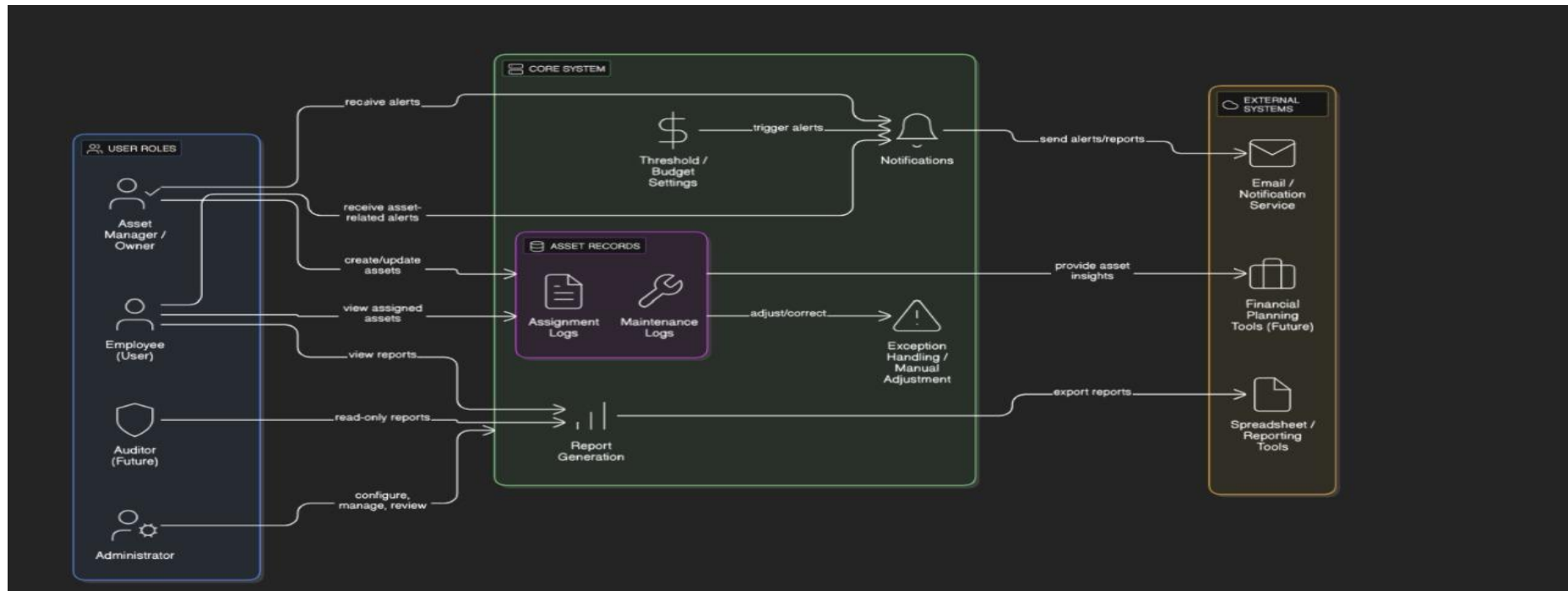


## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	16 Feb 2026
Team ID	LTVIP2026TMIDS36006
Project Name	Asset Management Portal
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



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

S.No	Component	Description	Technology
1.	<b>User Interface</b>	Web-based forms and dashboards for asset tracking and management	ServiceNow UI Framework (Form Designer, Lists, Service Portal)
2.	<b>Application Logic – 1</b>	Dynamic form behavior, field visibility, validation rules	ServiceNow Client Scripts, UI Policies (JavaScript, GlideForm API)
3.	<b>Application Logic – 2</b>	Automation of asset lifecycle events like assignment, updates, and disposal	ServiceNow Flow Designer / Workflow Engine
4.	<b>Application Logic – 3</b>	Alerts and email notifications for maintenance, audits, or disposal schedules	ServiceNow Notification Engine
5.	<b>Database</b>	Stores asset records, users, departments, conditions, and history	ServiceNow Custom Tables (Assets, Users, Requests, Logs), MySQL Backend
6.	<b>External API – 1</b>	Integration with procurement, maintenance systems, or audit tools	ServiceNow REST API
7.	<b>Infrastructure (Cloud)</b>	Hosted on cloud platform with secure, scalable, and compliant environment	ServiceNow SaaS Cloud Infrastructure

**Table-2: Application Characteristics:**

<b>S.No</b>	<b>Characteristic</b>	<b>Description</b>	<b>Technology</b>
1.	Open-Source Frameworks	Uses JavaScript for form logic; can extend with AngularJS or React for advanced customization	JavaScript, AngularJS (optional), ReactJS (optional)
2.	Security Implementations	Role-based access (Admin, Asset Manager, Employee), secure endpoints	ServiceNow ACLs, HTTPS, TLS, Role-based IAM
3.	Scalable Architecture	Cloud-based, modular design; supports expanding asset types, rules, or workflows	ServiceNow Cloud Platform, REST APIs
4.	Availability	High uptime ensured via ServiceNow's redundant and fault-tolerant infrastructure	ServiceNow SaaS with HA infrastructure
5.	Performance	Optimized record processing and caching, load-balanced delivery of static/dynamic resources	ServiceNow Caching, Akamai CDN or equivalent