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Enhancing Hospitality Through Geofencing

Mayur M. Gaikwad[1], Shreya U. Patil[2], Om B. Shinde[3], Mitali K. Pai[4], Snehal S. Shinde[5], Prof. M. A Pardesi[6]

[1,2,3,4,5] Department of Computer Science and Engineering, D. Y. Patil College of Engineering and Technology, Kolhapur, Maharashtra, India
[6] Department of Computer Science and Engineering, D. Y. Patil College of Engineering and Technology, Kolhapur, Maharashtra, India

Abstract:

"Enhancing Hospitality Through Geofencing" provides a location-based offer notification system designed to enhance customer engagement and promote sales in retail environments. The system utilizes geofencing technology to deliver focused offers to customers based on their real – time location. Sellers can create and manage offers within predefined geographic areas using mobile application interface. When customer enters these geofenced areas, they receive notifications on their mobile devices about available offers from nearby sellers.

Key words : Location-based services, Geofencing, offer notifications, mobile application, customer engagement

Introduction:

In today's highly competitive retail landscape, businesses are constantly in search of innovative ways to draw and keep customers. One powerful strategy is to leverage location-based services and mobile technology to deliver personalized and timely offers to consumers based on their real-time location. Location-based totally provide notification structures have emerged as a promising approach to enhance customer engagement and drive sales in retail environments. Geofencing hospitality is a prototypical geofence-enabled mobile application for the android mobile operating system. It consists of an exemplary user interface for activating respectively deactivating the geofencing service and a component that deals with positioning and communication. The core purpose is to demonstrate the feasibility of our approach in general.

A location-based offer notification system designed to revolutionize the way sellers engage with their customers. Through a mobile application interface, sellers can easily define geofence, set offer parameters, and track the performance of their campaigns in real time.

Methodology:

To develop the Location-Based Offer Notification System, we'll start by talking to the people who will use it - like store owners and shoppers - to understand what they need. Then, we'll plan out how the system will work, including what it will look like and what it will do. Next, we'll actually build the system, making sure everything works the way it's supposed to. One important part of the system is creating "geofences," which are virtual boundaries. on a map.

These help us know when shoppers are near a store. Sellers will also be able to create and manage their offers, like discounts or special deals, in the system. Once everything is built, we'll test it out to make sure it works well. Then, we'll launch the system for everyone to use. We'll keep an eye on how it's doing and make any changes needed to make sure it's working great for everyone. This way, the Location-Based Offer Notification System will help stores send shoppers special offers when they're nearby, making shopping more fun and saving the time.

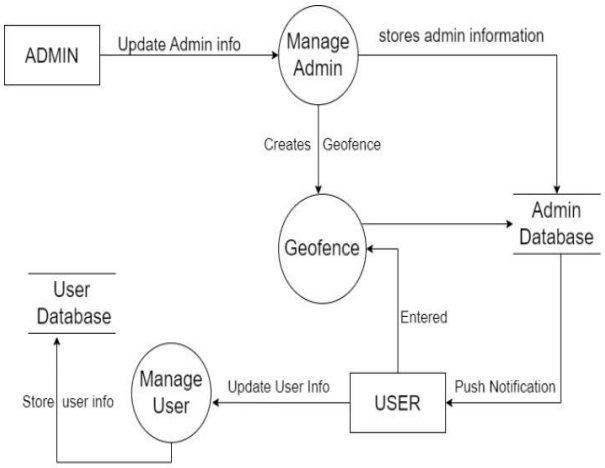
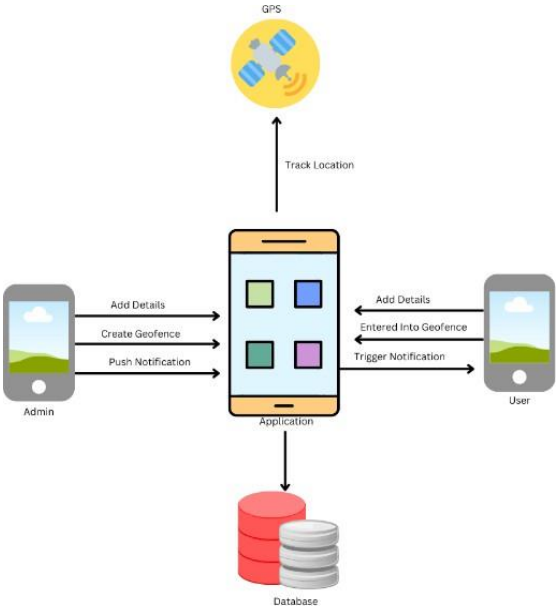


Fig 4: DFD level 2



Proposed system:

Fig 2: DFD level 0

Requirements:

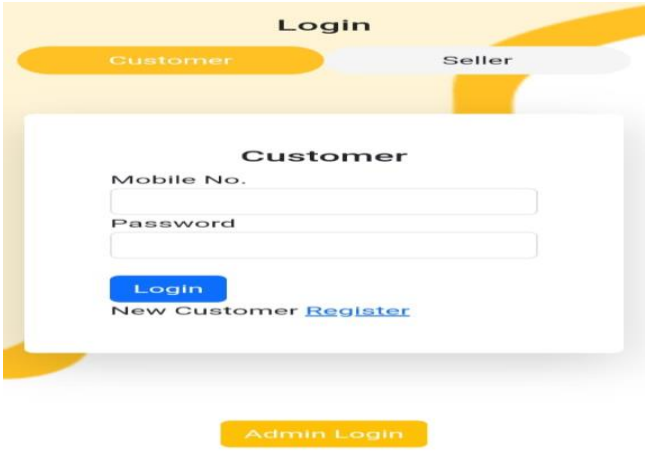
Hardware requirement:

1. Android Device : Mobile
2. Desktop
3. 4.00 GB RAM

Software requirements:

1. OS – Window Operating System
2. Database – MySQL Database
3. Programming Language & IDE – HTML, CSS, JavaScript & Visual Studio IDE

Result and Outcomes :



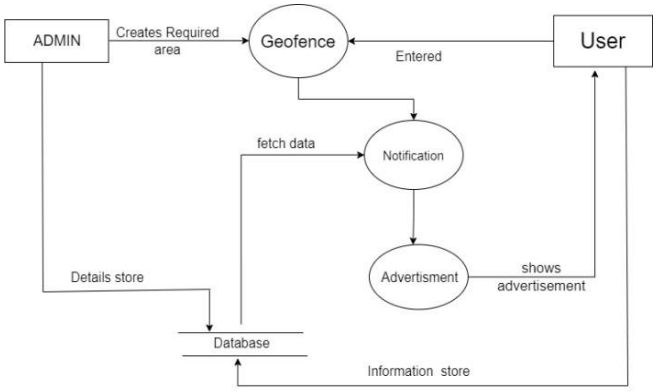
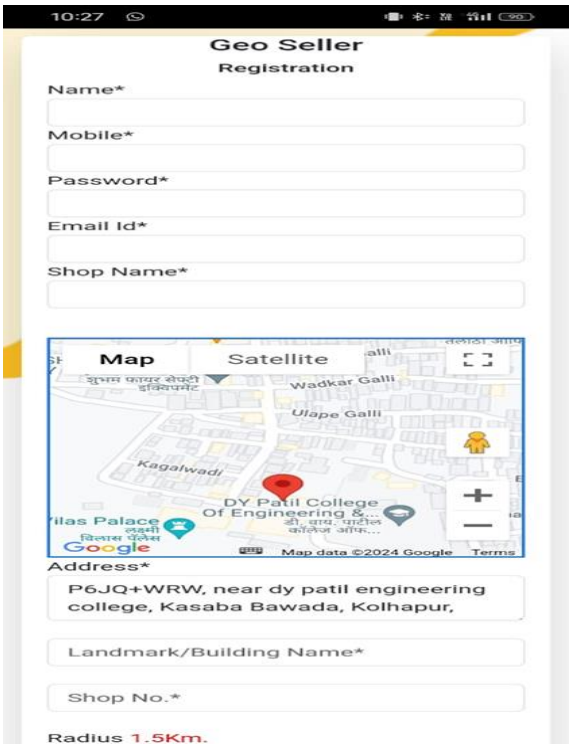
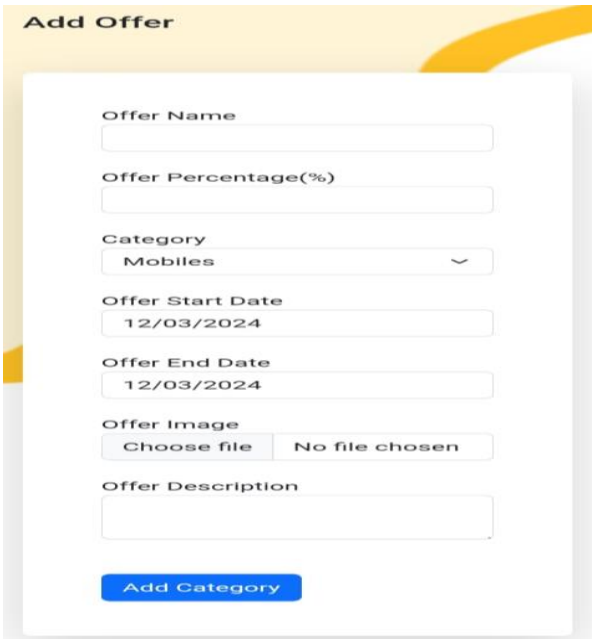
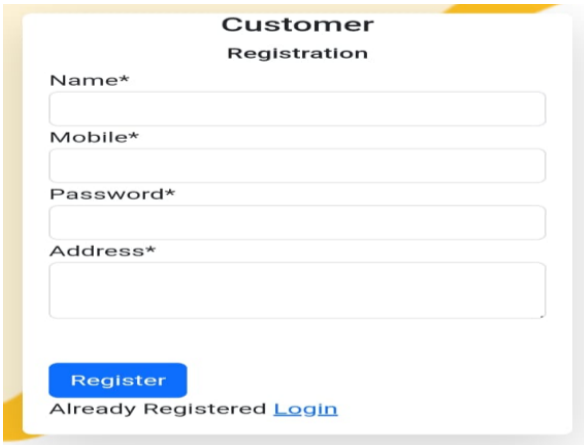


Fig 3: DFD level 1


10:27
Geo Seller
Registration
Name*
Mobile*
Password*
Email Id*
Shop Name*
Map
Satellite
Wadkar Galli
Ulape Galli
Kagalwadi
DY Patil College
Of Engineering &...
Google
Map data ©2024 Google
Terms
Address*
P6JQ+WRW, near dy patil engineering college, Kasaba Bawada, Kolhapur,
Landmark/Building Name*
Shop No.*
Radius 1.5Km.


Add Offer
Offer Name
Offer Percentage(%)
Category
Mobiles
Offer Start Date
12/03/2024
Offer End Date
12/03/2024
Offer Image
Choose file
No file chosen
Offer Description
Add Category


Customer
Registration
Name*
Mobile*
Password*
Address*
Register
Already Registered Login

Conclusion:

The proposed system acts as platform for small to medium business to extend their reach towards customers and overcomes the drawbacks of traditional marketing as well as existing system This system provides efficient way for business to market the products and services as advertises are delivered directly to the user's mobile phone and also the cost to set up infrastructure is much less as compared to other marketing strategies.

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