Project Design Phase-II
Data Flow Diagram & User Stories

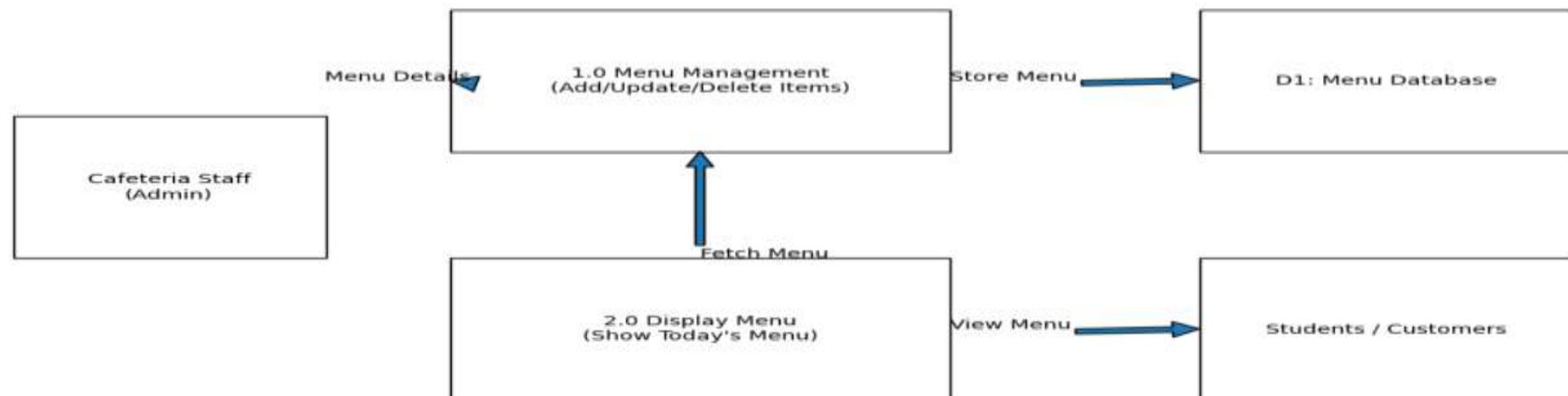| Date	15 February 2026
Team ID	LTVIP2026TMIDS79115
Project Name	Cafeteria Menu Display
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Data Flow Diagram (DFD) - Educational Organisation System :

Data Flow Diagram (DFD) - Cafeteria Menu Display System

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Developer	Project Setup	USN-1	Set up development environment with Flask and MySQL.	Flask server runs locally and MySQL database is connected successfully.	High	Sprint-1
Developer	Project Setup	USN-2	Create project folder structure and initialize Git repository.	All folders (backend, frontend, database) are created and code is version controlled.	High	Sprint-1
Developer	Database Design	USN-3	Create Users table for admin authentication.	Table stores username and hashed password with unique ID.	High	Sprint-1
Developer	Database Design	USN-4	Create Categories table for menu organization.	Table stores category names (Breakfast, Lunch, etc.) with display order.	High	Sprint-1
Developer	Database Design	USN-5	Create Menu Items table for food details.	Table stores name, price, description, category_id, image_url, and availability status.	High	Sprint-1
Developer	Backend Development	USN-6	Create Flask app with basic routes and configuration.	App runs on http://localhost:5000 with CORS enabled.	High	Sprint-2
Administrator	Authentication	USN-7	Implement admin login with session management.	Admin can login with credentials and session persists until logout.	High	Sprint-2
Developer	API Development	USN-8	Build API endpoint to fetch all menu items.	GET /api/menu returns JSON array of all available menu items.	High	Sprint-2
Administrator	API Development	USN-9	Build API endpoint to add new menu items.	POST /api/admin/add saves new item to database with validation.	High	Sprint-2
Administrator	API Development	USN-10	Build API endpoints to edit and delete menu items.	PUT and DELETE requests update or remove items from database.	Medium	Sprint-2
Administrator	Admin UI	USN-11	Design admin panel HTML forms for menu management.	Forms include fields for name, price, category, description, and image upload.	Medium	Sprint-2
Developer	Frontend Display	USN-12	Design customer display interface with HTML/CSS.	Display shows categorized items with prices in large, readable fonts.	High	Sprint-3
Developer	Frontend Logic	USN-13	Implement JavaScript to fetch and render menu from API.	Menu items load automatically when display page opens.	High	Sprint-3
Customer	Frontend Logic	USN-14	Add category-based filtering functionality.	Clicking category tabs shows only items from that category.	Medium	Sprint-3
Customer	Automation	USN-15	Implement auto-refresh every 5 minutes.	Display updates automatically without manual page refresh..	Medium	Sprint-3

Customer	UI Enhancement	USN-16	Add dietary icons (Veg, Vegan, Gluten-Free).	Icons appear next to items based on dietary_tags in database.	Low	Sprint-3
Customer	UI Enhancement	USN-17	Implement "Today's Special" highlight feature.	Special items show with highlight color and star icon.	Low	Sprint-3
Customer	UI Enhancement	USN-18	Add "Out of Stock" grayed-out display logic.	Unavailable items appear grayed with "Sold Out" label.	Medium	Sprint-3