**Project Design Phase-II**

**Technology Stack (Architecture & Stack)**

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| --- | --- |
| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID30150 |
| Project Name | Streamlining Ticket Assignment for Efficient Support Operations |
| Maximum Marks | 4 Marks |

**Technical Architecture:**

#### ****User Interface:****

* Web-based UI (ServiceNow UI Builder / Form Designer)
* Intuitive dashboards for agents and managers
* Custom forms to capture issue details and priority

#### ****Application Logic:****

* ServiceNow Flow Designer: For workflow automation and dynamic ticket routing
* Script Includes & Business Rules: For custom server-side logic
* Decision Tables: For routing logic based on priority, team, and ticket type

#### ****Database & Storage:****

* ServiceNow CMDB: To maintain user, department, and configuration data
* Incident & Task tables: For storing and managing tickets

#### ****Machine Learning/AI (Optional Advanced Phase):****

* Predictive Intelligence (ServiceNow): To auto-categorize and assign incidents
* Performance Analytics: For SLA tracking and efficiency insights

#### ****Infrastructure:****

* Hosted on ServiceNow’s cloud platform (multi-instance architecture)
* Scalable and secure with built-in compliance features

#### ****External Interfaces:****

* Email Integration (for notifications)
* Virtual Agent (for user self-service via chat)
* Slack/MS Teams (optional integration for notifications and ticket updates)

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

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Component** | **Description** | **Technology** |
|  | User Interface | Custom forms and dashboards | ServiceNow Form Designer, UI Builder |
|  | Application Logic | Workflow & routing logic | Flow Designer, Business Rules, Script Includes |
|  | |  | | --- | |  |  |  | | --- | | Ticket Intelligence | | Auto-categorization and prioritization | Predictive Intelligence (optional) |
|  | Database | Ticket storage and user data | Incident Table, CMDB |
|  | Notifications | Alerts for ticket status updates | Email, SMS, Virtual Agent |
|  | Infrastructure | Hosting and scalability | ServiceNow Cloud Platform |

**Table-2: Application Characteristics:**

| **S.No** | **Characteristics** | **Description** | **Technology** |
| --- | --- | --- | --- |
|  | Platform-based Design | Uses pre-built and configurable platform tools | ServiceNow |
|  | |  | | --- | |  |  |  | | --- | | Security | | |  | | --- | |  |  |  | | --- | | Role-based access, data encryption | | ACLs, HTTPS, Instance Security Policies |
|  | |  | | --- | |  |  |  | | --- | | Scalable Architecture | | Can support large enterprise support teams | Multi-instance architecture of ServiceNow |
|  | Availability | Always accessible through web | Hosted via ServiceNow's secure cloud |
|  | Performance | Track and improve support KPIs | ServiceNow Performance Analytics, SLA tracking |