 

# CVM University

**A. D. Patel Institute Of Technology**

ZipFood-A Food Delivery App

**A Project Report**

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#### ABSTRACT

The online food ingredients delivery app is a convenient and efficient solution for individuals who want to prepare their favorite dishes at home. With this app, users can order their desired food ingredients in the exact quantity they need and have them delivered straight to their doorstep.

One of the major benefits of using this app is that users can order the exact quantity of ingredients they need. This helps to reduce food waste and ensures that customers only pay for what they need. Additionally, the app offers a wide range of food items, including fresh produce, meat, and spices, making it easier for customers to prepare their desired dishes at home.

Overall, the online food ingredients delivery app is a game-changer for food enthusiasts who want to create restaurant-quality meals at home. It eliminates the need to go to the store and spend time searching for ingredients, while also providing the convenience of having everything delivered straight to your door.

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## CHAPTER 1

#### INTRODUCTION

In today's fast-paced world, many people find it difficult to make time for grocery shopping and meal planning. However, with the advent of online food delivery apps, the process of ordering food has become more convenient and efficient. These apps have made it possible for people to order ready-to-eat meals, snacks, and even groceries, all with just a few taps on their phone.

In recent years, a new trend has emerged in the online food delivery industry - the delivery of food ingredients. With the rise of home cooking and food blogging, many people are interested in preparing restaurant-quality meals at home. However, the process of sourcing and buying the right ingredients can be time-consuming and challenging.

To address this need, online food ingredients delivery apps have been introduced, allowing customers to order their desired food ingredients in the exact quantity they need and have them delivered straight to their doorstep. This innovative solution has become popular with food enthusiasts who enjoy experimenting with new recipes and ingredients.

In this abstract, we will explore the features and benefits of an online food ingredients delivery app, which allows users to order their desirable food ingredients in the desired quantity, delivered directly to them in person.

#### Motivation

The motivation behind developing an online food ingredients delivery app is to provide a convenient and efficient solution for people who love to cook at home but may not have the time or resources to source the right ingredients. The app aims to simplify the process of grocery shopping, enabling users to order the exact quantity of ingredients they need for their desired recipe.

Additionally, the app aims to reduce food waste by allowing customers to order only what they need. Traditional grocery shopping often results in leftover ingredients that go to waste, leading to unnecessary expenditure and environmental damage. With an online food ingredients delivery app, users can order the precise amount they need, thus reducing food waste and saving money.

Furthermore, the app also provides access to a wider range of ingredients, including exotic spices and fresh produce, which may not be readily available at local stores. This allows home cooks to experiment with new recipes and flavors, expanding their culinary skills and repertoire.

Overall, the motivation behind this app is to make the process of grocery shopping and cooking at home more accessible, efficient, and enjoyable. By providing a reliable and easy-to-use platform for ordering ingredients, this app aims to empower home cooks to create restaurant-quality meals in the comfort of their own kitchens.

#### Problem Statement

The main problem that an online food ingredients delivery app aims to solve in today's world is the inconvenience and time-consuming process of traditional grocery shopping. Many people find it challenging to make time for grocery shopping and meal planning, especially those who have busy work schedules or other commitments. Additionally, shopping for ingredients at physical stores can be frustrating, with long lines, crowded aisles, and limited stock of specific items.

Moreover, with the ongoing COVID-19 pandemic, many people prefer to avoid crowded public spaces like grocery stores, making home delivery a safer and more convenient option.

By providing an online platform for ordering food ingredients, an app can simplify the grocery shopping process and eliminate the need to visit a physical store. This solution offers a range of benefits, including the convenience of ordering ingredients from the comfort of one's own home, the ability to order precisely the amount of ingredients required, and access to a wider variety of ingredients that may not be available at local stores.

In summary, an online food ingredients delivery app provides a solution to the inconveniences and time constraints of traditional grocery shopping and offers a more convenient and safer way to shop for food ingredients.

#### Objectives

The objectives of an online food ingredients delivery app are to:

* Provide a convenient and efficient platform for users to order food ingredients: The app aims to simplify the process of grocery shopping by providing a user-friendly platform that allows users to order food ingredients from their smartphones.
* Offer a wide range of food ingredients: The app aims to provide a wide range of food ingredients, including fresh produce, meat, spices, and other pantry staples. The objective is to make it easier for users to find the ingredients they need for their desired recipe.
* Ensure delivery of ingredients in the desired quantity: One of the key objectives of the app is to ensure that the ingredients are delivered to the users in the exact quantity they need. This reduces food waste and saves users money by eliminating the need to purchase more than what is required.
* Provide timely delivery of food ingredients: The app aims to provide timely delivery of food ingredients to the user's doorstep. The objective is to ensure that the ingredients are delivered within a reasonable timeframe, allowing users to prepare their meals as planned.
* Maintain high-quality standards: The app aims to maintain high-quality standards for the food ingredients that are delivered to the users. The objective is to ensure that the ingredients are fresh, in good condition, and meet the user's expectations.

Overall, the objectives of an online food ingredients delivery app are to provide a convenient, efficient, and reliable solution for users to order food ingredients, making it easier and more enjoyable for people to cook at home

#### Scope and Applications

The scope and application of an online food ingredients delivery app are broad and varied. The app can be used by individuals, families, and even businesses that require fresh and high-quality food ingredients for their daily cooking needs. Some of the key scopes and applications of the app include:

* Home cooking: The primary application of the app is to make it easier for home cooks to order fresh and high-quality food ingredients from the comfort of their own homes. The app can be used by individuals and families who enjoy cooking at home and need access to a wide range of food ingredients.
* Food bloggers: Food bloggers and recipe creators can also use the app to order specific ingredients for their recipes. This allows them to experiment with new ingredients and flavors, as well as share their creations with their followers.
* Small restaurants and cafes: Small restaurants and cafes that require fresh ingredients for their daily menu can use the app to order food ingredients in the desired quantity. This helps them to manage their inventory better and reduce food waste.
* Specialized diets: The app can also be used by people who follow specialized diets such as vegan, gluten-free, or low-carb. These individuals often require specific ingredients that may not be available at local stores, and the app can help them find the ingredients they need.
* Gift baskets: The app can also be used to create gift baskets of food ingredients for special occasions like birthdays, holidays, or anniversaries. This allows users to customize the ingredients based on the recipient's preferences and dietary requirements.

Overall, the scope and application of an online food ingredients delivery app are wide-ranging, making it a valuable tool for anyone who needs access to fresh and high-quality food ingredients.

## CHAPTER 2

1. **REQUIREMENT ANALYSIS**

#### Planning

This project involves the planning and development of an online food ingredients delivery app using Flutter technology and Firebase as the backend. The key steps involved in developing the app include defining the requirements, designing the user interface, setting up Firebase, implementing the app features, testing the app, deploying it to app stores, and maintaining and updating it regularly. The app is intended to make it easier for individuals, families, and businesses to order fresh and high-quality food ingredients in the desired quantity, and the project aims to provide a user-friendly and efficient solution to this problem.

#### Literature Reviews

The literature on online food delivery apps highlights their growing popularity and the ways in which they have transformed the food industry. Research shows that these apps have made it easier for consumers to access a wider variety of food options and to order food from the comfort of their homes. Additionally, online food delivery apps have created new opportunities for businesses to reach a wider customer base and increase revenue.

However, some research also points to potential downsides of online food delivery apps. For example, there are concerns about the environmental impact of the increased use of single-use plastic packaging, as well as concerns about the working conditions of delivery drivers. Additionally, some research has found that the fees charged by online food delivery apps can be high, making it difficult for small businesses to compete.

Overall, the literature on online food delivery apps highlights the benefits and potential challenges of this rapidly growing industry. As with any new technology or service, it is important to carefully consider the potential impacts and ensure that these apps are used in a way that benefits both consumers and businesses while minimizing any negative consequences.any class is the largest .The size of the block for the LBP feature extraction is chosen for higher recognition accuracy. The testing results indicate that by using LBP features facial expressions recognition accuracy is more than 97%. The block LBP histogram features extract local

as well as global features of face image resulting higher accuracy. LBP is compatible with various classifiers, filters etc. [3].

#### Functional requirements:

#### The functional requirements for an online food ingredients delivery app may include:

#### User Registration and Authentication: Users should be able to create and manage their account, including logging in and out, changing their password, and resetting their password.

#### Search and Browse: Users should be able to search and browse the available food ingredients, filter by category, and sort by different attributes such as price, quantity, and availability.

#### Order Placement: Users should be able to add food ingredients to their cart, select the desired quantity, and place an order.

#### Payment Processing: Users should be able to pay for their orders using a secure payment gateway and view their payment history.

#### Order Tracking: Users should be able to track the status of their order, receive real-time updates, and view their order history.

#### Delivery Management: The app should allow users to enter their delivery address, track the status of their delivery, and rate the delivery service.

#### Inventory Management: The app should allow the vendor to manage their inventory, including adding and removing items, updating prices and quantities, and managing stock levels.

#### Admin Panel: An admin panel should be provided for the app administrator to manage users, vendors, orders, and other app-related activities.

#### Overall, these functional requirements are designed to ensure that the app is user-friendly, efficient, and provides a high-quality user experience.

#### 2.2.2Non-Functional requirements:

The non-functional requirements for an online food ingredients delivery app may include:

Performance: The app should be designed to handle a large number of users and transactions, and should be able to process requests quickly and efficiently.

Security: The app should be secure, with measures in place to protect user data, prevent unauthorized access, and prevent fraudulent activity.

Usability: The app should be easy to use, with a simple and intuitive user interface that is easy to navigate.

Reliability: The app should be reliable and stable, with minimal downtime and system errors.

Compatibility: The app should be compatible with a wide range of devices and operating systems, and should be able to adapt to different screen sizes and resolutions.

Accessibility: The app should be accessible to users with disabilities, with features such as screen readers and keyboard shortcuts.

Scalability: The app should be designed to scale as the user base grows, with the ability to handle larger volumes of data and transactions.

Availability: The app should be available 24/7, with measures in place to ensure that it is always up and running.

Overall, these non-functional requirements are important for ensuring that the app meets the needs and expectations of its users, while providing a high level of security, reliability, and usability.

#### Reliability:

#### Ease of Use:

#### Feasibility Study

#### Technical Feasibility

#### Operational Feasibility

#### Economic Feasibility

#### Schedule Feasibility

#### Software and Hardware Requirement

#### Software Requirement

#### Hardware Requirement