

# DevBots 2021

## Domain-OPEN INNOVATION

**Problem Statement** - Coupons can be really helpful while buying online products but people don't have time to find it and it's difficult too.



VANSH BULANI  
(LEADER)

6261761136



ASHWATH P

6383660273



VISHAL R

7550102046

# Abstract

So analyzing the problem stated in the previous slide, our team came up with a solution, Coupons can be very helpful economically but people don't give much attention to it because sometimes coupons of a particular brand gets difficult to find. So we built a coupon trading android application and a web application from which people can buy and sell coupons and vouchers according to their needs.

# Novalty

This concept of coupon trading is something which has not been seen in the market yet. Moreover, our app and website is user friendly, where a person who have coupons that he/she won't use can simply put it up for sale and a customer in need can buy coupons .

# Methodology and Algorithm

## ANDROID APPLICATION

- The main methodology of this working model is to use Firebase as a backend with the best efficiency we can extract out of it .
- In authentication process( login/signup) the user information gets stored in Firebase Realtime database queries. And this info is extracted out when needed.
- In "Add Sale" page again the data gets stored in Realtime database queries and with the help of recycler view and adapter the data is fetched from Firebase and displayed in "Manage sales" in the form of recycler view.

# Methodology and Algorithm- cont'd

- In "Buy" page data is retrieved from two Firebase queries i.e. one from the "Users"( which was stored during authentication process) and one from the "Sales" (which was stored when putting the coupon for sale.) and finally displaying the required information through recycler view and card view.
- In buy page every card contains a button which again fetches the data from firebase and takes to the RazorPay Test payment Gateway.( we made this gateway in "test" mode as of now).If payment gets successfull the a message is sent to inner activities to display the coupon information in "My Coupons" page.

# Methodology and Algorithm- cont'd

- In Contact Us page we have just put a special Intent which will direct the user directly to the mailingapp and will automatically fill the subject and message part ( by retrieving from what was written in the editText of the app)

# Technology stack

## ANDROID APPLICATION

- Java
- Firebase

## WEB APPLICATION

- CSS
- JavaScript
- EJS
- MongoDB
- node.js
- express.js

# Software Implementation

## ANDROID APPLICATION

- Firstly the user needs to login/signup to move ahead and this is done using firebase authentication system.
- Then the user lands on tabbed activity where 1st tab is "About us" which introduces us.
- In Second page the user can sell the coupons by filling details and this is data gets stored in Firebase Realtime Database.
- And this sale will appear in "Buy" page (third page). If a customer clicks any of the sale in "Buy" page, a payment gateway will appear which was integrated through RazorPay. If payment succeeds the coupon will appear in "My coupons" page.
- There is also a page where user can manage their sales (delete or update).
- Last page is the "Contact Us" page where a user can write subject and message in the given text fields and mail will be sent to us, the developers.



# Software Implementation

## WEB APPLICATION

- The workflow is same as the Android application, with the same implementation and features

# Business scope

We believe everyone here has dozens of coupon (mostly from GPay) getting wasted without the use but "One man's waste is another man's treasure". With this application, people can sell their coupons to the people who will put it to good use. This app may hit as a useful app for many people because nowadays most of us purchase our required supplies online from clothes to stationary. We will be launching the web app and mobile app in the future.



# Conclusion:

If this project gets widely spread people will have no problem keeping it because online shopping is getting very common nowadays and coupons can save money and using coupons regularly will be very beneficial to the user. And selling coupons is also another advantage as many coupons go in drains because sometimes some people don't need it.



# Some Discussions:

- **Shareable & Unshareable Coupons :**

The Coupons which are similar to the reward coupons we get in Gpay are shareable, these coupons are like redeem codes for other companies like Lenskart/Zomato.

so ,it can be used by anyone . But the coupon we get in specific apps like Myntra which are based on the user account can only be used by the specific user, that is, it can't be shared with others.



# Some Discussions:

- **What if coupon is expired and still in Sales page? :**

Yes, this is a problem but we have solutions for this too, although we haven't implemented because of time restrictions. We can build a backend just for it which will automatically first go to the brand website and check if coupon is applicable or not.



**Thankyou for this wonderful  
opportunity, where we got  
out of our comfort zone and  
did our best!**