

Requirement Gathering and Analysis Phase Technology Stack (Architecture & Stack)

Date	29-June-24
Team ID	SWTID1720075141
Project Name	Food Mine – Order On The Go
Maximum Marks	4 Marks

Technical Architecture:

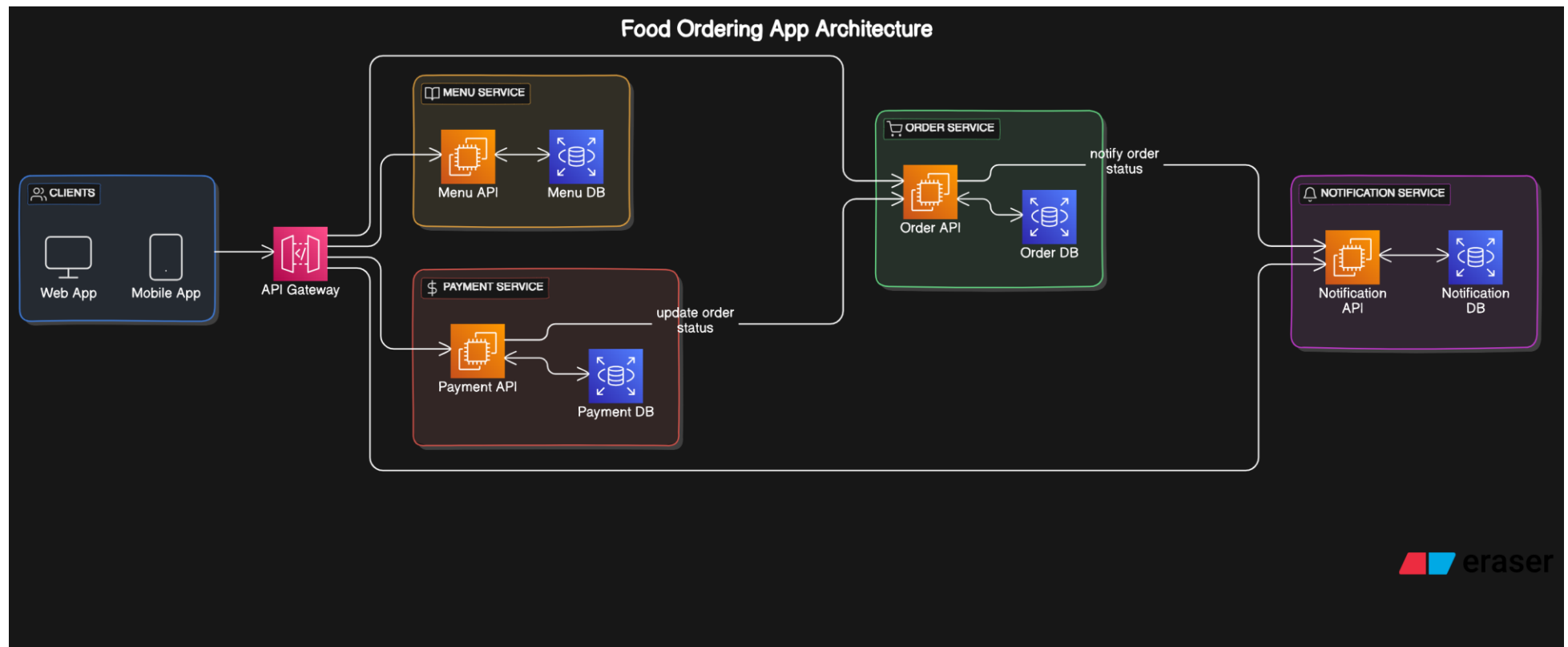


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Interactive web platform enabling users to explore menus, place orders, manage preferences, and track deliveries.	HTML, SCSS, JavaScript / React.js
2.	API Gateway	Centralized gateway managing incoming requests from the frontend and routing them to respective backend services.	Cloud-based API Gateway service
3.	Search Service	Backend system processing user queries to find nearby restaurants, filtering by cuisine, rating, and availability.	Node.js with MongoDB

4.	Listing Service	Backend functionality for restaurant owners to list, update, and remove menu items with real-time synchronization.	Node.js with MongoDB
5.	User Service	Service handling user account management, authentication, and personalized recommendations based on order history.	Node.js with MongoDB
6.	Geolocation Service	Service leveraging GPS data to suggest local eateries, optimize delivery routes, and estimate delivery times accurately.	Google Maps Platform
7.	Database	Central repository storing user profiles, restaurant data, menu items, orders, and transaction histories securely.	MongoDB
8.	Messaging Service	Real-time chat solution facilitating direct communication between customers and restaurants for order inquiries.	Node.js
9.	Cloud Storage	Scalable storage solution for hosting restaurant images, menu photos, and user profile pictures efficiently.	Cloudinary
10.	Payment Gateway	Secure payment processing service allowing seamless transactions for food orders and subscription services.	Third-party payment gateway service

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Utilizes open-source frameworks to create dynamic user interfaces, robust backend support, and scalable data storage.	Prisma, Express.js, React.js
2.	Security Implementations	Implements robust security measures to protect user data and manage access to food listings and user profiles.	bcrypt ,JSON web tokens(JWT), Middleware-Token Verification, Role Based Access

S.No	Characteristics	Description	Technology
3.	Scalable Architecture	Architecture that supports scalability for handling increasing user traffic and data volume efficiently.	MongoDB, RESTful API, Node.js
4.	Availability	Ensures high availability of food ordering features, minimizing downtime and ensuring continuous service access.	Multiple Node.js instances
5.	Performance	Focuses on delivering fast response times for food searches, menu details, and transactions to enhance user experience.	Prisma ORM, MongoDB, Node.js, Express