**Project Design Phase-II**

**Technology Stack (Architecture & Stack)**

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| --- | --- |
| Date | 24 June 2025 |
| Team ID | LTVIP2025TMID20412 |
| Project Name | Calculating Family Expenses using Service Now |
| Mentor Name | Dr Shaik Salma Begum |
| Maximum Marks | 4 Marks |

**Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

A computer screen shot of a computer

AI-generated content may be incorrect.

**Table-1 : Components & Technologies:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Component** | **Description** | **Technology** |
|  | User Interface | Web-based ServiceNow forms and lists for managing family and daily expenses | ServiceNow UI Framework (Form Designer, Lists, UI Actions) |
|  | Application Logic-1 | Dynamic form behavior, field visibility, and validations | ServiceNow Client Scripts, UI Policies (JavaScript, GlideForm API) |
|  | Application Logic-2 | Business rule automation for insert/update operations, budget monitoring | ServiceNow Flow Designer / Workflow Engine |
|  | Application Logic-3 | Email notification for budget alerts | ServiceNow Notification Engine |
|  | Database | Stores family expense, daily expense, and configuration data | ServiceNow custom tables (Family Expenses, Daily Expenses), MySQL backend |
|  | External API-1 | Integration with external reporting tools or budget calculators | ServiceNow REST API |
|  | Infrastructure (Server / Cloud) | ServiceNow instance hosted in the cloud | ServiceNow Cloud SaaS Platform |

**Table-2: Application Characteristics:**

| **S.No** | **Characteristics** | **Description** | **Technology** |
| --- | --- | --- | --- |
|  | Open-Source Frameworks | Uses JavaScript for client and server logic, and optional AngularJS within ServiceNow if extended | JavaScript, AngularJS (optional) |
|  | Security Implementations | Role-based access control for users (e.g. family member, admin), secure HTTPS connections | ServiceNow ACLs, HTTPS, TLS, platform IAM |
|  | Scalable Architecture | Cloud-based, supports adding new tables, fields, and automations as family requirements grow | ServiceNow Cloud Platform, REST APIs |
|  | Availability | High availability provided by ServiceNow’s cloud infrastructure | ServiceNow Cloud with built-in redundancy |
|  | Performance | Optimized workflows, caching mechanisms within ServiceNow, and CDN services for static assets to ensure low latency and high throughput. | ServiceNow Caching Layer, CDN (Akamai or similar) |