

# Project Design Phase-I

## Solution Architecture Template

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Team ID	Team-590932
Project Name	<b>Snack Squad- A customisable snack ordering and delivery app.</b>

Team member name:	Member details:
Prasanna Gudivada	<a href="mailto:prasanna.21bce7104@vitapstudent.ac.in">prasanna.21bce7104@vitapstudent.ac.in</a>
Tishita Godavarthi	<a href="mailto:tishita.21bce7110@vitapstudent.ac.in">tishita.21bce7110@vitapstudent.ac.in</a>
Varshitha Mattupalli	<a href="mailto:varshitha.21bce7327@vitapstudent.ac.in">varshitha.21bce7327@vitapstudent.ac.in</a>

### Architecture:

There are several components involved in creating the architecture for a snack delivery application, which ensures that it operates smoothly and effectively. You will find a high-level overview of the architecture for snack apps:

- **Client-side Application:**

Mobile App: The main interface for customers who want to see snacks and order them, or make payments.

Web App (Optional): A web-based version for customers who prefer ordering snacks through a web browser.

- **Backend Server:**

Web server: handles incoming requests from clients' applications, controls user sessions and serves as an API gateway.

Application logic: Applies core business logic such as user authentication, snack catalogue management, order handling and payment processing.

- **Database:**

User's data: retains user names, personal information, and order history.

The Snack catalogue: contains information about available snacks, their descriptions, and prices as well as the level of stocks at present.

Order data: The information on existing and past orders is stored.

- **Authentication and Authorization:**

To make sure that features of an application can be accessed with confidence, implement authentication methods such as OAuth, JWT or API keys.

- **Order Management:**

Shopping cart: Keep the user's shopping carts, which allow users to add, modify and remove snacks.

Order processing: handling the placing, order confirmation and real-time status updates of orders.

Delivery Scheduling: Implement a feature for customers to select delivery time slots.

- **Delivery Management:**

Delivery driver assignment: assign to incoming orders drivers who are available.

Realtime tracking: keep an eye on drivers' location and let customers know about it.

Optimisation of routes: optimise delivery routes for drivers in order to minimise transport times and costs.

The specific technologies and frameworks that are used will depend on team's expertise and the targeting platform (iOS, Android, web). Additionally, considering the user experience and design to make the app appealing and user-friendly. And continuously improving and updating app based on user feedback and changing market demands.