Project Design Phase
Solution Architecture

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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.

        o **Auto-numbering** – Unique identifiers for each asset and request (e.g., AST0001, REQ0001)

- **User Interface Elements**:

    o **Custom Forms** – Intuitive and simplified forms for request submission and updates.

    o **Dashboards** – Real-time reporting on asset usage, availability, and lifecycle status.

    o **Related Lists** – Embedded views of linked maintenance and assignment records.

- **Configuration Management**:

    o **Update Sets** – Capture and migrate customizations across environments.

    o **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: