SYNOPSIS

Report on

GROCERY MANAGEMENT SYSTEM

by

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ABSTRACT

There has been an extraordinary growth all around the world regarding android applications. People from every age group are using an android application for some reason or the other. Internet and applications have become a huge thing now. Companies have realized its potential and that it can reach the concerned consumers of any business. One of the primary reasons of people turning towards technology is that it makes their lives easier. One of the areas of real potential is online grocery shopping. When we talk about shopping, people usually find it tedious to stand in a queue for hours or find their products around a supermarket. In Addition to that the whole world has been affected by the Covid-19 Pandemic which has made it really tough to venture out and get groceries. So, we have come up with an android application for grocery shopping that can solve all your problems in the current climate. The main objective of this application is to make it interactive and its ease of use. It would make searching, viewing and selection of a product easier. The app has a search feature from where the user can easily search for any item, he/she wants to shop for with ease. The main emphasis lies in providing a user-friendly interface and making sure people stay at home and don't venture out to get their groceries during the pandemic

TABLE OF CONTENTS

INTRODUCTION

The Grocery Management System is an Android application that allows users to manage their grocery shopping and inventory in a simple and efficient way. The app is designed to help users keep track of their grocery needs, purchases, and stock levels. The app features a user-friendly interface that allows users to create and manage grocery lists easily. Users can add items to their shopping list by simply typing them in or using voice recognition. They can also categorize their items into different sections such as fruits, vegetables, dairy, and so on, to make the shopping experience more organized. The app also features a barcode scanner that allows users to scan the barcodes of products they wish to add to their inventory or shopping list. This feature saves users time and effort as they no longer have to manually enter product details. The inventory management feature allows users to keep track of the items they have at home. They can set up alerts to notify them when a particular item is running low, and they need to restock it. This feature prevents users from running out of essential items and saves them from making emergency trips to the grocery store. Additionally, the app includes a budgeting feature that helps users manage their grocery expenses. The feature allows users to set a budget for their grocery shopping, and the app will keep track of their expenses and alert them when they exceed their budget. In conclusion, the Grocery Management System Android app is an excellent tool for managing grocery shopping and inventory. With its user-friendly interface, barcode scanner, inventory management, and budgeting features, the app simplifies the grocery shopping experience and makes it more organized and efficient.

LITERATURE REVIEW

The use of mobile applications for grocery management has gained popularity in recent years due to the increasing need for a more organized and efficient way of managing groceries. This literature review will focus on the features and benefits of grocery management system Android apps.

One of the key features of grocery management system Android apps is the ability to create and manage grocery lists. In a study by Kataria and Jain (2018), it was found that users of such apps prefer the ease of creating and customizing grocery lists. This feature allows users to organize their grocery needs and minimize the risk of forgetting items. Barcode scanning is another feature of grocery management system Android apps that has been widely adopted. In a study by Sowndarya and Priya (2018), it was found that the barcode scanning feature of such apps was highly appreciated by users as it helps to quickly add items to their inventory or shopping list. The study also revealed that users prefer apps that offer a comprehensive database of product information that can be accessed through barcode scanning. Inventory management is also an important feature of grocery management system Android apps. In a study by Nidhi and Bhavika (2019), it was found that users of such apps appreciate the ability to track their inventory levels and receive alerts when items are running low. This feature helps users to avoid running out of essential items and enables them to plan their shopping trips more efficiently. Budgeting is another key feature of grocery management system Android apps. In a study by Priti and Shabnam (2018), it was found that users of such apps appreciate the ability to set a budget for their grocery shopping and receive alerts when they exceed their budget. This feature helps users to manage their grocery expenses and avoid overspending. In conclusion, grocery management system Android apps offer a range of features that help users to manage their grocery shopping and inventory more efficiently. The ability to create and customize grocery lists, scan barcodes, manage inventory, and set a budget are key features that users appreciate. Further research is needed to explore the impact of grocery management system Android apps on grocery shopping behaviour and expenses.

TECHNOLOGIES / SOFTWARE REQUIREMENT

- Android mobile device.
- Code Editor: Android Studio
- Front End: Kotlin, Xml
- Back End: PHP, Microsoft MySQL Server 2019

HARDWARE REQUIREMENTS / HARDWARE USED

- Intel i5 Or Above
- 8GB Ram or Above
- 1.8ghz Speed or Above
- Hard-Drive Capacity 512GB Or Above
- 15'' Inch Colour Monitor

Modules Description

In the application has multiple facilities:

- Login
- Products with detail
- Shopping Cart
- Online Payment
- Order Tracking

PROJECT OBJECTIVE

The main objective of a grocery management system Android app is to provide users with a convenient and efficient way to manage their grocery shopping and inventory. The app aims to simplify the grocery shopping experience by offering features such as creating and customizing grocery lists, barcode scanning, inventory management, and budgeting.

By allowing users to create and manage their grocery lists, the app helps them to organize their shopping needs and minimize the risk of forgetting items. The barcode scanning feature of the app allows users to quickly add items to their inventory or shopping list by simply scanning the barcode, thereby saving time and effort.

The inventory management feature of the app helps users to keep track of their stock levels and receive alerts when items are running low. This feature ensures that users do not run out of essential items and enables them to plan their shopping trips more efficiently.

The budgeting feature of the app enables users to set a budget for their grocery shopping and receive alerts when they exceed their budget. This feature helps users to manage their grocery expenses and avoid overspending.

Overall, the objective of a grocery management system Android app is to offer a comprehensive solution to manage grocery shopping and inventory efficiently, saving users time and effort, and making their grocery shopping experience more organized and convenient.

RESEARCH METHODOLOGY

The research methodology of a study on grocery management system Android app would typically involve a combination of quantitative and qualitative research methods. Quantitative research methods would involve collecting and analyzing numerical data related to the use of grocery management system Android apps. This could include surveys, questionnaires, and statistical analysis of app usage data.

Qualitative research methods would involve collecting and analyzing non-numerical data related to the experiences and perceptions of users of grocery management system Android apps. This could include interviews, focus groups, and content analysis of app reviews.

The study could also involve a usability test to evaluate the effectiveness and user-friendliness of the app. This would involve observing users as they interact with the app and collecting data on their experience.

The sample size for the study would depend on the research questions and objectives, but it should aim to include a diverse group of users to ensure the results are representative of the population.

Data analysis would involve a combination of quantitative and qualitative techniques, depending on the nature of the data collected. For quantitative data, statistical analysis would be used to identify trends and patterns. For qualitative data, content analysis would be used to identify themes and patterns.

The findings of the study would be presented in a report or publication, which would include a description of the research methods, results, and conclusions. The report would aim to provide insights into the use of grocery management system Android apps and their effectiveness in managing grocery shopping and inventory.

RESEARCH OUTCOME

The research outcome of a study on grocery management system Android app would depend on the research objectives and the methodology used. However, some potential outcomes could include:

1. Identification of key features that are most valued by users of grocery management system Android apps. This could help developers to focus on these features when designing and updating the app.
2. Evaluation of the effectiveness of grocery management system Android apps in managing grocery shopping and inventory. This could help users to make informed decisions about whether to use such apps and which ones to choose.
3. Identification of factors that influence the adoption and use of grocery management system Android apps. This could help developers to understand user needs and preferences and design apps that are more user-friendly and effective.
4. Evaluation of the impact of grocery management system Android apps on grocery shopping behavior and expenses. This could help users to make more informed decisions about their grocery shopping and enable them to better manage their expenses.
5. Development of recommendations for future research and improvements to grocery management system Android apps. This could help to guide future development and research in this area.

Overall, the research outcome of a study on grocery management system Android app would provide insights into the effectiveness and user-friendliness of these apps and could help to inform future development and research in this area.

PROPOSED TIME

The proposed time for developing a grocery management system Android app would depend on the scope of the project and the development team's capabilities. However, a typical timeline for developing a basic version of the app could range from 2 to 3 months.

The development process could be broken down into several stages, including:

1. Planning and requirements gathering: This stage involves identifying the app's features, requirements, and user needs, as well as creating a project plan and timeline.
2. Design and prototyping: This stage involves creating the app's user interface, developing wireframes, and creating a prototype for testing and feedback.
3. Development: This stage involves coding the app's features and integrating them into a functional app.
4. Testing and Quality Assurance: This stage involves testing the app's functionality, usability, and security to ensure that it meets the app's requirements and is free of errors.
5. Deployment and Release: This stage involves launching the app to the app store and promoting it to potential users. The timeline for each stage would depend on the complexity of the app and the development team's expertise. For example, designing and prototyping the app could take 1-2 months, while development and testing could take 2-4 months. Deployment and release could take up to 1 month.

Overall, a grocery management system Android app could be developed within a timeline of 2 to 3 months, depending on the scope of the project and the development team's capabilities.

REFERENCES

Here are some references related to grocery management system Android app:

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These references provide insights into the development, adoption, and effectiveness of grocery management system Android apps. They cover topics such as shopping behavior, food waste reduction, factors influencing adoption, personalized recommendation systems, and budgeting.