

A Web Based Coupons Recommendation System for Applicable Users in Friend Zone

R Madhu¹, P.Purushotham², K. Shekar⁴, T. Vinod³

Assistant Professor, Dept. of Computer Science and Engineering^{1,2,3,4},
MLR Institute of Technology, Dundigal, India

Abstract: Presently, every individual is using digital payment platforms like Google Pay, PhonePe, Paytm, Amazon Pay. Whenever a person does online transactions, he/she get coupons as a reward for couple of transactions. These coupons can vary from one another. Sometimes they are discounts or cashbacks or else vouchers. Every person who uses the digital payment systems will not be able to use every single coupon he/she received. So, instead of letting that coupon expire we are developing an android- based application, where the user can form groups with contacts of his/her choice in order to share their coupons. People can exchange the coupons among each other in the group. Also, when two people share their coupons that belong to same company, the application prioritizes and recommends the coupon which expires early. Also, to overcome the problem of a person entering details of coupons our app will remind the users to update the coupons in his profile. Also, to share the coupons which can't be directly shared a module is included such that a request message will be sent to the user and if the user accepts it can be gifted from native application

Keywords: Coupons, Redeemed, Coupons Expiry, Friend Zone, Coupons Availability

I. INTRODUCTION

In marketing sector, a coupon is a voucher or record that can be retrieved for a monetary drop or refund while purchasing a product. Coupons are provided by makers of consumption goods or by retailers, to be used in their stores to promote sales. Coupons can be aimed particularly at domestic markets in which price war is great. There are variety use-cases of coupons which include: to encourage a purchase, drop in price, avail a free sample, to aid analysts in understanding the demographics of their customer.



Figure 1: A Picture of Coupon Discount

An e-coupon can be part of a process, where a retailer issues a coupon in an effort for recovery in their stores. it can be a multi-party process,

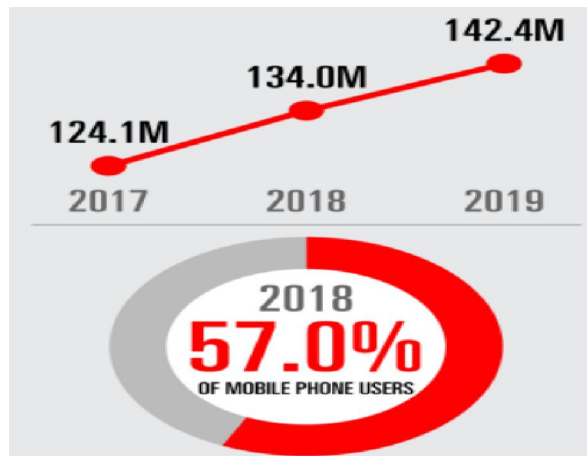


Figure 2: A Picture of mobile coupon users in US

II. LITERATURE SURVEY

There are various existing projects we took as a reference for our Web Based Coupon Recommendation System for Applicable Users in Friend Zone

1. Preeti Nayal and Neeraj Pandey entitled “Redemption Intention of Coupons: A Meta-Analytical Review and Future Directions” Published in 2020 on Taylor and Francis online. This paper features a structure to refine the understanding of characteristics influencing consumer’s motive to retrieve digital coupons using meta-analysis.
2. Jiawei He entitled “Understanding Users Coupon Usage Behaviours in E-Commerce Environments” Published in 2017 on IEEE Paper. This paper features the anticipation of user’s coupon usage prospect, and to explore which factors will impact the probability and how they take effects.
3. Hiroki Satoh, Toshiomi Moriki and Yuuichi Kurosawa entitled “Electronic Coupon Management System for Regional Vitalization” where domestic marketing districts offer special menus to rekindle the shops and their appeal.

III. PROPOSED METHOD

Whenever a user logs in, he is connected to the app. Now inside the app, the user has to connect with his friends who are in his contact list. Then the user can either upload or search for a coupon which is uploaded by his friends. If any coupon is found useful by the user then he can redeem it and use it

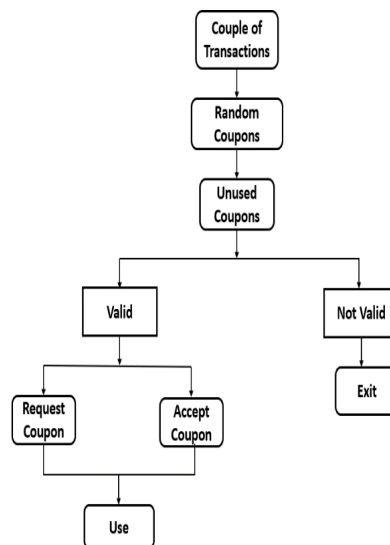


Figure 3: Proposed System Model
DOI: 10.48175/IJAR SCT-12919

3.1 Architecture

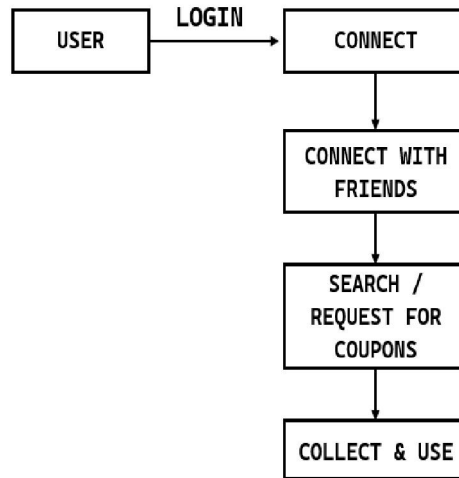


Figure 4: System Architecture for the proposed System

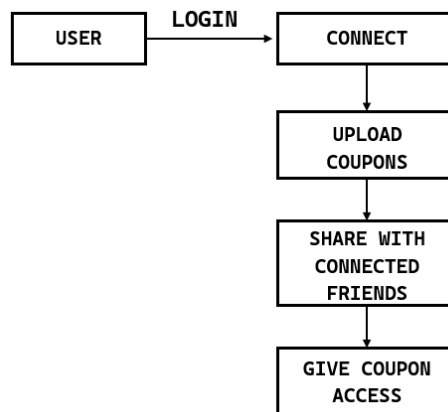


Figure 5: System Architecture for the proposed System

3.2 System Requirements

- **OS:** Android 7.1 above
- **CPU:** Qualcomm Processor
- **Disk Storage:** 2GB of free disk space, 100MB.
- **Framework:** Android.
- **Front End:** Javascript , XML.
- **Server:** Firebase (google).
- **Database:** Firebase (google).

3.3 Modules

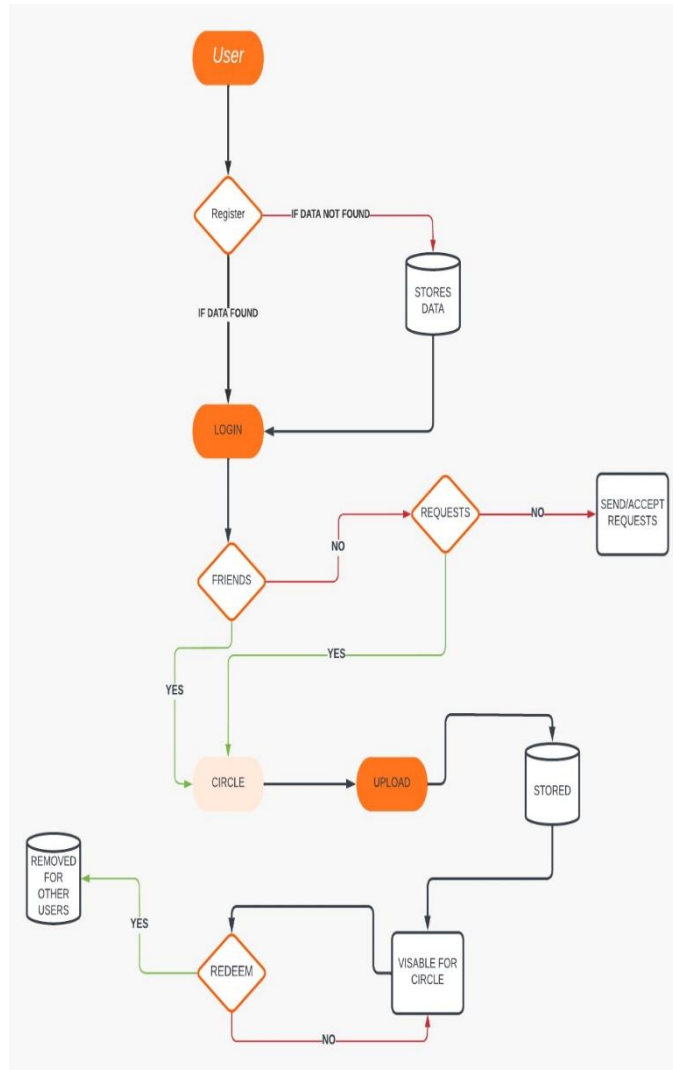
A. Admin module

In this admin module, the admin first signs in with the default username and password, and if the username and password is correct, the admin will now be directed to the admin home page. After logging into the admin homepage, click verify and select users to see all of the users who already have registered. Admin has the authority to verify the users by viewing their details, and then activates the coupons, making all of the coupons details visible to users who have been verified by admin

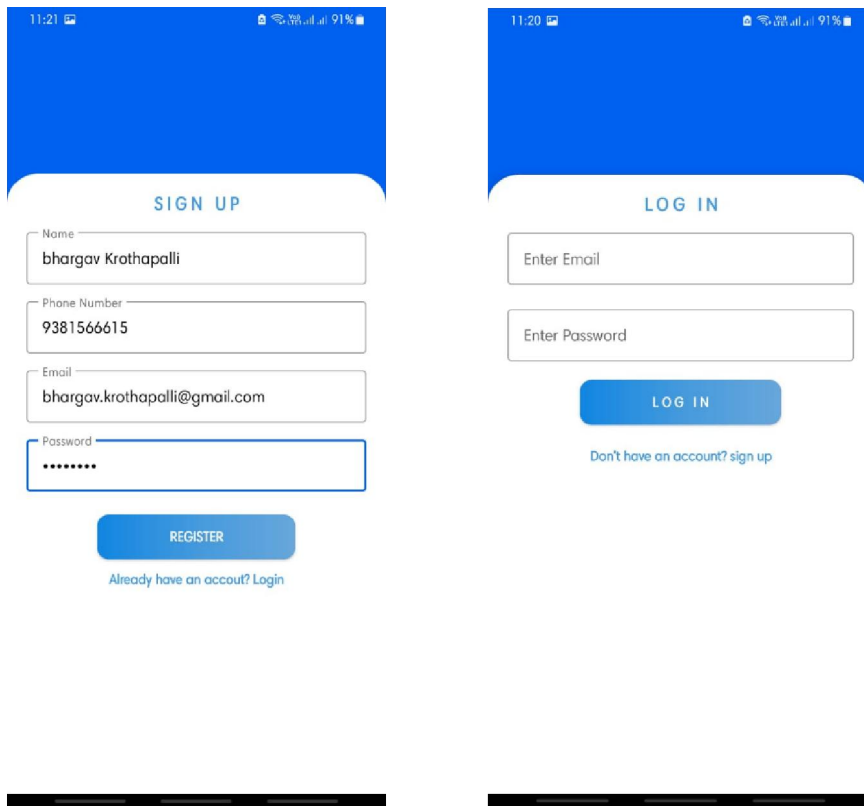
B. User Module

Users can register with their User credentials. After successful registration, the User will sign-in using their **username and password**. If the contact information and password supplied are accurate, the User can go to the User home page. After signing-in, the user is able to see the contact profiles, send requests, and view requests in the navigation bar. After clicking on view coupon information, the user may access coupons that have been authorized by the admin

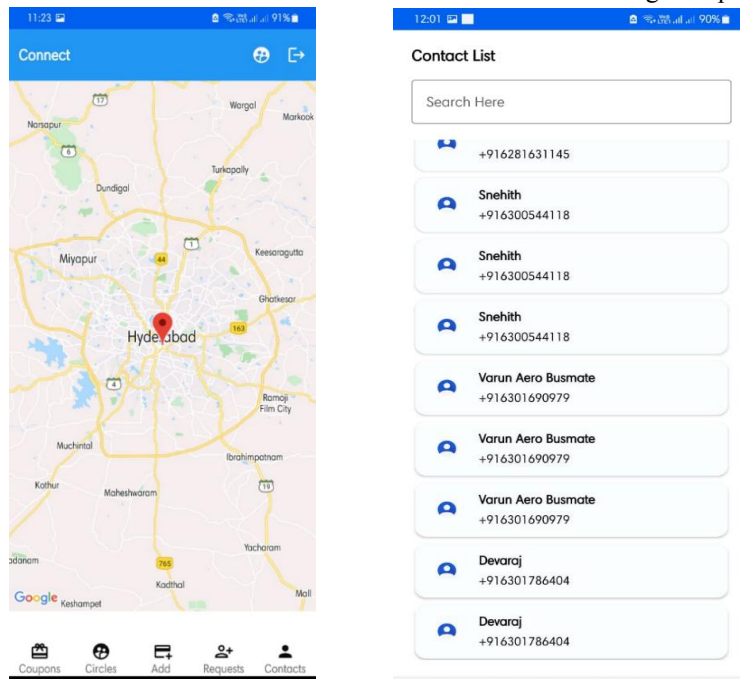
3.3 Use case Diagram



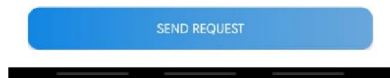
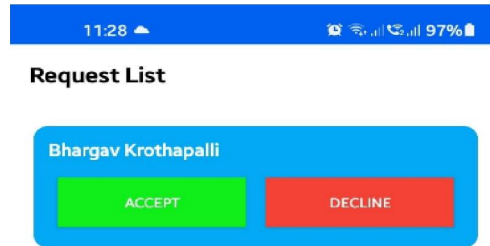
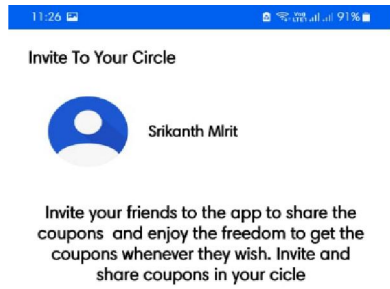
IV. RESULTS



When user enters into the app firstly he'll see the sign up page So after signing up he is allowed to log into the app after logging into the app the user is now enter into the dashboard where we can see a Google map with real time location

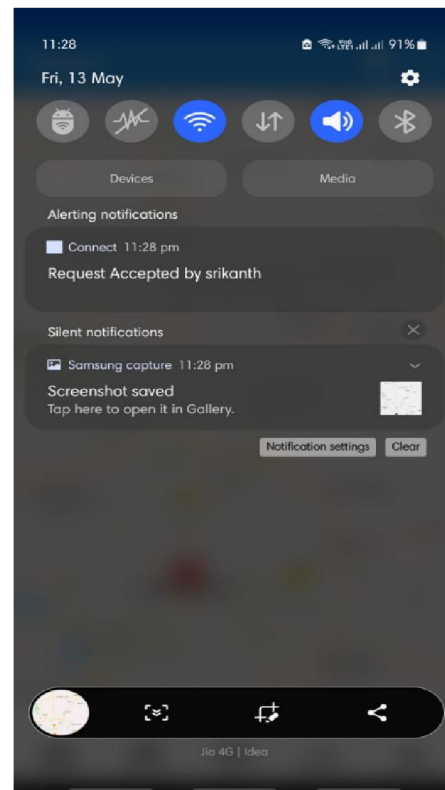
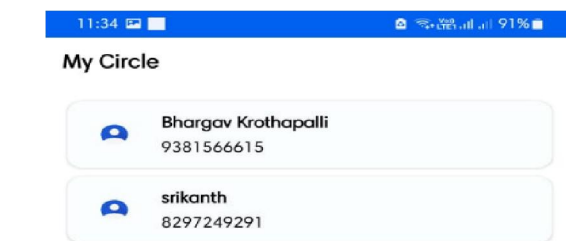


In the contact tab the user can see the all the contacts which he is saved in this mobile phone in the same tab of we can select the particular contact to which we need to send a request

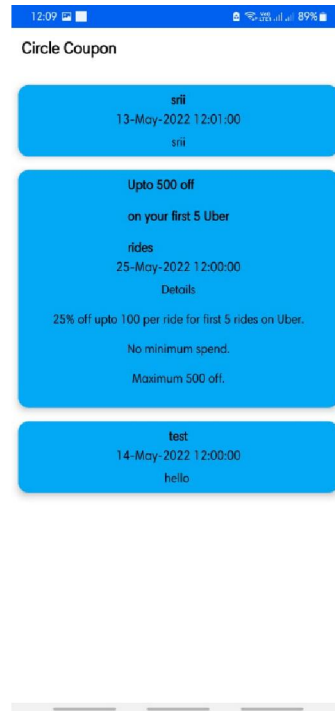
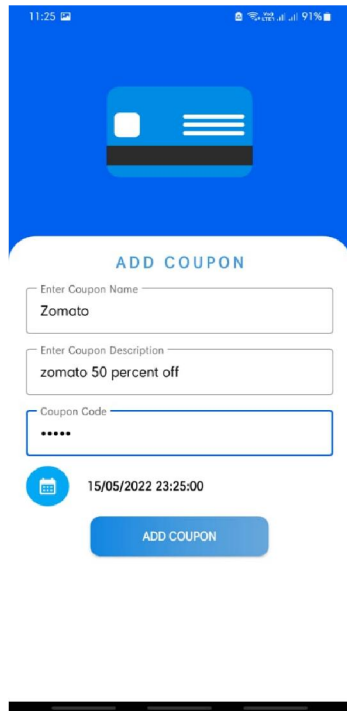


When user accepted the request send another user we will get the notification like this

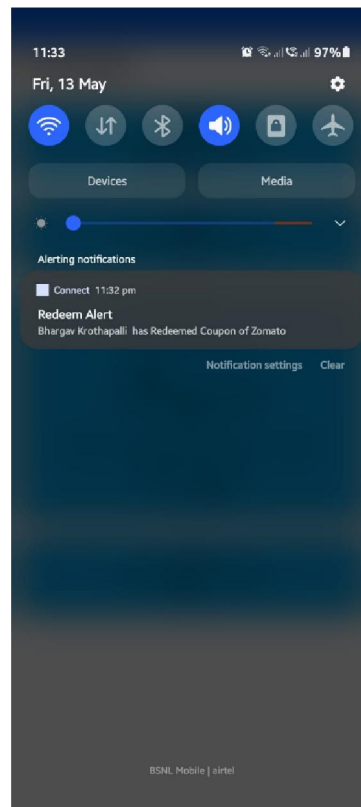
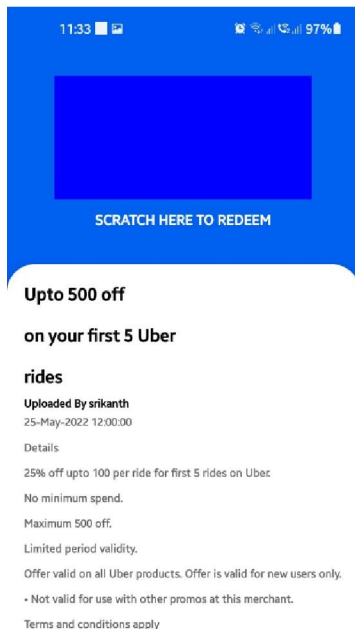
After sending the request the user will be notified in the request tab where we will get the request like this

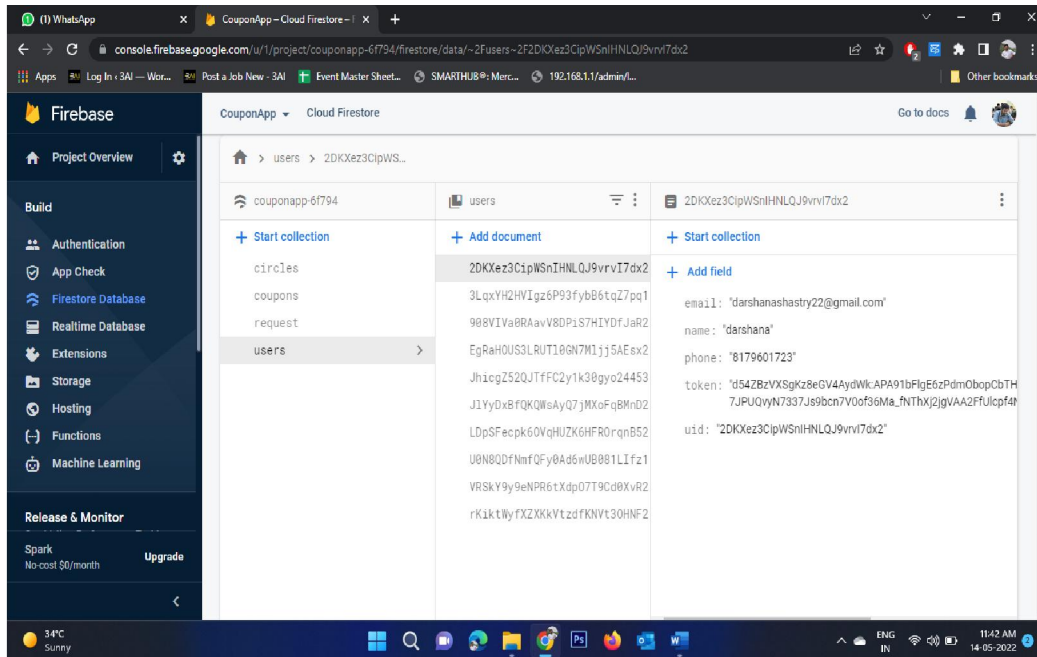


After accepting the request both the users are added into the circles



The uploaded coupon will be displayed in the circle step where all other users uploaded coupons will be displayed we can easily search them and read them when we need
When we click on a particular coupon then it will be displayed like this and when we redeem this other users will be notified





Every data that we use in the application will be stored in the firebase database this is the screen shot of that

V. FUTURE ENHANCEMENT

We aim to link the google maps to our app in such a way, that it shows us the coupons/vouchers (that are uploaded) based on our instantaneous location. That is, if a person is near a restaurant and one of his friends or he himself has a coupon of that restaurant, then the app will notify regarding the availability of the coupon related to that particular restaurant.

VI. CONCLUSION

We achieved our goal using JavaScript, XML and java combined with the power of android studio to build an android app that lets us exchange the coupons with our contacts and also to be notified at the exact moment when the coupon is redeemed by another pe

REFERENCES

- [1] Chen Chen, Chunyan Hou, Jiakun Xiao, and Xiaojie Yuan. Purchase behavior prediction in e-commerce with factorization machines. *Ieice Transactions on Information & Systems*, E99.D(1):270–274, 2016.
- [2] Mathias M. Adankon and Mohamed Cheriet. *Support Vector Machine*. Springer US, 2015.