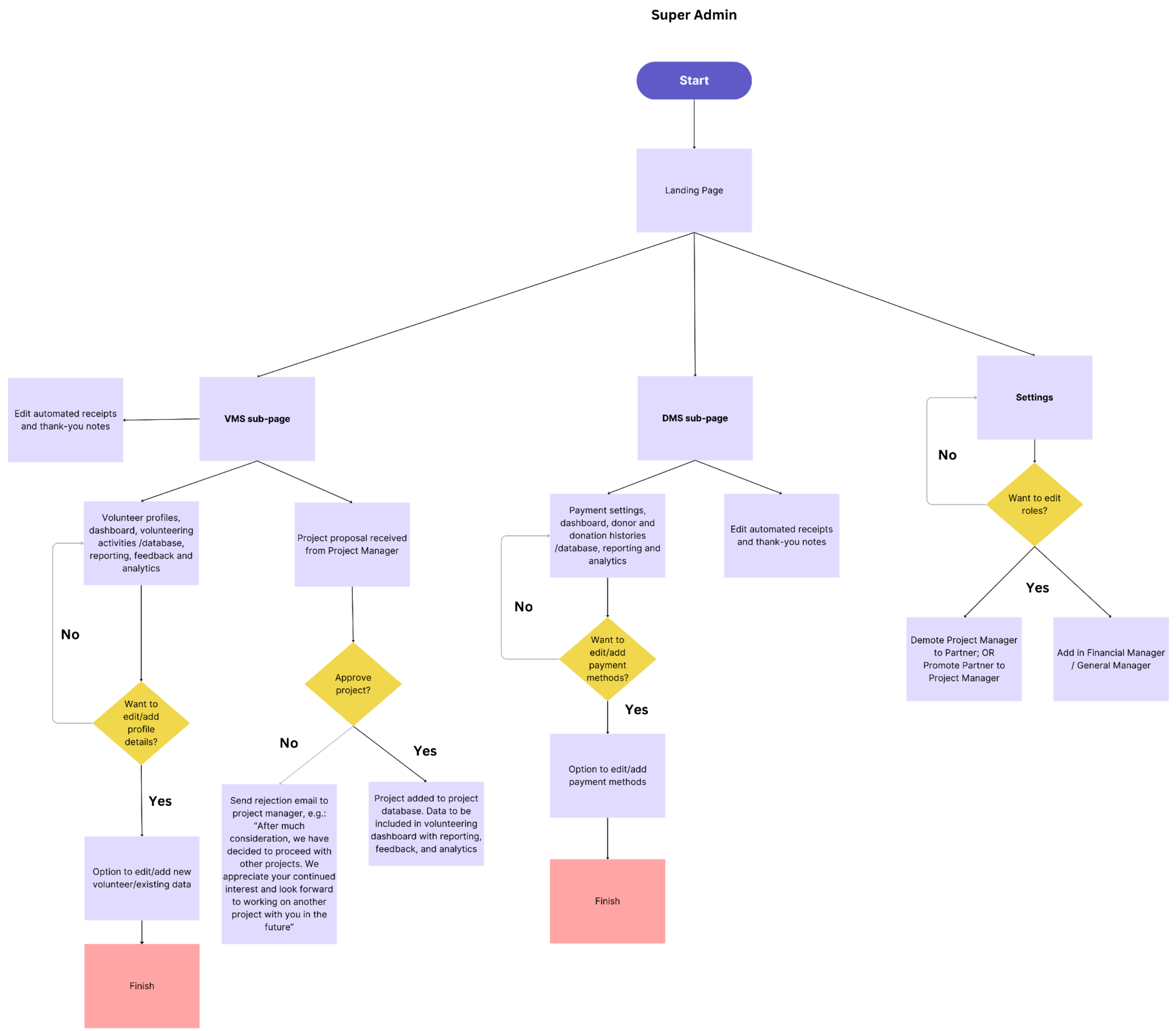
Flow 3: General Manager


Start
Landing Page
Are you a general manager
No
Yes
General manager page
Edit automated receipts and thank-you notes
VMS sub-page
Volunteer profiles, dashboard, volunteering activities /database, reporting, feedback and analytics
Project proposal received from Project Manager
No
Approve project?
Want to edit/add profile details?
No
Yes
Yes
Send rejection email to project manager, e.g.: "After much consideration, we have decided to proceed with other projects. We appreciate your continued interest and look forward to working on another project with you in the future"
Project added to project database. Data to be included in volunteering dashboard with reporting, feedback, and analytics
Option to edit/add new volunteer/existing data
Finish

Flow 4: Finance Manager

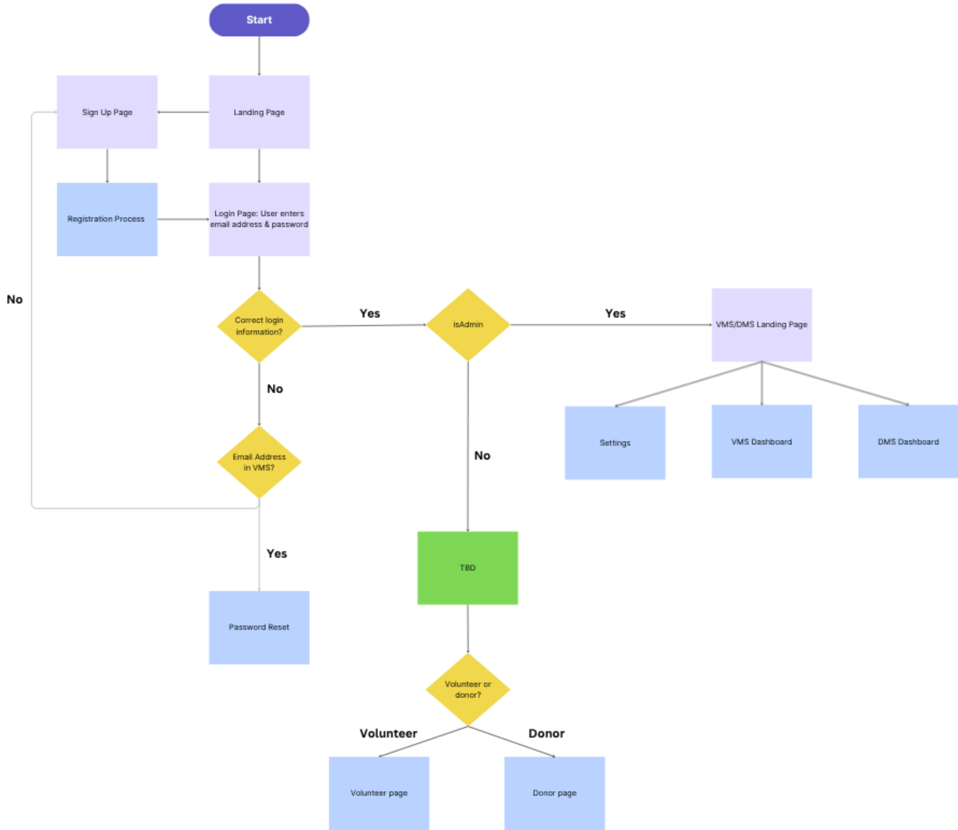


Flow 5: Super Admin

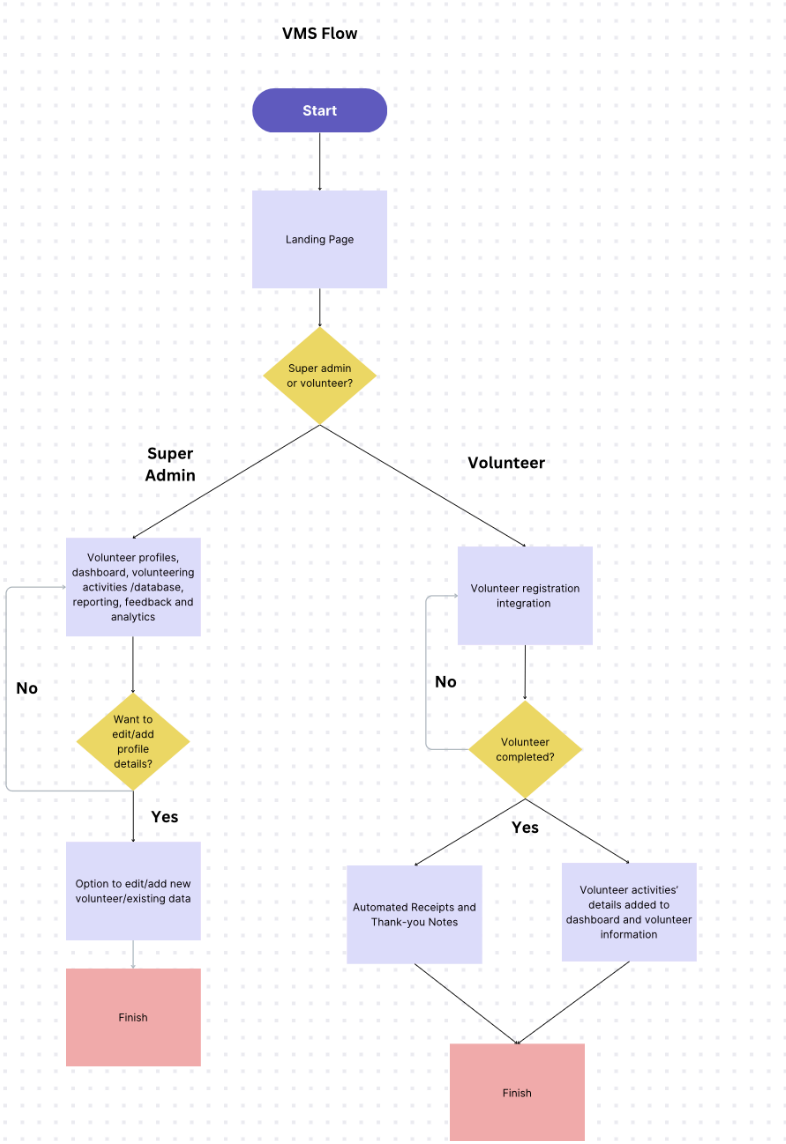


Example:

~~Flow 1: Overview of Flow (Login/Signup for Admin to the VMS/DMS portal)~~

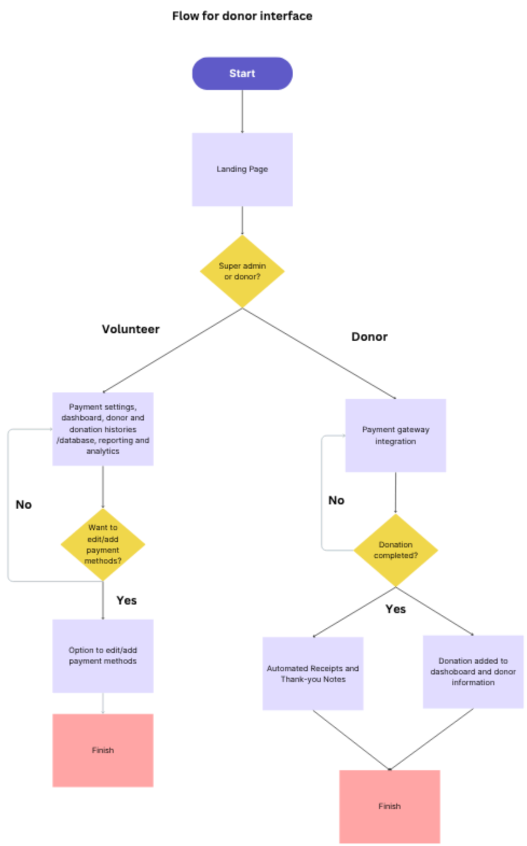


~~Flow 2: VMS Flow~~



VMS Flow
Start
Landing Page
Super admin or volunteer?
Super Admin
Volunteer
Volunteer profiles, dashboard, volunteering activities /database, reporting, feedback and analytics
No
Want to edit/add profile details?
Yes
Option to edit/add new volunteer/existing data
Finish
Volunteer registration integration
No
Volunteer completed?
Yes
Automated Receipts and Thank-you Notes
Volunteer activities' details added to dashboard and volunteer information
Finish

~~Flow 3: DMS Flow~~

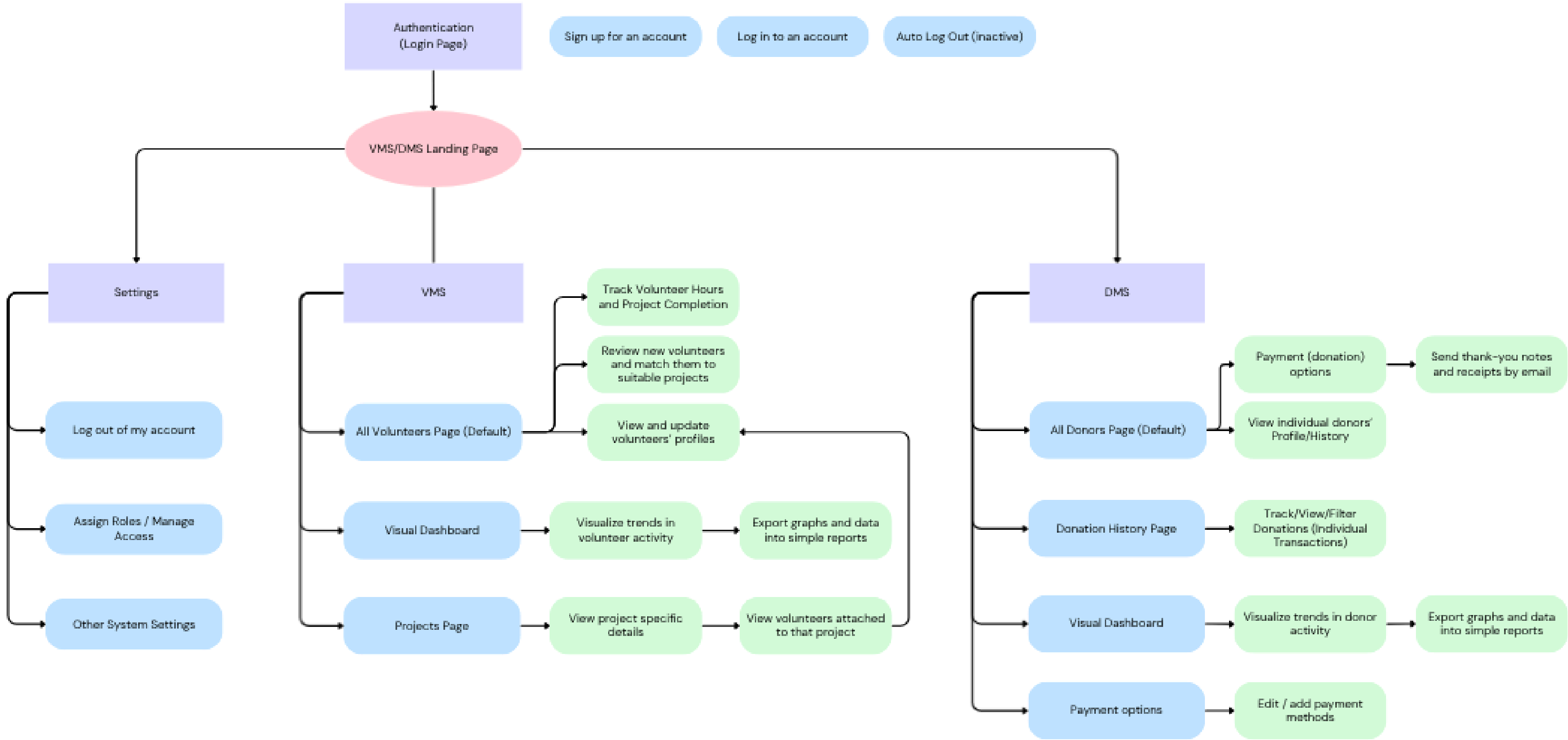


~~//ignore the left side, not relevant anym for new flow -- can just change~~

📑 Sitemap

https://www.canva.com/design/DAGOXHsMLPY/4Oje2PdZ7ahn6lrVXj8uqw/edit?utm_content=DAGOXHsMLPY&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

VMS/DMS portal



Fields Tracked for Volunteers and Donors

<table>
<tr><th>Volunteers</th><th>Donors</th></tr>
<tr><td>

Full Name
NRIC/FIN Number
Passport Number (Optional)
Contact number
Occupation
Language spoken (Dropdown - multiple selection)
Highest Education qualification (dropdown)
Volunteering duration (Ad hoc/ long term/ short term)
Email
Address
Nationality (dropdown)
Gender (Dropdown)
DOB (Dropdown)
Volunteer interest (drop-down list, e.g. befriender, event support, fundraiser)
Volunteer expertise

Have you volunteered before? (yes/no)
What kind of volunteering have you done in the past? (dropdown: Elderly, family, children, PWIDs)
How many years of volunteering experience do you have? (scale for them to pull and choose)
Strengths/Value to add during volunteering (open ended/multiple options)
Weakness during volunteering (open ended/multiple options)

Availability

Days available (Mon-Sun)
Timings available (9am-6pm, every 1 hr interval choice)
Specific Dates available to click on

Total Volunteering hours completed till date

</td><td>

Full name
NRIC/FIN Number
Email
Contact Number
Address
Donation Amount
Preferred cause for donation
One Time/Recurring
Payment Method
Tax Deduction

</td></tr>
</table>

• Interest for Specific Projects ◦ List out all the specific projects that has been confirmed to let them choose	

Functional requirements

#	Use Cases	User Story	Acceptance Criteria / Definition of Done (User Testing will be based on this)	Priority	Notes
Feature 1: Siloam Partner Management System (PMS) General					
1	Sign up for an account	~~As a Siloam staff, I want to be able to sign up so that I can utilize the VMS/DMS~~	~~*Onboarding*~~ • ~~Staff MUST use a Siloam domain email to create an account on the VMS/DMS~~ • ~~Staff can be given various levels of access internally (Clerk.js has support for this)~~ • ~~User authentication should be included in the forms to check for account duplicates, incorrect input formats, etc.~~ • ~~Alternatively, accounts can be included manually to improve privacy and security~~ • ~~Automatic data entry from form responses into a separate database~~ • ~~Siloam super admins can update access permissions from the Clerk dashboard (this is a separate platform) if necessary~~		All stakeholders will be accessing their respective functionalities from the same page. What they see and be able to do will differ from the access levels given to them. • Super admin (full access to all information) • General Manager (full access EXCEPT finance information) • Finance Manager (access to financial information, and only necessary personal info to identify
		As a partner, I want to be able to sign up so that I can access the PMS	• Donors / volunteers can be identified by the non-Siloam domain email they use to sign-up • User authentication should be included in the forms to check for account duplicates, incorrect input formats, etc. • Alternatively, accounts can be included manually to improve privacy and security • Automatic data entry from form responses into a separate database		
2	Log in	As a Siloam staff, I want to be able to log in seamlessly	Each staff member should receive a unique log in user and password for their specific role. When they log in		

			using their staff account, they should be redirected to their role's main webpage. Multiple failed log ins should perhaps raise an alert to the super admin as an unauthorised personnel may be trying to access a staff account. ~~A failed login will give an error panel, and provide the option to create an account (links to the signup page)~~		user such as names) ● Project Manager (access to vms and dms like a normal partner, with the addition of being able to manage their own project page) ● Partner (can only access dms/vms)
		As a partner, I want to be able to log in seamlessly so that I can access the PMS	Simple login with user email and self's password. Successful login will lead to the Main Page of the VMS/DMS [from a non-staff perspective] A failed login will give an error panel, and provide the option to create an account (links to the signup page)		
3.	Access VMS/DMS	As a partner, I want to be able to access the PMS	After logging in, the user can see a simple landing page with two buttons, one to enter the VMS, and one to enter the DMS. Donors / volunteers would be able to access both. HOWEVER, they will be accessing the non-staff webpage which will be detailed down below.		
		As a project manager, I want to be able to access the DMS, VMS, and my project page	When the project manager has their own project approved by the super admin, they will be added to the page by the super admin to create a page just for it. They can have the option of adding the volunteers and donors for this project. There will be two sub pages for volunteers and donors respectively. In each page, to add a new individual, there will be a search bar for them to search for the individuals that signed up and click on 'add' to put them into the system. For each individual added, there will be an edit function for them to delete the individual if needed.		

		As a finance manager, I want to be able to access the financial information			
		As a general manager, I want to be able to access all the information except finances	After logging in, the user can see the general analytics dashboard (Feature group 2, feature 12). The general manager should also be able to access the VMS to see all the volunteers and their related statistics and data.		
		As the super admin, I want to access the full information	After logging in, the user can see the vms, dms, financial information, personal details of partners, and every dashboard / analytics.		

4.	View all submissions to Partner Sign Up Form	As a finance manager, I want to see limited information on the donor submissions on the DMS platform	Once the user accesses the VMS they should be able to view all submissions (of the three subpages under VMS, this is the default) but information on each submission is limited. The entries will default to display the *latest entry at the top.*
			
			The following will be visible on each row of entries:
			○ Full Name
			○ Prefix Title
			○ Gender
			○ Email Address
			○ Phone Number
			○ Preferred way of supporting financially
			    ○ Building funds
			    ○ Sponsor-a-family program
			    ○ Mission trip support
			    ○ Education funds
			    ○ One-time gift
			    ○ Monthly partnership
					For full visualisation of the sign-up form, please view this: https://claude.ai/share/4d1d2edd-1410-4d75-b5e4-ed6ee44affe4

			○ Other: (please specify) ● Preferred Payment Method ○ Amount donated		

		As a general manager, I want to view limited information on the volunteer submissions on the VMS platform	The following will be visible on each row of entries:
			○ Full Name
			○ Prefix Title
			○ Birthday
			○ Gender
			○ Occupation
			○ Nationality
			○ Email Address
			○ Phone Number
			○ Preferred Communication Method
			○ Partnership interest
			    ○ Organizing fundraising events
			    ○ Planning trips for your organization/group
			    ○ Short-term mission trips (up to 14 days)
			    ○ Long-term commitments (6 months or more)
			    ○ Behind-the-scenes administration
			    ○ Marketing & social media magic
			    ○ Teaching & mentoring
			    ○ Training & program development
			    ○ Agriculture projects
			    ○ Building & facilities work
			    ○ Other: (please specify)
			○ Passport Number
			○ Passport Expiry Number
			○ Health Conditions and Health Declaration Form		

		As a super admin, I want full access to view all submissions and information with no restrictions.	The following will be visible on each row of entries:
			○ Full Name
			○ Prefix Title
			○ Birthday
			○ Gender
			○ Occupation
			○ Nationality
			○ Email Address
			○ Phone Number
			○ Preferred Communication Method
			○ Partnership interest
			    ○ Organizing fundraising events
			    ○ Planning trips for your organization/group
			    ○ Short-term mission trips (up to 14 days)
			    ○ Long-term commitments (6 months or more)
			    ○ Behind-the-scenes administration
			    ○ Marketing & social media magic
			    ○ Teaching & mentoring
			    ○ Training & program development
			    ○ Agriculture projects
			    ○ Building & facilities work
			    ○ Other: (please specify)
			○ Passport Number
			○ Passport Expiry Number
			○ Health Conditions and Health Declaration Form
			○ Their story
			    ○ Preferred way of supporting financially
			    ○ Building funds
			    ○ Sponsor-a-family program		

			○ Mission trip support ○ Education funds ○ One-time gift ○ Monthly partnership ○ Other: (please specify) ○ Preferred Payment Method ○ Amount donated		
5	Define Finance Manager Role & Scope	As a Finance Manager, I want access only to finance functions so that I can perform my duties without viewing non-finance data.	● Role Finance Manager exists with scope: Donations, Receipts, Refunds/Chargebacks, Project Budgets, Disbursements, Finance Dashboard. ● Minimal PII visible: Donor ID + Email only. ● No access to: VMS (volunteer lists/profiles/hours), general analytics, or project operations pages. ● Payment methods displayed only as tokenised/ masked identifiers (no PAN/IBAN).		
6	Enforce RBAC & Segregation of Duties	As a Super Admin, I want strict access control so financial data is protected and duties are separated.	● RBAC denies Finance Manager access to VMS and non-finance dashboards (403 + audit log). ● Maker-Checker: creator of a disbursement cannot approve it; enforced in UI & API. ● Compliance exports (IRAS/Cambodia) are Finance-only; exports include only Donor ID/Email. ● Data retention for donations/receipts >= 7 years (configurable) with purge/anonymisation logs. ● All access attempts and exports are audit-logged (user, timestamp, action).		

Feature Group 2: Siloam PMS (VMS sub-page)					
1	Filter VMS entries by volunteer profiles	As a general manager, and super admin I can filter out volunteers based on specific criteria, to aid in subsequent project matching	The platform will follow similar wording as the Volunteer Sign-up form. Users can filter the same data fields on that form. These filters include: Occupation, Language spoken, Education qualification, Volunteering duration (Ad hoc/ long term/ short term) - availability, Email, Address, Nationality, Gender, DOB, Volunteer interest (drop-down list), Volunteer expertise/Skills available, Availability, Volunteering hours, Experience *Users can use multiple filters concurrently in a search.* If possible, there can be AI suggested matches for the project based on the selected criteria, listing out the list of participants that are selected by AI.		Partners and project managers do not have access
2	Match Project to Volunteer	As a general manager, and super admin, I can march partners to projects that match their interest and experience the most.	*Matching* After filtering based on relevant criteria, the user can export resulting volunteers into (X page/database)? to notify them via email for their further confirmation and indication for their matching the pertaining project. Automated emails can be sent to volunteers' registered accounts, which includes action items from Siloam to contact them further. The email has a link that will include a link for the volunteer to confirm their project choice, and personal conditions- including availability, frequency, and location details.		
3	Search VMS for a particular entry	As a general manager and super admin, I can use the	In required situations, the user can use the search bar above the entries to find specific names. The search bar		

	(by name, project, skills)	query function to locate specific partners	will only be applicable to search for individual volunteers, by their registered name.		
4	View an individual volunteer's profile by clicking on his entry	As a general manager and super admin, I am interested in viewing an individual volunteer's profile for more details and evaluation of project matching	After searching for a volunteer by their name, the user can see details on their profile. All details outlined in the volunteer sign-up form will be reflected on the screen, as detailed in the 'Fields Tracked for Volunteers and Donors' section. This page should also allow the admin to update the volunteer's non-personal information (eg: skills, remarks) and also approve the volunteer if not already done so. Approval of a volunteer should send them a confirmation email. Additionally, individual volunteer metrics will be displayed on this page. See the 'Metrics' section for what these metrics are.		
5	Update a volunteer's personal information and/or status	As a general manager and super admin, I want to see the active and non-active members of the volunteer database	One of the following statuses will be shown for each volunteer: —>pending —>available (after acceptance, while waiting to be assigned to one or more projects) —>assigned (volunteer must have been assigned to at least one project) —>rejected Over the course of a project, if a volunteer withdraws themselves from their duties, a manual update to the status is required.		

6	Track volunteer's activity	As a general manager and super admin, I want to see the number of hours volunteers spend for a project, their attendance. General manager and super admin can mark the volunteer attendance at the end of session in this tab.	For each partner, after clicking into their name, there will be a tab for volunteering hours. The data for the following should be taken from the matching and allocation of projects to the volunteer portion. In this tab, the columns will be the name of the project that they took part in. For the rows, there will be 3 different rows (in this order) → Attendance: Attended(can calculate the number of hours)/Did not attend (immediately put 0 hours) [2 options to choose] → Date Volunteered → Time Volunteered (Have drop down boxes for start to end) [e.g. __am/pm to __ am/pm] → Hours Completed: the system will automatically fill the number of hours completed based on the time given in the time volunteered row There should be a filter button for the Siloam staff member to choose the type of project they want to see. This allows them to see the number of hours completed just for that project itself.		
8	View overall volunteer metrics	As a general manager and super admin, I am interested in seeing the growth metrics of my volunteers for the current year, and trends from the past. This allows me to see the growth in impact we	The second subpage of the VMS. When connected to the dashboards, the user can see various metrics with accompanying graphs to show annual, or YOY growth. See the 'Metrics' section for more information on what metrics are to be tracked.		

		have on society.			
9	View/Modify Projects List	As a general manager and super admin, I can view all the volunteering projects managed by the organization and make additions and amendments.	The third subpage of the VMS Full list of projects displayed as rows. User can click into a project to see more details about the project along with the volunteers assigned to it. Possible to unassign a volunteer from here, but it must update for that volunteer's profile across the application. Can also add a new project using a plus button somewhere on the page.		
		As a project manager, I can view my volunteering projects managed by me and make additions and amendments	The third subpage of the VMS Full list of user's own projects displayed as rows. User can click into a project to see more details about the project along with the volunteers assigned to it. Possible to unassign a volunteer from here, but it must update for that volunteer's profile across the application. Can also add a new project using a plus button somewhere on the page.		
10	Performance and Feedback Tracking	As a **general manager and super admin**, I want to view my performance records so I can track my progress over time. As a **general manager/ super admin / project manager**, I want to submit performance reviews and	System allows staff and supervisors to: • Record, edit, and view performance data by date or project. • Submit and tag feedback (supervisor/peer/self). • Generate and download individual or team performance reports (PDF/Excel). • View performance history and trend graphs. • Data entries are time-stamped and associated		

		feedback for my team so I can monitor their growth. As a **partner**, I want to provide feedback for colleagues after specific activities so my input can be used for improvement.	with the correct user ID. Testing: • Users can successfully submit and retrieve performance entries. • Reports match the recorded data with 100% accuracy. • Average page load time for report generation < 5 seconds. • Data is visible only to authorised roles.		
11	Communication Tools (Email/SMS Notifications)	As a **general manager and super admin**, I want to receive reminders about performance reviews or feedback deadlines so I stay informed. As a **general manager/ super admin / project manager**, I want to send group messages or announcements directly through the system. As a general **manager/ super admin / project manager**, I want to customize notification templates to maintain consistent messaging.	System capabilities: • Automatically sends notifications for key events (e.g., review deadlines, feedback requests, announcements). • Allows creation and editing of custom templates for emails and SMS. • Enables ad hoc sending to individuals, teams, or departments. • Logs all sent messages with timestamps and delivery status. Testing: • Notifications trigger correctly based on workflow events. • Delivery success rate ≥ 95%. • Templates load correctly and display variables (e.g., name, date). • Users can opt in/out of specific notifications.		

12	Reporting and Analytics Dashboard	As a general **manager/ super admin / project manager**, I want to see overall engagement and performance metrics so I can identify trends. As a **general manager/ super admin**, I want to generate detailed reports for my team to support performance reviews. As a **general manager/ super admin**, I want to view a summary of my performance statistics for self-reflection.	Dashboard features: • Displays key KPIs (performance, engagement, feedback trends) in real-time. • Includes filters (by department, project, date range). • Provides data visualization tools (charts, graphs, tables). • Allows exporting reports to PDF/Excel formats. • Dashboard auto-refreshes or updates when new data is added. Testing: • Charts accurately reflect backend data. • Exported reports match on-screen data. • Load time for dashboard < 3 seconds. • Access restricted based on user role.		
13	Access Control and Data Security (PDPA Compliant)	As an **super admin**, I want to manage user access levels so that only authorized personnel can view/edit data. As a **super admin**, I want to ensure data handling complies with PDPA regulations. As a **general manager /**	Security and compliance: • Role-based access control is enforced (Admin, Supervisor, Staff). • Sensitive data (personal info, feedback) is encrypted in transit and at rest. • The system maintains an audit trail of all access and edits (user, timestamp, action). • PDPA compliance checklist met (consent, purpose limitation, data retention). • Regular security reviews and penetration testing		

<table>
<tr><td></td><td></td><td>finance manager /super admin, I want assurance that my personal data and performance records are secure.</td><td>scheduled.

Testing:
Users can only access data relevant to their role.
Unauthorized access attempts are logged and denied.
Audit trail exports available for review.
Data deletion and retention policies function correctly.</td><td></td><td></td></tr>
<tr><td>14</td><td>Restrict Finance Manager from VMS</td><td>As a Finance Manager, I should not see volunteer data so that privacy boundaries are upheld.</td><td>Finance roles cannot view VMS lists, profiles, matching, hours, or project operations.
Attempted access returns 403 and generates an audit log entry.</td><td></td><td></td></tr>
<tr><td colspan="6">Feature Group 3: Siloam PMS (DMS sub-page)</td></tr>
<tr><td rowspan="2">1</td><td rowspan="2">Centralised donor information management and tracking</td><td>As the super admin, I want to be able to see all the donor information on the webpage</td><td rowspan="2">When the user accesses the DMS webpage, they should be able to see a dashboard, displaying details such as:
Donation trends (can be illustrated through a graph), total donation amount
Visual representation (e.g. pie charts) of donations by types
A database at the bottom of the dashboard detailing donor information
First name, last name, tax reference number, email, contact no.
Donation history, donation amount, payment types, donation category (e.g. individual, corporate, fundraising events), project donated to, preferred payment</td><td></td><td></td></tr>
<tr><td>As the finance manager, I want to see all finance-related information and other data identifying partner</td><td></td><td></td></tr>
</table>

			method • Online query capabilities for donor information • An option to allow users to import in external data to the system, where needed, such as importing CSVs ○ System should automatically extract relevant details and store it into the database Entries should be sorted by the latest donation date by default. This feature amalgamates the details from the Centralised donor information management and Donation Tracking. **Centralised donor information management** refers to the database to store and capture donor information including personal details, donation amount, donation history, frequency, payment methods, communication preferences etc. **Donation Tracking** refers to the dashboard providing a real-time view of donations across channels (e.g. direct bank transfer, 3rd party such as giving.sg). It tracks donation trends (such as donor frequency and average donation in a year) and generates financial reports.		
2	Payment Gateway Integration	As a partner, I want to be able to see the different payment options available for donation.	When donors access the DMS webpage, they should be able to see the following fields to provide inputs: • Name • Email • Preferred mode of payment After submitting these details, the finance manager will		If donor has not logged in (i.e., signed up too), I imagine the payment options to be below the donor sign-up section

			reach out to them via email with the bank account details to make the payment ● Donor sends payment with proof of receipt (by email)		
		As a finance manager, I want to be able to view all donation interest and approve donations	● User should see form submissions containing the donor's ○ Name ○ Email ○ Preferred mode of payment ● After payment + receipt: user can add donation data into the system		I imagine this database to be right below the dashboard (from the finance manager perspective)
3	Automated Receipts and Thank-you Notes	As a finance manager / super admin, I want to be able to activate and edit the automated receipts and thank-you notes	Upon confirmation of donation, user should be able to ● Activate an automated email to acknowledge donation receipts and include a personalised thank-you note ○ Thank-you note should be personalised including the donor's name, and the impact they achieved (e.g., total donation amount) ● Edit email template such as ○ Message content ○ Placeholders where fields are being automated		
		As a partner, I want to receive a receipt confirmation of my email with an attached thank you note	Once donor completes their donation, in the confirmation emails sent out to them by the finance manager, they should ● See a "payment confirmed" and thank-you note ○ Thank-you note should be personalised including the donor's name, and the impact they achieved (e.g., total donation amount) ○ There should be an option at the bottom		

			to generate and print requests at the bottom ● See an option to send out reminders/receipts when needed for subsequent emails ○ If they click yes, automate follow-ups for recurring donations or lapsed donors ○ Reminders are sent out once every month by default ■ Frequency can be changed through the DMS page		
4	Donation trend reporting and analytics	As the super admin, I want to be able to utilise statistics like donation patterns, campaign effectiveness, and donor demographics through visual and data-driven insights. This can help me plan for future campaigns as well as find out which group of donors I should try to retain and promote to. As the finance manager, I would also want to be able to utilise all these tools to analyse data and provide meaningful strategies to retain partners and plan future campaigns.	● The system shall provide **real-time** dashboards displaying total donation amounts, donation trends over time, and campaign performance. ● The system shall support customisable dashboards and filters by campaign, donor type, geography, and data range ● The system shall include analytical tools for: ○ Pareto Analysis (80/20 rule for donor contribution share) ○ Predictive Donor Analytics (Identify potential high-value or lapsed donors) ○ Donor Giving Analytics (Track average donation size and frequency) ○ Donor Demographic Analytics (Analyze giving patterns by age, location, occupation) ○ Donor Time Period Analytics (Analyze when the volume of donation is greatest such that we can target this period of time for future campaigns) ● The system shall allow for data export (CSV, XLSX, PDF) for easy reporting to management or higher-ups		

			• The system shall maintain data visualizations (graphs, charts, heatmaps) for donation trends and engagement metrics for easy reference.		

5	Segmentation of Donors	As the super admin, I would want to group donors dynamically based on defined criteria to tailor engagement and campaigns.	• The system shall allow multi-dimensional segmentation based on:
			  ○ Demographics (Age, Location, Occupation)
			  ○ Behavior (Frequency, Recency, Monetary value, Non-monetary value)
			  ○ Engagement (Email open-rates, Clicked links, Responded to surveys, Event attendance, Partners who just volunteers/donates or does both)
			  ○ Interest (Reason for donation, Custom tags/labels for campaigns they have supported)
			• The system shall automatically flag:
			  ○ New donors (first-time donors)
			  ○ Lapsed donors (no donation in X months)
			  ○ Prospective donors (expressed interest but no donations yet)		

		As the finance manager, I would also want to group donors dynamically based on defined criteria to tailor engagement and campaigns.			

		As the general manager, I would want to group partners dynamically based on defined criteria to tailor engagement and campaigns.	• The system shall allow multi-dimensional segmentation based on:
			  ○ Demographics (Age, Location, Occupation)
			  ○ Behavior (Frequency and Recency of volunteering)
			  ○ Engagement (Email open-rates, Clicked links, Responded to surveys, Event attendance, Partners who just volunteers/donates or does both)
			  ○ Interest (Reason for partnering, Custom tags/labels for campaigns they have supported)		

			• The system shall automatically flag:
			  ○ New partners (first-time volunteering)
			  ○ Lapsed partners (no activities in X months)
			  ○ Prospective partners (expressed interest in campaigns or emails but no sign up)		

6	Donor engagement tracking	As the super admin, I would want to centralise all donor touchpoints and activities for holistic engagement insights.
		
		As the finance manager, I would also want to centralise all donor touchpoints and activities for holistic engagement insights.
			• The system shall log all donation activities (amount, date, channel, recurring/one-time, pledge vs fulfilled)
			• The system shall record all communications (email open rates, SMS, WhatsApp, calls, notes from personal outreach)
			• The system shall track event participation (RSVPs, attendance, event type)
			• The system shall implement engagement scoring based on:
			  ○ Donation frequency
			  ○ Donation value
			  ○ Email response
			  ○ Event attendance
			This is to make it easier to differentiate the “highly engaged” vs “at-risk of losing” donors
			• The system shall provide an interaction timeline for each donor showing all donations, communications, and events.
			• The system shall link survey feedback and satisfaction results to donor profiles
			• The system shall provide alerts/tags for donor lifecycle stages (e.g green for highly engaged, orange for at-risk and red for lapsed)		

		As the general manager, I	• The system shall log all partner activities		

		would want to centralise all partner touchpoints and activities for holistic engagement insights.	(volunteer date, channel, campaign, hours volunteered) • The system shall record all communications (email open rates, SMS, WhatsApp, calls, notes from personal outreach) • The system shall track event participation (RSVPs, attendance, event type) • The system shall implement engagement scoring based on: ○ Volunteer frequency ○ Email response ○ Event attendance This is to make it easier to differentiate the "highly engaged" vs "at-risk of losing" partners • The system shall provide an interaction timeline for each partner showing all participations from donating to volunteering, communications, and events. • The system shall link survey feedback and satisfaction results to partner profiles • The system shall provide alerts/tags for donor lifecycle stages (e.g green for highly engaged, orange for at-risk and red for lapsed)		
7	Integration with External Donation Platforms	As a super admin, I would want a seamless and safe synchronisation of donation data from established platforms	• The system shall integrate with GIVE.asia API for real-time donation data sync. • The system shall periodically import new and updated donations (amount, data, donor info, campaign IDs) • The system shall ensure all imported data complies with PDPA and local regulatory standards in Cambodia		These external donation platforms are for the general public (not just our partners) to be able to donate to causes put out by Siloam.

8	Data Security and Regulatory Compliance	As a super admin, I would want to ensure that donor data is well protected and complies with PDPA/Cambodia charity regulations	• The system shall store only necessary PII (Personally Identifiable Information) and restrict access by user role • The system shall enforce Two-Factor Authentication using perhaps Microsoft Authenticator as a minimum login requirement • The system shall encrypt data at rest and in transit • The system shall mask sensitive identifiers (e.g Khmer National ID) • The system shall maintain audit logs of all data access and modification actions • The system shall comply with data retention policies - automatic archiving or deletion of outdated records • The system shall maintain regulatory compliance with: ○ PDPA ○ IRAS (for tax-deductible receipts) ○ Cambodian charity data regulations		
9	Donation Ledger & Reconciliation	As a Finance Manager, I want a real-time ledger so I can reconcile donations with bank/platform data.	• Ledger shows: Donor ID, Email, Donation ID, Amount, Currency, Date/Time, Method (token), Status, Campaign/Project. • Filters: date range, status, method, campaign/project, currency. • Import bank CSV; auto-match ≥95% (amount, date±tolerance, reference). • Unmatched items go to Exceptions queue with reason; CSV/XLSX export; last-30-day view loads <3s.		Minimal PII (Donor ID + Email), tokenised payments only, PDPA-compliant logs, exports limited to finance scope.

10	Exceptions Workflow	As a Finance Manager, I want to resolve reconciliation mismatches quickly and traceably.	• Actions: Link, Split, Write-off (reason), Reclassify campaign. • All actions are audit-logged (user, timestamp, before/after). • Exceptions report downloadable (CSV/PDF); resolving updates ledger and reports immediately.		Minimal PII (Donor ID + Email), tokenised payments only, PDPA-compliant logs, exports limited to finance scope.
11	Receipts & Acknowledgements (IRAS-ready)	As a Finance Manager, I want to issue numbered receipts and send acknowledgements automatically.	• Auto receipt numbering (prefix/year/sequence). • Email with PDF receipt uses templated placeholders (Donor ID/Email, Amount, Date, Campaign, Receipt No.). • Bulk issuance supported; re-issue marked “duplicate copy” with reason; each PDF renders ≤2s.		Minimal PII (Donor ID + Email), tokenised payments only, PDPA-compliant logs, exports limited to finance scope.
12	Refunds & Chargebacks	As a Finance Manager, I need to process refunds and capture chargebacks accurately.	• Full/partial refunds require a reason code; donation status updated. • Chargebacks pulled from gateway sync (read-only); donor/campaign totals auto-update. • Reversal note stored; actions fully audit-logged.		Minimal PII (Donor ID + Email), tokenised payments only, PDPA-compliant logs, exports limited to finance scope.
13	Project Budgets & Availability	As a Finance Manager, I want to set budgets and track available funds per project.	• Budget per project/fiscal year; shows Committed / Disbursed / Available. • Alerts on <10% remaining or overspend. • GM/PM have a read-only view of their project availability.		Minimal PII (Donor ID + Email), tokenised payments only, PDPA-compliant logs, exports limited to finance scope.
14	Disbursements with Maker–Checker	As a Finance Manager, I want controlled disbursements to approved projects.	• Create disbursement with project, amount, currency/FX rate, date, memo, attachments. • Validation blocks amounts > Available funds. • Maker–Checker approval flow: Draft → Pending		Minimal PII (Donor ID + Email), tokenised payments only, PDPA-compliant logs,

			Approval → Scheduled/Released (or Rejected). ● Export bank batch (CSV/XLSX) or call bank API; full audit trail.		exports limited to finance scope.
15	Finance Dashboard (Restricted)	As a Finance Manager, I want a finance-only dashboard for quick insights.	● KPIs: Total/Net donations, Average donation, % recurring, Disbursements YTD, Available by project. ● Filters: period, campaign, project, currency; load <3s. ● No volunteer/engagement analytics visible to Finance role.		Minimal PII (Donor ID + Email), tokenised payments only, PDPA-compliant logs, exports limited to finance scope.
16	External Platform Sync (e.g., GIVE.asia)	As a Finance Manager, I want synced, cleared donations from external platforms.	● Scheduled (e.g., hourly) + manual sync. ● Imports: external ID, gross/net, fees, settled date, status; maps to internal campaign/project codes. ● Failures appear in Exceptions queue; credentials stored in secrets manager; access is audit-logged.		Minimal PII (Donor ID + Email), tokenised payments only, PDPA-compliant logs, exports limited to finance scope.
17	Year-End Donor Statements (Minimal PII)	As a Finance Manager, I want to generate annual summaries per donor without exposing extra PII.	● Bulk PDF summaries per Donor ID/Email with totals by campaign; email delivery only. ● Opt-out respected; templates render all variables; audit log of sends.		Minimal PII (Donor ID + Email), tokenised payments only, PDPA-compliant logs, exports limited to finance scope.

Metrics

<u>**VMS**</u>
General Population

- CWA active volunteer numbers
  - line graph/bar chart
  - X-axis: Time, Y-axis: Numbers
  - The timeframe can be manipulated (last 1 month, last 1 year, all-time)
  - We can consider separating returning/new volunteers in the same timeframe
  - Volunteer type: individual/school/corporate
- Volunteers' age range
  - Stacked bar chart across months/years
  - Within a bar for a given month/year, each colored stack represents the number of volunteers in that age group
- Gender/Ethnicity/Skillset holders distributions
  - Can use a pie chart to show the distribution of these metrics across active volunteers in the CWA database - this will help with assigning volunteers to projects and tasks
  - If we include a field in the signup form for 'Where did you hear about us?' - this data can be used to produce a graph for volunteer acquisition channels

Individual Volunteer

- Apart from attendance and which projects a volunteer is assigned to, there is not much other data, so we cannot think of any other visualizations for individual volunteers. Perhaps not necessary.

<u>**DMS**</u>
General Population

- Temporary Funding Target Progress Bar: A progress bar indicating the current progress toward the funding goal. The goal should be easily replaceable/reset after being reached.
- Funding by Source Pie Chart: A chart displaying the proportion of funding from individual versus corporate donors.
- Transactions by Payment Type Pie Chart: A breakdown of donations received via different methods (e.g., PayNow, GIRO, GivingSG).
- Ranked Donors: A ranking of top donors based on the total all-time donations.

Individual Donor

- Donations over time (per month, per year)
  - Either as a bar chart for each month/year or a cumulative graph
- Total all-time donations to Siloam
  - Future ability to rank donors
- Donation frequency (e.g., monthly, yearly)

~~🧸 💻 Non-functional requirements / Technical Specifications~~

~~These are typically requirements for uptime, performance etc. Most typical performance metrics to consider are throughput and latency. More to add on based on questions asked by dev teams.~~

~~To be discussed with CWA during meeting~~

~~🎨 User Interaction & Design~~

~~CWA Website~~

1. ~~Signup page (with two options)~~
2. ~~Volunteer Signup Page~~
   a. ~~Will require an intermediary page for Singpass verification~~
3. ~~Donor Signup Page~~
   a. ~~Will require an intermediary page for Singpass verification~~

~~CWA VMS/DMS Application~~

1. ~~Login/Signup Page~~
2. ~~Landing page – this will be very basic, with options to click into VMS or DMS~~
3. ~~VMS (will have the following subtabs:)~~
   a. ~~View/edit page for ALL volunteers – a long list of all the volunteers under CWA (this is the default VMS subtab)~~
      i. ~~Can click a volunteer to see a unique page about that volunteer (personal details, skills, contributions, projects assigned)~~
      ii. ~~A way for new signups to be pushed to the top/highlighted so that they can be assigned to projects~~
   b. ~~Project Management~~
      i. ~~Can view all the projects under CWA, click on them~~
      ii. ~~Once clicked into the project, see the project's details, and volunteers assigned – click a volunteer will take you to their page~~
   c. ~~Dashboard Page (with all the agreed-upon metrics/visualizations displayed)~~

4. ~~DMS (will have the following subtabs:)~~
    a. ~~View/edit page for ALL donors – a long list of all the people that have donated to CWA (this is the default DMS subtab)~~
        i. ~~Can click a donor to see a unique page about that volunteer (personal details, contributions over time)~~
    b. ~~History page (for individual transactions)~~
        i. ~~Ordered latest to oldest~~
        ii. ~~New donations are to be pushed to the top/highlighted so a thank you email can be sent if desired~~
    c. ~~Dashboard page (with all the agreed-upon metrics/visualizations displayed)~~
5. ~~Account/Settings Page~~