

Proximity Marketing using Android and PHP

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Abstract— Often people get confused while planning movies or shopping in malls or to plan which restaurants to visit. Firstly it becomes difficult for the people to visit each and every store to decide which is appropriate to fulfil their needs and requirements. Further, it is time consuming and may lead to disappointment and irritation. However, inventions of smart phones, tablets and computers have made our life easy and also they are very handy to use. And to solve this problem we can use a system which solves all the problems of the client. In this project, we have created an android application that is used by sending notifications about all the store's offers available in the shopping malls or food offers in restaurants or cafe or also movie and cinema snacks offers. Using this system people won't have to visit each and every store and can easily find out their needs and requirements and can plan it accordingly.

Keywords: Notification, Android Application, GCM

I. INTRODUCTION

Initially a page will appear which will ask the client to switch on the Bluetooth device. If the user does not switch on the Bluetooth then the application will instantly shut down and if the user switches on the Bluetooth then a login page will appear and the user has to login in order to continue. The user has to sign in/login in using his/her email id and their respective passwords. After logging in a main screen will be displayed. Then the user has to select from the three available options which include shop, movies and eateries. Then the list of all the offers that are available in the nearby area i.e. within 100 meters. The offers include the store's offers available in the shopping malls or food offers in restaurants or café or also movie and cinema snacks offers. Each option will provide the current offers that are available. The page also contains a notification tab which once clicked will display all the notifications which contains the offers that the client will receive if he/she passes through the respective options. Once the user is fulfilled, a page will appear which will ask the user to rate this application

A. Features of Android Studio

- Gradle based build support.
- Android specific refactoring and quick fixes.
- Lint tools to catch performance, usability, version compatibility and other problems.
- Pro-guard integration and app-signing capabilities.
- Template based wizards to create common android designs and components.
- A rich layout editor that allows users to drag and drop UI components, option to preview layout on multiple screen configurations.
- Support for building android applications.
- Built in support for Google cloud platform, enabling integration with Google cloud Messaging and application engine.

B. Features of Android Beacon

- Android Beacon provides with beacon triggering.
- Point SDK provides indoor triggering capabilities using Bluetooth Low Energy (BLE) Beacons.
- This feature is only available on devices that have BLE hardware support and are running Android OS 4.3 and above.

II. EXISTING SYSTEM

The existing system is a manual entry for the students. Here the attendance will be carried out in the hand written registers. It will be a tedious job to maintain the record for the user. The human effort is more here. The retrieval of the information is not as easy as the records are maintained in the hand written registers. This application requires correct feed on input into the respective field. Suppose the wrong inputs are entered, the application resist to work and if the register is lost the data cannot be retrieved back. So the user finds it difficult to use.

III. PROPOSED SYSTEM

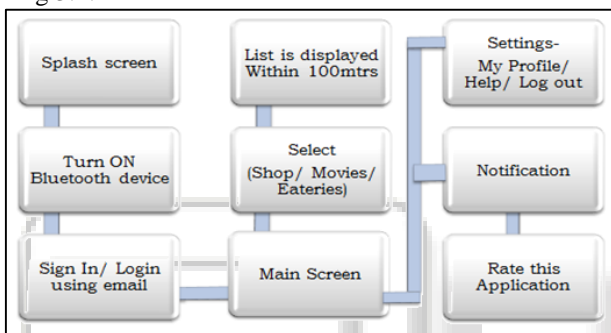
To overcome the drawbacks of the existing system, the proposed system has been evolved. This project aims to reduce the efforts and saving time to generate accurate results as per the user's requirements. The efficient and required reports/results can be generated by using this system. This system is the localized wireless distribution of advertising content associated with a particular place. This application will help the users/clients. In this project, we have created an android application that is used by sending notifications about all the store's offers available in the shopping malls or food offers in restaurants or cafe or also movie and cinema snacks offers. This is possible using Bluetooth. The user has to simply switch on the Bluetooth to receive the notifications. Using this system people won't have to visit each and every store and can easily find out their needs and requirements and can plan it accordingly.

IV. BASIC IDEA

Proximity marketing is the localized wireless distribution of advertising content associated with a particular place. Transmissions can be received by individuals in that location who wish to receive them and have the necessary equipment to do so. Distribution may be via a traditional localized broadcast, or more commonly is specifically targeted to devices known to be in a particular area. Bluetooth, a short-range wireless system supported by many mobile devices, is the transmission medium used for proximity marketing. The process of Bluetooth-based proximity marketing involves setting up Bluetooth "broadcasting" equipment at a particular location and then sending information which can be text, images, audio or video to Bluetooth enabled devices within range of the broadcast server. These devices are often referred to as beacons. This is an application in which the user will receive all the offers that are available in the nearby area i.e. within 100 meters. The offers include the store's offers

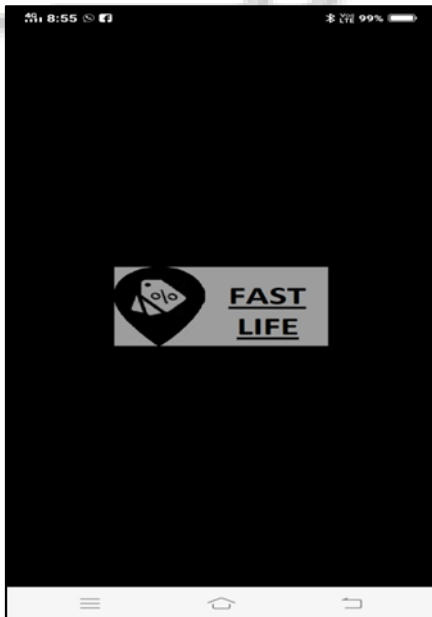
available in the shopping malls or food offers in restaurants or café or also movie and cinema snacks. Initially a page will appear which will ask the client to switch on the Bluetooth device. If the user does not switch on the Bluetooth then the application will instantly shut down and if the user switches on the Bluetooth then a login page will appear and the user has to login in order to continue. The user has to sign in/login in using his/her email id and their respective passwords. After logging in a main screen will be displayed. Then the user has to select from the three available options which include shop, movies and eateries. Then the list of all the offers that are available in the nearby area. The page also contains a notification tab which once clicked will display all the notifications which contains the offers that the client will receive if he/she passes through the respective options. Once the user is fulfilled, a page will appear which will ask the user to rate this application.

The overall architecture of the Application is shown in Fig 3.1.



V. IMPLEMENTATION

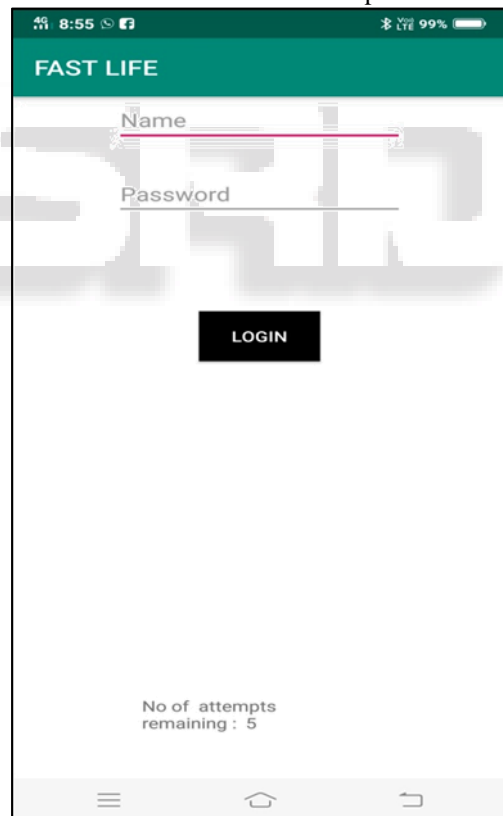
- 1) Firstly, the application splash screen will appear which will display the application's logo and the application's name i.e. fast life.



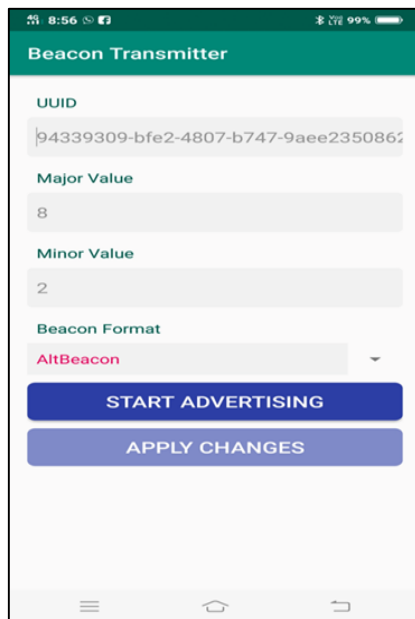
- 2) Then, the login page will appear. In the login page the user will have to enter his/her name and their password. The total number of attempts given to the user to enter their correct name and password is 5 attempts.



- 3) Then the admin login page will appear where the admin will have to enter his/her name and password.



- 4) Later, a page will appear in which the admin has to enter the UUID i.e Universal unique identifier. The admin will also have to enter the major value and minor value. Once the admin starts the advertising, all the nearby devices with Bluetooth switched on will receive the notifications.



VI. FEATURES OF PROPOSED SYSTEM

- Increased brand awareness.
- Engaged users.
- Higher conversion rates
- It is trouble-free to use.
- An automated edge
- It is highly reliable.
- Saves time.

VII. CONCLUSION

For the users to find their suitable requirements can be a very time consuming process. This application solves all the downfalls of finding the right offer. It provides the user with all the offers available in his/her nearby area. This includes all the store's offers available in the shopping malls or food offers in restaurants or cafe or also movie and cinema snacks offers. Using this system people won't have to visit each and every store and can easily find out their needs and requirements and can plan it accordingly. This not only saves the user's time but is also error free. This application reduces the effort of the users in finding their appropriate needs and helps them to find it easily without taking any efforts. Just a few clicks away!

VIII. FUTURE WORKS

Proximity platforms could also transform digital out-of-home, or even traditional billboard marketing. iSIGN's Bluetooth- and Wi-Fi-based product already can send rich media to phones in conjunction with signage, and it requires no preinstalled app. Other possible applications abound. Bus stops, sporting arenas and events are all areas where beacons or even near field communication chips could create multichannel campaigns outdoors, essentially turning a poster with a beacon into a palpable real-world portal into the ecommerce realm.

Although aspects of proximity marketing—targeted marketing with a geographic radius of roughly 100 meters—have been in place for nearly a decade, the field is still new

enough to make it extremely difficult to forecast. Its uptake depends on two overarching factors: retailer interest and consumer acceptance.

Beacons can be further used in technologies like:

- Travel
- Sports
- Real Estate
- Health
- I.T.
- Entertainment
- Finance
- E-commerce
- B2B

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