PRD

SMFLX Event Portal – Product Requirements Document (PRD)

1. Platform Overview

Product Name: SMFLX Event Portal (Singles, Married & Family Live Experience)

Website: https://smflx.org

Vision
SMFLX is a move of God designed to help singles, married couples, and families escape corruption through lust and discern, pursue, and walk in God's ordained purpose for their lives. The SMFLX platform serves as the digital backbone that enables seamless participation in this experience—onsite, camping, or online—while preserving continuity across years.

Problem Statement

- Manual or fragmented event registration processes
- Poor visibility into accommodation and facility availability
- Lack of unified participant history across yearly editions
- Administrative difficulty in communication, allocation, and reporting

Goal
Build a secure, easy-to-use web platform that:

- Supports multiple attendee types with distinct journeys
- Automates room allocation via transparent ballot logic
- Gives admins real-time visibility and control
- Preserves attendee history year-over-year

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2. Target Users & Personas

2.1 Participants

1. **Camper Attendee**
    - Attends physically

    - Camps onsite
    - Meals are included by default
    - May share rooms
2.
3. **Regular Attendee (Physical, Non-Camping)**
    - Attends physically
    - Does not camp
    - Optional meal purchase
4. **Online Attendee**
    - Attends virtually only
    - No accommodation or meals

2.2 Admin Users

1. **Super Admin** – Full system access
2. **Event Admin** – Registration, rooms, communications
3. **Finance/Admin Ops** – Payments, reports

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3. User Access & Authentication

User Side

- Email-based sign-up
- Mandatory email verification before registration completion
- One account per user, reusable across event years

Admin Side

- Role-based access control (RBAC)
- Secure admin dashboard login

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4. Core Features & Functional Requirements

4.1 Registration Module (MVP)

Description

Handles differentiated registration journeys based on attendee category.

User Stories

- As a user, i want to sign up with my email address only so that i can login to see the event details
- As a user, I want to choose my attendee type so I can see only relevant options
- As a user, I want to fill in my basic profile information and then relevant information about my attendee type and the smflx event.
- As a user, I should be able to see the days left before the event and a reminder sent to me
- As a user, I should be able to update my event category (attendee type) anytime before the start day of the event.

User Story	Acceptance Criteria
As a user, I want to sign up with my email address only so that I can log in and see the event details	• Sign-up form contains Email Address (Required) only • Email must be in valid format • System sends verification email on submission • User cannot proceed to registration until email is verified • Once verified, user can log in and access dashboard
As a user, I want to choose my attendee type so I can see only relevant options	• Attendee Type selection is Required • Options shown: Camper / Regular / Online • Selected type dynamically controls which form sections appear • Changing attendee type updates visible fields without page reload
As a user, I want to fill in my basic profile information and then relevant information about my attendee type and the SMFLX event	• Basic Profile section includes: First Name (Required), Last Name (Required), Phone Number (Required), Gender, Marital Status, Local assembly (optional) , Contact address , country of residence • Camper sees: Room/Facility Selection (Required), Willing to Share Room (Optional), Meal (Auto-included) • Regular sees: Meal Option (Optional) • Online sees: No physical attendance or meal fields • User cannot proceed unless all required fields for selected attendee type are completed

As a user, I should be able to see the days left before the event and receive a reminder	• Dashboard displays event countdown (days remaining) • Countdown updates automatically based on event start date • System sends reminder emails to registered users based on admin-defined schedule • Countdown and reminders apply regardless of attendee type
As a user, I should be able to update my event category anytime before the start day of the event	• Edit attendee type is enabled until event start date • User can switch between Camper, Regular, and Online • Form updates to reflect new attendee type fields • Price difference is recalculated if applicable • Editing is disabled automatically once the event starts

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4.2 Camper & Accommodation Management

Description

Manages room inventory, facilities, sharing options, and ballot allocation.

User Story	Acceptance Criteria
As a camper, I want to choose between camping accommodation and hotel accommodation so I can stay in my preferred facility	• Accommodation type selection is shown only for Camper attendee type • Accommodation Type field is Required • Options available: Camp Facility / Hotel Accommodation • Selection controls which accommodation inventory is loaded
As a camper, I want to view available camp rooms so I can choose where I will stay	• Camp room list shows only rooms with available beds • Each room displays: Facility Name, Room ID, Capacity, Beds Available, Price per Bed, Gender Restriction • Bed count updates in real time after payment • One successful payment reserves one bed

As an admin, I want to manage camp room inventory so I can control availability and prevent overbooking	• Admin can create and edit camp rooms with fields: Facility Name, Room ID, Capacity, Price per Bed, Gender Restriction, Event Year, Status (Active/Locked) • System tracks Occupied Beds and Available Beds automatically • Admin can manually lock or unlock a room • System prevents booking when available beds = 0
As a camper, I want to indicate that I am willing to share a room so that my registration can proceed	• “Willing to share room” checkbox is Required • Checkbox is pre-selected and informational • System does not allow non-shared camp rooms • Acceptance is stored as part of registration record
As a camper, I want to view available hotels so I can choose where I will stay	• Hotel list displays Hotel Name, Location, Short Description • Only hotels marked Active by admin are shown • Hotel selection is Required to proceed
As an admin, I want to manage hotel facilities so I can control which hotels are available for SMFLX	• Admin can create/edit hotels with fields: Hotel Name, Address, Description, Contact Info, Event Year, Status (Active/Inactive) • Inactive hotels are hidden from users • Admin can assign multiple room types to a hotel
As a camper, I want to select a hotel room type based on availability so I can make a booking	• Room type list shows Room Type Name, Price per Room, Total Rooms, Rooms Available • Only room types with available inventory are selectable • Pricing is calculated per room, not per bed • One successful payment reserves one room
As an admin, I want to manage hotel room inventory so I can prevent overbooking and manage pricing	• Admin can create/edit hotel room types with fields: Hotel Name, Room Type Name, Total Room Count, Price per Room, Event Year, Status (Active/Locked) • System tracks Booked Rooms and Available Rooms automatically • Room types with zero availability are disabled automatically

As a camper, I want to see my accommodation details on my dashboard so I know where I'm staying	• Dashboard displays: Accommodation Type, Facility/Hotel Name, Room or Bed Type, Payment Status • Accommodation details are tied to the specific event year • Roommate names are never displayed A user registered this year must reuse the same account next year and see historical records.
As a camper, I want to change my accommodation before the event starts if options are available	• Accommodation edit is allowed before event start date • User can switch between camp or hotel accommodation • System recalculates price difference automatically • Additional payment or refund follows defined policy • Old inventory is released only after new booking is confirmed
As an admin, I want to reassign accommodations so I can handle exceptions and logistics issues	• Admin can move users between rooms or hotel room types • Admin override fields include: Previous Allocation, New Allocation, Reason, Admin User • Inventory counts update automatically after reassignment • User dashboard reflects changes instantly
As an admin, I want to view accommodation reports so I can support logistics and planning	• Admin can view reports grouped by: Event Year, Accommodation Type, Facility/Hotel, Room Type • Report fields include: Total Inventory, Allocated, Available, Revenue • Reports are exportable (CSV/Excel)

Other Functional Requirements

- Admin can define facilities (rooms, hostels, cabins, etc.)
- Display real-time availability during registration
- Allow users to:
  - Pick preferred room/facility
  - Indicate willingness to share
- Transparent ballot logic:
  - Users select from available options

    - Allocation finalized via ballot rules
- Auto-lock facility when capacity is reached
- View total capacity vs allocated
- Override or reassign rooms
- Regular Attendee: Optional meal add-on , but must pay based on the meal price set by the admin
- Conditional meal selection

4.3 Payment & Confirmation

Functional Requirements

- Integrated payment gateway (local + card-ready)
- Payment breakdown summary
- Upon Successful payment system triggers:
    - Registration confirmation
    - Dashboard badge creation
    - Confirmation email

4.4 Admin Dashboard

Core Views

- Total registrations (by event year)
- Breakdown by attendee type
- Breakdown by attendee gender and age
- Camping vs non-camping
- Facility availability- each facility type
- Payments summary(total payment received)

Management Actions

- Manual registration edits
- Room reassignment
- Export data (CSV/Excel)

4.5 Communication & Notifications

Email System

- Email verification
- Registration confirmation
- Payment receipts
- Admin-triggered broadcast emails

Admin Features

- Send reminders to:
  - All users
  - Specific attendee types
  - Only campers / only online

5. Non-Functional Requirements

Security

- Secure authentication
- Encrypted passwords
- Role-based admin access

Performance

- Must handle peak registrations
- Real-time inventory updates

Scalability

- Multi-year event support
- Multi-campus ready (future)

Reliability

- Zero data loss on payment

- Idempotent payment handling

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6. Suggested Enhancements (Phase 2 & 3)

Phase 2 (Nice-to-Have)

- QR code badge scanning for onsite check-in
- WhatsApp notification integration
- Admin analytics dashboard

Phase 3 (Advanced)

- Group/family registrations
- Automated roommate matching
- Sermon access for online attendees
- Post-event feedback surveys

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7. Technical Assumptions

- Web-first, mobile-responsive design
- Modular backend (event-year aware)
- Clean separation of user & admin apps

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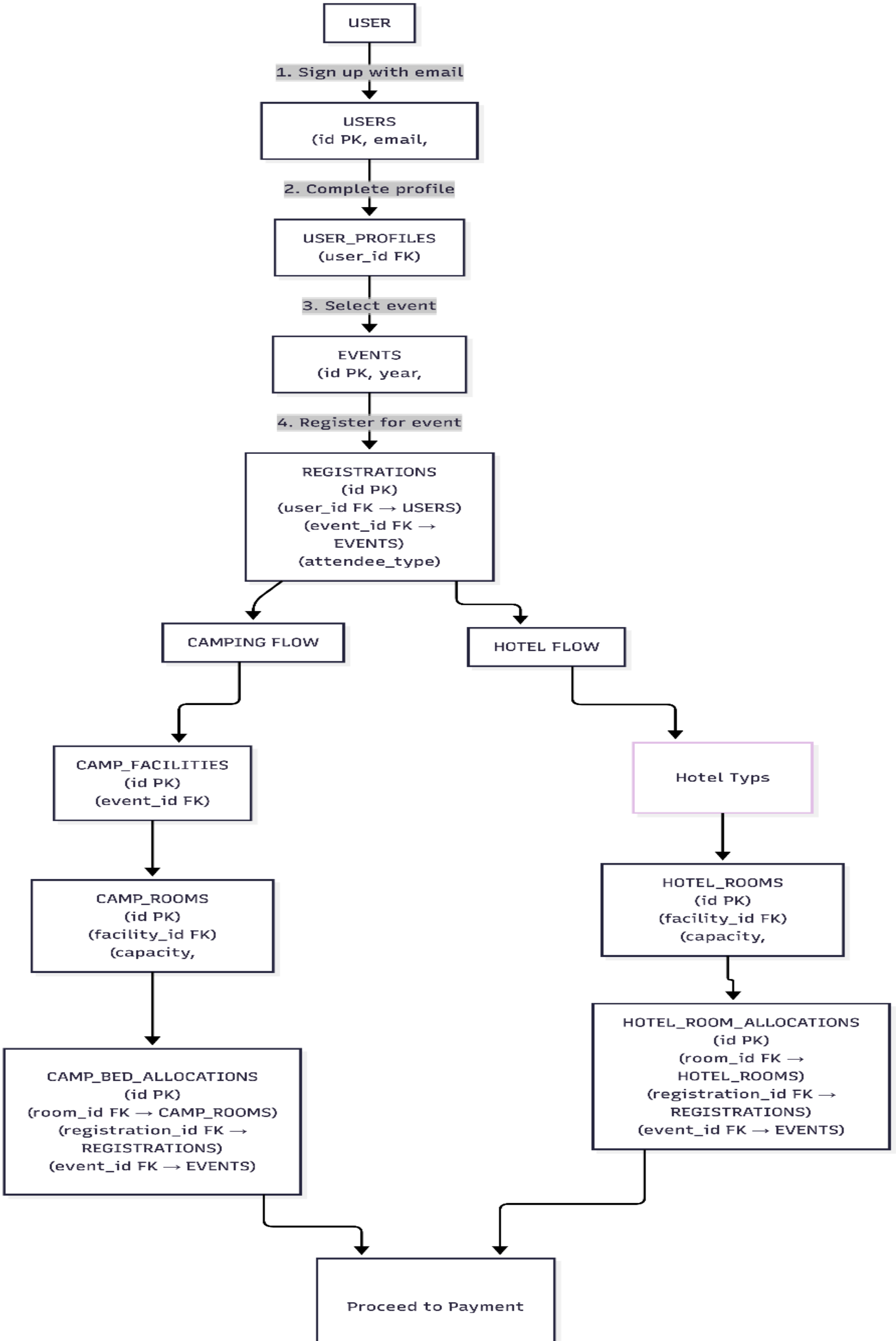
8. Success Metrics

- Registration completion rate
- Reduction in manual admin work
- Accommodation allocation accuracy
- Email open & engagement rates
- Year-on-year returning users

Data Structure


USER
1. Sign up with email
USERS
(id PK, email,
2. Complete profile
USER_PROFILES
(user_id FK)
3. Select event
EVENTS
(id PK, year,
4. Register for event
REGISTRATIONS
(id PK)
(user_id FK → USERS)
(event_id FK → EVENTS)
(attendee_type)
CAMPING FLOW
HOTEL FLOW
CAMP_FACILITIES
(id PK)
(event_id FK)
Hotel Typs
CAMP_ROOMS
(id PK)
(facility_id FK)
(capacity,
HOTEL_ROOMS
(id PK)
(facility_id FK)
(capacity,
CAMP_BED_ALLOCATIONS
(id PK)
(room_id FK → CAMP_ROOMS)
(registration_id FK → REGISTRATIONS)
(event_id FK → EVENTS)
HOTEL_ROOM_ALLOCATIONS
(id PK)
(room_id FK → HOTEL_ROOMS)
(registration_id FK → REGISTRATIONS)
(event_id FK → EVENTS)
Proceed to Payment

1. Core User & Auth Schemas

users

Stores one account reused across years.

Field	Type	Notes
id	UUID	PK
email	string	Unique
email_verified	boolean	Required before registration
created_at	datetime	
updated_at	datetime	

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user_profiles

Separated to keep auth clean.

Field	Type	Notes
id	UUID	PK
user_id	UUID	FK → users.id
first_name	string	Required
last_name	string	Required
phone_number	string	Required
gender	enum	Required
marital_status	enum	Required

employment_status	enum	Optional
local_assembly	string	Optional
created_at	datetime	

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2. Event & Registration

events

Supports multi-year SMFLX.

Field	Type	Notes
id	UUID	PK
name	string	e.g. SMFLX 2025
start_date	date	
end_date	date	
registration_deadline	date	
status	enum	Draft / Active / Closed

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registrations

One user per event.

Field	Type	Notes
id	UUID	PK
user_id	UUID	FK
event_id	UUID	FK
attendee_type	enum	Camper / Regular / Online

accommodation_type	enum	Camp / Hotel / None
meal_option	boolean	
status	enum	Pending / Confirmed / Cancelled
created_at	datetime	

3. Hostel Camping (Shared Rooms – Per Bed)

`camp_facilities`

Groups rooms (e.g. Hostel A).

Field	Type	Notes
id	UUID	PK
name	string	
event_id	UUID	FK
status	enum	Active / Inactive

`camp_rooms`

Defines the room itself.

Field	Type	Notes
id	UUID	PK
facility_id	UUID	FK

room_code	string	RM-101
capacity	int	Total beds
price_per_bed	decimal	
gender_restriction	enum	Male/Female/Mixed
status	enum	Active / Locked

`camp_bed_allocations`

This is the magic table — one row = one bed.

Field	Type	Notes
id	UUID	PK
room_id	UUID	FK
registration_id	UUID	FK
event_id	UUID	FK
allocated_at	datetime	
status	enum	Reserved / Released

> 💡 Room occupancy = count of rows per room

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4. Hotel Accommodation (Per Room)

`hotels`

Field	Type	Notes

id	UUID	PK
name	string	HighPoint Hotel
address	string	
description	text	
event_id	UUID	FK
status	enum	Active / Inactive

hotel_room_types

Field	Type	Notes
id	UUID	PK
hotel_id	UUID	FK
room_type	string	Executive / Classic
total_rooms	int	
price_per_room	decimal	
status	enum	Active / Locked

hotel_room_allocations

One row = one hotel room booked.

Field	Type	Notes
id	UUID	PK
room_type_id	UUID	FK
registration_id	UUID	FK
event_id	UUID	FK

allocated_at	datetime	
status	enum	Reserved / Released

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5. Payments

payments

Field	Type	Notes
id	UUID	PK
registration_id	UUID	FK
amount	decimal	
currency	string	NGN
payment_type	enum	Registration / Upgrade
payment_reference	string	Gateway ref
status	enum	Pending / Successful / Failed
paid_at	datetime	

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6. Admin Overrides & Audit

admin_users

Field	Type	Notes
id	UUID	PK

email	string	
role	enum	Super / Ops / Finance

accommodation_overrides

Field	Type	Notes
id	UUID	PK
admin_id	UUID	FK
registration_id	UUID	FK
previous_allocation	json	
new_allocation	json	
reason	string	
created_at	datetime	