Project Design Phase-II
Data Flow Diagram & User Stories

Date	**20 Feb 2026**
Team ID	**LTVIP2026TMIDS60253**
Project Name	**Asset Management Portal**
Maximum Marks	4 Marks

Data Flow Diagrams:

The Data Flow Diagram (DFD) of the Asset Management Portal represents the flow of data between different components of the system and external entities. It begins with the end users, such as employees or administrators, who interact with the system through the web or mobile interface. User inputs are processed by the frontend and passed to the backend via secure API calls. These requests are directed to appropriate services like the Asset Management Service for asset-related operations, the User Management Service for handling login, roles, and permissions, and the Notification Service for sending alerts or reminders. Each service exchanges data with a centralized database where all asset information, logs, and user records are securely stored. The system also includes a Business Intelligence (BI) module that extracts data from the database to generate insights and reports. Data also flows to the Admin Portal for configuration, audit logging, and system monitoring. This logical flow ensures seamless asset tracking, real-time updates, and secure management of organizational assets.

User Stories:

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Admin	Asset Registration & Management	US001	As an admin, I want to add new assets so that they are tracked in the system.	Asset details are saved, unique ID generated, and visible in asset list.	High	Release 1
Admin	Asset Registration & Management	US002	As an admin, I want to update or delete asset details to keep the database accurate.	Edited or deleted asset reflects immediately in system and logs the action.	High	Release 1
Employee	Asset Request	US003	As an employee, I want to raise a request for an asset.	Request form is submitted successfully and visible in request list.	Medium	Release 1
Asset Manager	Request Approval	US004	As a manager, I want to approve or reject asset requests made by employees.	Approved/rejected status updated, notification sent to employee.	High	Release 1
Employee	Asset Tracking	US005	As an employee, I want to see the list of assets assigned to me.	User dashboard displays correct asset list linked to user ID.	High	Release 1
Admin	Notifications	US006	As an admin, I want to set automated	Notifications are triggered before due dates via email/SMS.	Medium	Release 2

			alerts for asset return dates.			
Analyst	Reports & Analytics	US007	As an analyst, I want to generate usage and lifecycle reports for all assets.	Report shows correct data with filters and export options (PDF, Excel).	Low	Release 2
Admin	User Management	US008	As an admin, I want to manage user roles and permissions.	Role-based access control enforced across all modules.	High	Release 1
Employee/Admin	Authentication	US009	As a user, I want to log in securely to access the portal.	Valid credentials allow access, with session timeout and password encryption.	High	Release 1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Employee (User)	Laptop Request	USN-1	As a user, I can submit a laptop request by filling out a request form.	The request is recorded and visible to the manager.	High	Sprint-1
Employee (User)	View Request Status	USN-2	As a user, I can view the status of my laptop request.	The system shows request status: pending/approved/rejected.	Medium	Sprint-2
Manager	Approve/Reject Requests	USN-3	As a manager, I can review and approve or reject laptop requests.	Approval or rejection updates request status and notifies the user.	High	Sprint-1
Inventory Officer	Update Inventory	USN-4	As an inventory officer, I can update the laptop stock after a request is approved.	Inventory levels decrease based on allocation.	High	Sprint-2
System	Notification	USN-5	As a system, I can send notifications to users and managers when a request is made.	Users and managers receive email or system notifications.	Medium	Sprint-2
Admin	Audit & Reporting	USN-6	As an admin, I can generate reports of all	Reports show requests, approvals, rejections, and inventory updates.	Low	Sprint-3

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
			laptop requests and their statuses.			
Admin	Manage Users	USN-7	As an admin, I can add or remove users and managers from the system.	User access levels are reflected correctly in the system.	Medium	Sprint-3
Employee (User)	Cancel Request	USN-8	As a user, I can cancel my laptop request before it is approved.	Request status changes to "cancelled" and is no longer editable.	Low	Sprint-2