Android Application for Ordering Water Containers, Grocery and Delivery Management System

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Article Received: 24 January 2018 Article Accepted: 27 February 2018 Article Published: 08 April 2018

ABSTRACT

The need of digitization is growing fast that people don’t have time to purchase anything going to shops. This is the era of switching over to mobile applications from web applications. Nowadays people prefer to enquire about the rate and quality of items online, purchase and pay for the products online. The current system working procedure in those cities is where customer calls/drives down to shop to order the water container by providing the shopkeeper a deliverable address and then a delivery person delivers the order to customer’s door step, as this system works totally offline and has lot of drawbacks. The major drawbacks in current offline system are repeated calls from and to customer, if multiple orders are placed from same locality the delivery person travels multiple times, there is no track of order, etc. This paper proposes an android application for water container and grocery items ordering, where a customer can purchase water cans and groceries from nearby shops and get delivered at door step with few taps on the mobile phone. This application makes efficient use of internet, e-payment and easy billing facilities which moderately helps in building a digitally empowered society.

Keywords: Digitization, water can delivery, grocery items delivery, online payment.

1. INTRODUCTION

An online water and grocery mobile app permits a customer to submit online orders for items and /or services from a store that serves both walk-in customers and online customers. The online store system presents an online display of all the items they want to sell.

This mobile based application helps the customer to choose their daily needs and add products to their shopping cart. Customer provides their complete detail of address and contact number and they get their chosen product in their home. Online mineral water delivery system, for water can ordering and servicing the business to engage more customers and bookings through an online portal.

It is one of the commercial centers assuring high value and revenue our investment. This mobile based application saves lot of customer time. It also helps in a major improvement in digitization of the society.

2. BACKGROUND AND RELATED WORK

The existing system of ordering cans through phones don’t have the confirmation of your order being placed.

Problems:

1. The customer has to go to the shop to give his/her address for the first time to make the delivery regular.
2. Every order will be made by phone which makes a chaos situation if calls are confused.
3. The labor rates are increasing that dealers could not manage taking orders and placing them rightly.
4. The payment can be made online which does not involve in billing mistakes.
3. SYSTEM ARCHITECTURE

This system provides majorly three modules, which are mentioned below. The system provides user friendly GUI and data flows to all modules in dynamic way. The three major modules of the system are,

Modules:
1. Customer
2. Admin
3. Delivery person

3.1 Customer

This module is specifically designed for customer end. The customer can register in this application where they can choose their unique username and password and have an individual account of the application. He/ She can change the password whenever required.

The features provided in this module are
1. Registration
2. Login
3. Profile View
4. Search for products
5. Payment
6. Place Order
7. Cancel Order

3.1.1. Registration
3.1.2. **Login**

![Login Flowchart]

3.1.3. **Water can Module**

![Water can Module Flowchart]

3.2 **Admin**

The admin maintains the details of all users in the database. He/She receives an email when a customer places an order and then instructs the delivery person to deliver the goods in the required time and location.
The features provided in this module are:

1. Profile
2. Order pending
3. Cancel order
4. Orders completed
5. Receive Payments

3.2. Delivery Person

This module has some special features which help the delivery person to deliver the product in efficient.

The features provided are:

1. Orders
2. Route
3. Receive feedback

4. METHODOLOGY

This paper is influenced by the idea digital India and making all possible business digital. The current working system has drawbacks like slow, includes lots of manual work, unclear, no e-transactions, multiple conversations, lack of delivery methods and many more. The proposed solution in this paper eases of everything and make the system digital.
The working of the system is shown in a flow chart. The customer first registers with the application with a unique username and password by filling in the required details. He/She is then asked to login to the registered account. There will be two modules for water can and grocery items ordering. The user can enter either of the two options.

If the customer enters into water can module, he/she must select the liter capacity i.e., 200 mL, 300 mL, 500 mL, 1L, 5L, and 20L and enter the quantity. For bulk purchases the customer can contact the admin through phone. Payment is made online.

If the customer enters into the grocery items module, he/she can select the items required and place the order. Payment is made online.

Finally, the customer can logout from the application by clicking the logout button.

5. CONCLUSION

The current system is old fashioned and time consuming and includes lot of manual work. Technologies like Android, Digitization has raised the evolution of this type of application which helps the customer order water cans and grocery items easily and would be a change over from the traditional method of purchasing and switch over from web applications.

REFERENCES


