

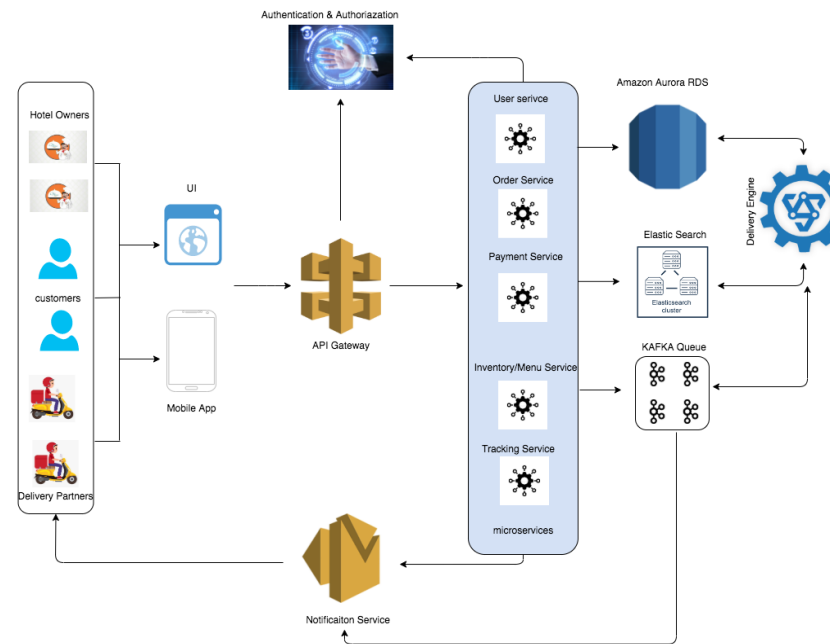
Project Design Phase-II Technology Stack (Architecture & Stack)

Date	27 October 2023
Team ID	590985
Project Name	Snack Squad: A Customizable Snack Ordering and Delivery App
Maximum Marks	4 Marks

Technical Architecture:

All the necessary information regarding the application are given in Table 1 and Table 2. and for workflow of the application a Flow Diagram is also attached.

Example: Ordering food online from an android application using just simple few click.



Application Flow Diagram

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	XML / Jetpack Compose.
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	Firebase
7.	File Storage	File storage requirements	Firebase
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Location, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	we have use firebase for login and for storing data	firebase
2.	Security Implementations	we will not take sensitive data from user and in just few important information all app will work etc.	SHA-256, Encryptions, Firebase Login, etc.
3.	Scalable Architecture	this can can be scalable and many things can be added in this single app like medicine delivery and many more.	Technology used
4.	Availability	this app is available for all android phone having android version 7 and above. so mostly ot will cover around 97% of all android user.	Android Developent, Google play service, etc.
5.	Performance	Design are good enough, easy to nevigat in app, and a modern ui.	XML, Jetpack Compose.

References:

<https://c4model.com/>

<https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/>

<https://www.ibm.com/cloud/architecture>

<https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>