

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

Date	26 June 2025
Team ID	LTVIP2025TMID29043
Project Name	Cafeteria menu display
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 and table 2.

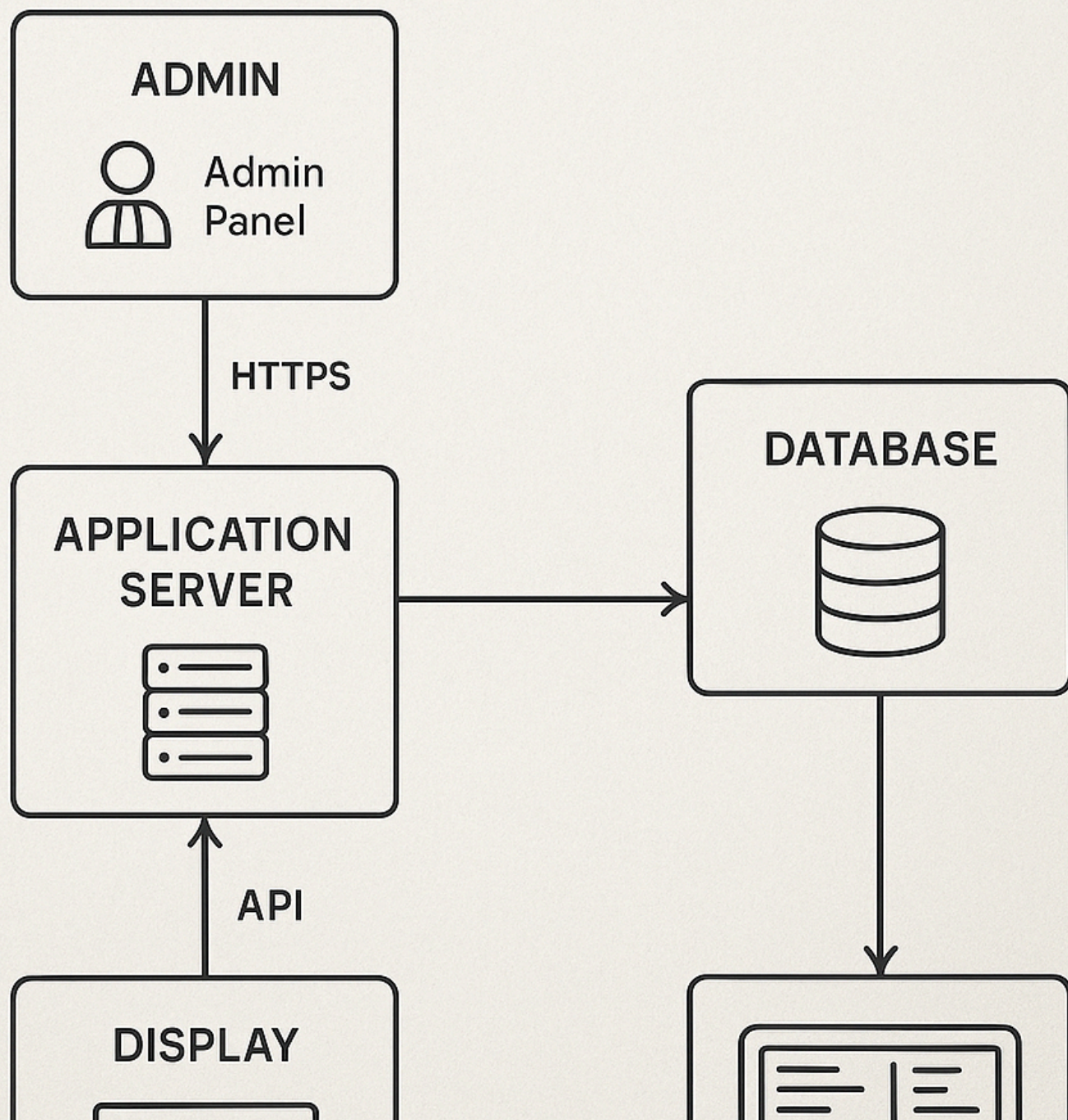


Table-1 : Components & Technologies:

Component	Technology/Tool	Description
Adim panel	HTML/Java/CSS/React,Angular	Web interface used by Cafeteria staff to manage and update menu items.
Data base	MySQL,PostgreSQL,MongoDB	Stores menu data like item names,prices,available and nutrition info
Real-time sync	Websockets,Fire base,MQTT	Ensure the menu on display update real-time when changes are made.
Host/cloud	AWS,Azure,Firebase Hosting	Hosts the backend server ,database,and frontend service.
Content Delivery	CDN	Accelerates load time to static assets across multiple service.

	Characteristics	Description	Technology
1.	Real-time update	Menu content is pushed to Display instantly when edited by the admin.	Technology of Opensource framework
2.	Security	Enforced via HTTPS,authentication and role based access control.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Customizability	Allows cafeteria branding colors theme and configurable display fromts.	Technology used
4.	Performance	Fast loading via catching CDN's and efficient data queries.	Technology used
5.	Reliability	Backup service and server monitoring to ensure system uptime.	Technology used

