Our clients have described a system of 5 microsystems as follows:

1. **Membership Management System**
2. **Food and Beverage**
3. **HR payroll**
4. **Website**
5. **Member Self App**

# Membership Management Systems

This system consists of members, their activities and administration over them

@Entity  
**Member:**

* Added through online application
  + Users can apply for membership through the **Website**
  + The application will be reviewed and approved by an admin
  + Members can log in to the **Member Self App**
* Can be of different categories
  + Categories are currently not clear from client’s document
* Has a profile of personal details
  + The required mandatory/nonmandatory details are not yet clear
* Maintains an Account top-up which is maintained by an online gateway
  + Has a limit to credit
  + Transactions are done using a pin
  + Pin is changeable
* Certain permissions on data access (reports and other stuff)
  + Permissions can be changed with admin approval
* Will need an analytics dashboard
  + The analyzation of various metrics such as activity, financial and other contributions etc

**Functionalities used by a member:**

* Maintain and update personal details in their profiles
* Subscribe different tiers of membership
* Event booking
* Service booking. The services being:
  + Dining
    - Requires OTP verification

[Not sure about other services: whether they need OTP verification for booking. Also not sure if Dining reservation and Dining service booking are the same]

* + Lounge
  + Conference Room
  + Library
  + Swimming Pool
  + Games
  + Kids’ zone
  + Bar
  + Gym
  + Prayer room
  + Banquet hall
* Maintain an Account top-up
  + Recharge
  + Check Balance
  + This service provides ease of transaction for online service and event booking
* Automated notifications of various events and online activities
  + SMS
  + WhatsApp
  + Mail
* Take board meeting notes for future reference and decision-making
* Health checking
  + Not sure if it’s related to the gym
  + Not sure of its functionality
* View activity log

**Admin functionalities in the Membership Management System:**

These functionalities will only be made available for the admin body

* Member application approval
* Member activity tracking
  + Can see currently active members
  + Can see activities
    - Profile Update
    - Service or Event booking
  + Monitor activities in real-time
* Can monitor user activity log
* Can view user permission change log
* Take app-based member attendance
  + Probably during board meetings
  + Done through the **Member Self App**
* View year-wise member contribution

# Food and Beverage

This Microsystem itself consists of several microsystems such as:

* **Restaurant POS:**
  + For processing customer transactions
* **Ordering and Booking:**
  + **TAB based order taking:** Waiters can take orders using a tablet
  + **Menu (Recipe) Builder:** Create and manage recipes on the menu
  + **Zone base item ordering**: Ordering items based on specific zones within the restaurant
  + **Dine is locked if not attendance in the club**: Dine-in orders not allowed if the member is not present in the club
  + **Table booking Time slot should be added**: Adding time slots for table bookings
* **Procurement and Inventory:**
  + **Inventory Management:** Tracking and managing inventory levels to ensure adequate supply.
    - **Procurement:** Process of acquiring goods and services necessary for restaurant operations
      * **Periodical Stock Report**: Regular reporting of stock levels.
      * **Requisition and Purchase Orders**
        + **Raw Material Requisition:** Requesting raw materials needed for production
        + **Requisition Approval:** Approval process for requisition requests.
        + **Requisition to PO:** Converting requisitions into purchase orders.
        + **Partial PO receiving:** Handling partial receipts of purchase orders
        + **GRN qty cannot be greater than PO Qty:** Ensuring Goods Receipt Note (GRN) quantity matches PO quantity.
        + **PO details Report**: Detailed reports of Purchase Orders (POs).
    - **Price change circular and log**: Documenting and logging price changes.
    - **Raw Material Stock Report change GRN UOM and Consumption:** Changing the unit of measurement (UOM) and tracking consumption in the raw material stock report.
    - **Stock Reconciliation should be added user in report:** Including user details in stock reconciliation reports.
    - **Reconciliation comparison:** Comparing reconciliation data for accuracy.
    - **Production vs sales**: Comparing production data with sales data.
  + **Batch Management:** Managing production and inventory in batches for efficiency.
    - **Production item buffer limit**: Setting buffer limits for production items.
  + **Expiry control:** Monitoring and managing the expiration dates of inventory items.
    - **Near expiry item CSR donation option**: Option to donate near-expiry items to Corporate Social Responsibility (CSR) initiatives.
  + Setting up Value Added Tax (VAT) and Service Delivery (SD) charges for items
  + Ability to change drink item names on invoice
* **Kitchen Management:**
  + **Kitchen Display/Printer/Bell integration:** Integration of kitchen display systems, printers, and notification bells for efficient order handling.
  + **Order Processing:**
    - Kitchen Order Ticket
    - Kitchen Status:
      * Seen
      * Processing
      * Ready
      * Served
    - KOT removed
    - Chef can reject an order
* Service charge should be defined like (dine in 5%, take way 0%, party 10% etc). This needs a thorough description

# HR and Payroll

@Entity  
**Employee**

* Personal Details
* Professional Qualification
* Division/unit
  + Needs clear description
* Salary Information
  + Division-wise salary
  + Monthly Salary
  + Bonus information
  + Annual increment
* Promotion Information
* Join date
* Confirmation details
  + Confirmation status
  + Confirmation details
* Overtime information
* Transfer history
* Termination details

Employees can:

* Apply for confirmation
  + Professional qualification
  + Other personal data
* Transfer, Resign

**Administration of Employee HR and Payroll**

* Admins can view
  + Employee’s personal details
  + Employee salary information
* List of Employee based on:
  + Joining date
  + Confirmation date
  + Active
  + Inactive
  + Pending confirmation
  + Transfer
* Attendant history
* Letters and Reports:
  + Pay slip
  + Pay sheet report
  + Division-wise salary report
  + Bonus Report
  + Overtime Report
  + Bonus pay-slip
  + Bank advice letter
  + Final payment report
* Admins can
  + Dismiss
  + Promote
  + Transfer

an employee

# Website

The website will mainly consist of user end functionalities such as:

* Membership application
* Event/service booking
* Ordering food items
* Exploring various activities and details of Club89
* Possibly every other functionality of the mobile app through authentication

# Member Self App

The purpose of this mobile application is probably to let the members conduct and manage their activities.

The functionalities this will provide include:

* Member login
  + Only members of the club can log in with their credentials
  + Membership is achieved through and application sent through the website
* Order panel
  + Keeps track of member’s order history
* Top up system that’s integrated with a payment gateway
  + Member should be able to recharge his account
  + Should be able purchase items using the account
  + Payment pin should be changeable through OTP SMS
* Event and service Booking
* Reserve dining online
  + This needs OTP verification
* Subscribe different membership tiers
* Party tickets
  + Members will be able to throw a party
  + They can sell the tickets of the party through the phone app
* Check their activity and operations log

# Technological Requirements and Cost Analysis for Implementation of the Whole System

**Tools, Techs, Services:**

* **Supabase**
  + **Pro Subscription:** 25 usd/month
* **Media Soft Integration**
* **Quick Book Integration**
* **Hardware and Device:**
  + **POS devices:**
  + **Kitchen Management Devices:**
  + **Others:**