**Project Design Phase**

**Solution Architecture**

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| Date | 24 June 2025 |
| Team ID | LTVIP2025TMID29498 |
| Project Name | Asset Management Portal using Service Now |
| Mentor Name | Dr Shaik Salma Begum |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

The **Asset Management Portal** project addresses the common challenges organizations face in tracking, managing, and maintaining physical and digital assets. The solution architecture outlines how the ServiceNow platform will be configured to deliver a centralized, automated, and user-friendly asset lifecycle management system.

**Purpose of the Solution Architecture**

* Identify the most efficient way to manage assets using ServiceNow’s capabilities.
* Provide a clear structure of how tables, automation, roles, and UI elements work together.
* Define key technical components and implementation phases to ensure scalability and usability.
* Support stakeholders in visualizing the system’s functions and user interactions.

**Solution Structure**

The architecture consists of:

* **Core Tables**:
  + **Assets** – Stores asset details (type, status, location, condition).
  + **Asset Requests** – Records requests submitted by employees for specific assets.
  + **Asset Assignment Logs** – Tracks when assets are assigned, returned, or transferred.
  + **Maintenance Logs** – Captures maintenance activities and servicing dates.
* **Relationships**:
  + Assets linked to Assignment Logs and Requests for full tracking.
  + Maintenance Logs tied to each asset for performance and servicing history.
  + Role-based relationships for employees, managers, and administrators.
* **Automation Components**:
  + **Business Rules** – Trigger alerts for maintenance, request approvals, and overdue returns.
  + **Flow Designer Workflows** – Automate asset request approvals and assignments.
  + **Auto-numbering** – Unique identifiers for each asset and request (e.g., AST0001, REQ0001)
* **User Interface Elements**:
  + **Custom Forms** – Intuitive and simplified forms for request submission and updates.
  + **Dashboards** – Real-time reporting on asset usage, availability, and lifecycle status.
  + **Related Lists** – Embedded views of linked maintenance and assignment records.
* **Configuration Management**:
  + **Update Sets** – Capture and migrate customizations across environments.
  + **Role Management** – Define access levels for users (employee, approver, admin).

**Phases of Development**

* Set up ServiceNow PDI and prepare update sets.
* Create tables, relationships, and configure number maintenance.
* Build business rules and workflows for request handling and lifecycle updates.
* Design dashboards and reports for real-time asset visibility.
* Test, validate, and document all components.

**Specifications**

* Built using ServiceNow's low-code/no-code tools.
* Aligned with ServiceNow best practices for modularity, scalability, and maintainability.
* Easily extendable to include barcode integration, mobile access, or warranty tracking.

**Solution Architecture Diagram:**

