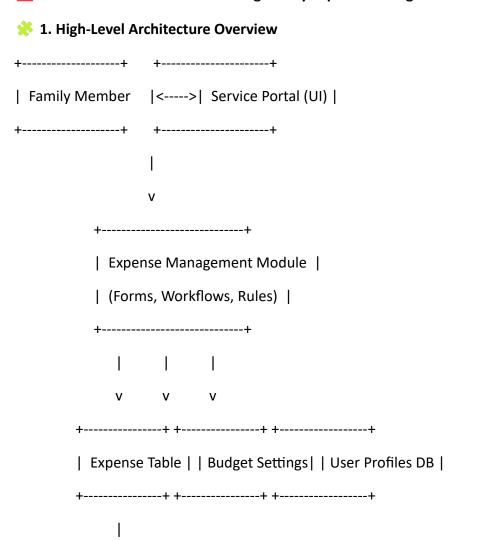
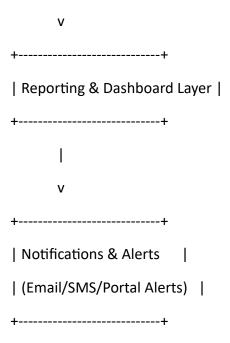
Project Design Phase

Solution Architecture

Date	28 June 2025
Team ID	LTVIP2025TMID60720
Project Name	Calculating family Expenses Using ServiceNow
Maximum Marks	4 Marks

Solution Architecture: Calculating Family Expenses Using ServiceNow





2. Core Components and Description

Component	Description
Service Portal (UI)	Web interface for users to submit expenses and view reports. Mobile-friendly.
Expense Form	Custom form for entering and managing expenses, built in ServiceNow Studio.
Budget Management	Interface for admins to define monthly or category budgets.
Flow Designer	Automates alerts when budget limits are crossed.
Business Rules	Validates input, auto-fills categories, handles backend logic.
Tables (CMDB-based)	Custom tables: u_expense_records, u_budget_settings, u_user_profiles.
Dashboard & Reporting	Visual charts for total spend, category spend, trends, etc.
Notification Engine	Sends alerts via email/SMS/portal for overspending or missed logs.

Component Description

Access Control (RBAC) Enforced through ServiceNow roles and ACLs (Admin vs Family Member).

3. Security & Access

- Authentication: Native ServiceNow user authentication.
- Authorization: Role-based access (Admin, Member).
- Data Protection: Field-level access via ACLs, platform encryption, audit logs.

4. Integration Points (Optional/Future Scope)

Integration Purpose

Bank APIs (via IntegrationHub) Automatically import and categorize expenses.

Google Sheets or Excel Export monthly reports.

WhatsApp/Email Bot Log expenses via messaging interfaces.

5. Scalability & Maintainability

- Scales with number of family members or expense entries.
- Easy to extend with additional categories, reports, or AI tools.
- Low maintenance via reusable components and out-of-box ServiceNow workflows.