Tenant Finder Application

Home page

- 1. Drawer Layout
 - Display house ads
 - Post an ad (for owner's side)
 - My posts (for owner's side)
 - Profile
 - ❖ Sign-out

Tenant side

- 2. Display house ads
- 3. Find a house
- 4. Profile

Owner side

- 5. Post an ad
- 6. My posts
- 7. Profile
- 8. Sign-out

Report

Title of the Project: Homify

Project Outline (3-4 Pages):

Abstract

Since the advent of Globalization, people have to move to other cities or countries for the purpose of work and studies. There has been a problem seen by everyone finding affordable housing. This application consists of a user interface for both tenants and owners . The tenants will be able to find the apartments and owners will be able to list their property on this app .

Introduction

This is a Tenant finding application but quite different from the normal application system, as all property is properly verified and there will be easy/no paperwork to rent the house. This application is designed to provide an open source platform for the tenants. Basically this application is designed for the people first who want to rent the house and second who want to rent their house. As in the Covid situation we are totally dependent on internet services, we have seen a lot of benefits of applications providing such services. Through an online system people can explore new places along with regular trust and also can generate a second source of income.

So Basically in this application there are two types of user: first tenant and second owner. As a student you can sign up easily but as a tenant you need to provide some documents to verify that you are really capable of affording or not. After signing up, owners can upload their property, with some charges depending on amenities provided with it. Tenants can enroll for these courses and start learning.

History & Background

Earlier finding an apartment was a tedious task. And this took a deep fall when globalisation started.. All of this had a massive negative impact on the people along with the jobs and studies of people. So in this situation anyone

is looking for something to earn some money. If you want to enter this system it's like competing for a new job and everyone knows that it is not easy. So we can see there is a need for something where anyone can list their home and rent apartments. This project is exactly the thing everyone is looking for where one can follow his passion of either earning money or providing a house and at the same time it is rewarding to each of them, one with home and the other with the financial aid.

Aim & Scope

Past few months have been a downfall for the offline brokers and each and every tenant could not get 100% access to the affordable housing. This project mainly focuses on providing the same to the masses out there struggling to get apartments in these hard times. This platform will have the facility for chatting along with the ease of verification of property. This project is focusing to cover all types of tenants and owners who seek and provide housing .

Motivation

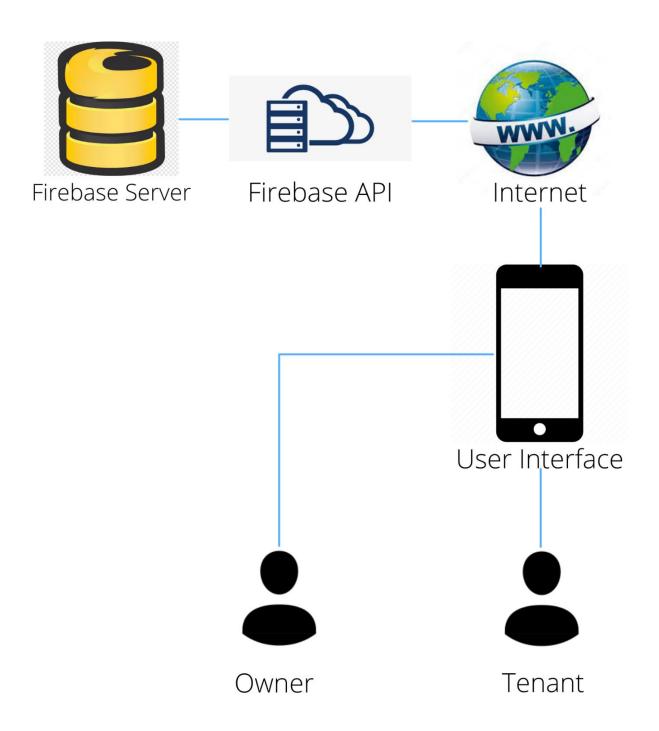
Because of these unprecedented situations that we have seen since the past one and a half years, we have decided to come up with this tenant finder application. This application will help tenants and owners to find and list homes respectively through the comfort of their phones. Every person in the real estate field has struggled through this Corona period and were not at their best. This application will provide them a platform where give and take of real estate can take place and the best part is that both of them would not have to come out of their comfort zones at all. Being college students, we have also faced this problem and had to cut off from our studies for a long time which affected our growth in our study which led us to build this application for other students as well.

<u>Framework</u>

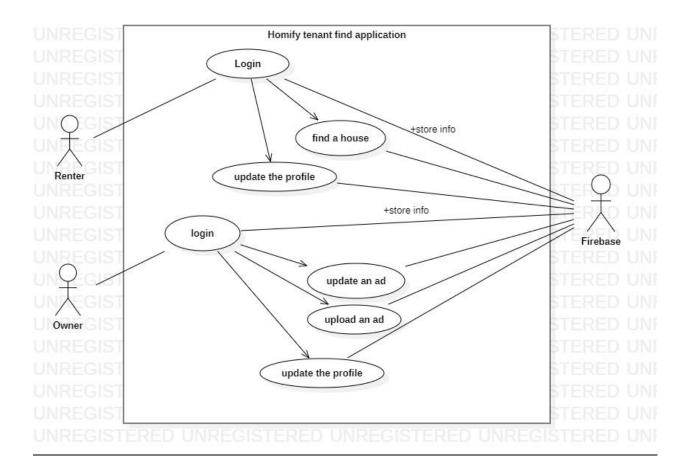
We are using java framework and android studio which is an official Integrated Development Environment(IDE) and for android development. Android studio uses gradle as a framework for building the android system. This build system runs as an integrated tool from the Android Studio menu, and independently from the command line. By employing the flexibility of Gradle, you can achieve all of this without modifying your app's core source files. Android Studio build files are named build.gradle. It helps to to write code in structured way and Structured code modules allow you to divide your project into units of functionality that you can independently build, test, and debug.

Block Diagram

Architecture of tenant finderapp



<u>Usecase diagram:</u>



Related work:

Initially we have discussed and understood what we actually want in this coaching app. For this we have visited the current android app market and see what different organizations have done. After that, we decide what functionalities we should provide to our user so that the app comes handy to the user..

After figuring out all these things we have prepared some diagrams and prepared a simple architecture for this whole system.

After completing these initial theoretical parts we have decided to jump into the coding section. First we are working on different layouts for the UI. We have distributed our work and started working on different screen layouts. As all these things are new for us so we are first learning all these from different websites, youtube and class notes.

We have explored new things like recycler view which helps to create a dynamic layout and set a list of data on this layout. We need this layout to show list of houses to tenants which can be fetched from our database. Other than this we have designed sign in/up layout for user, house overview layout etc.

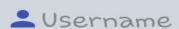
Other than front end we have start working on backend and learn how firebase work, how we can connect android studio project to firebase. We have seen how we can add new dependency to gradle build and get different library classes. We have understand how firebase connect with project with the help of JSON file. As firebase storing the data in tree hierarchy we have started to store data in

Screenshots of User-Interface:-



House Rent







- Password
 Password
- Confirm Password

Owner

SIGN UP

Already have account? Sign in here



House Rent



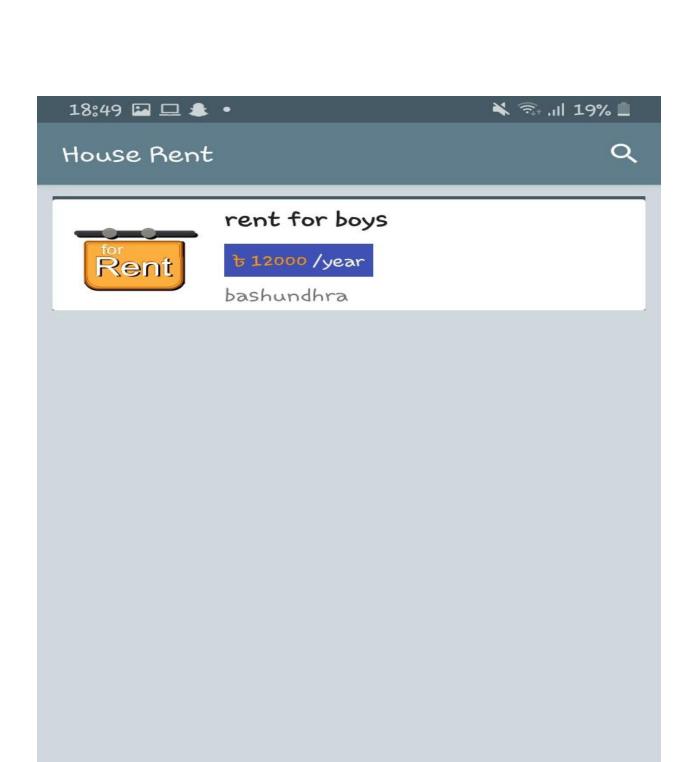




SIGN IN

Not a member? Sign up here

Owner's side:-



hemanshu2171@gmail.com

Work to be done/Proposed Approach/Solutions/Algorithms (1-2 Pages

Firstly the application is going to start with the application logo and its title where options will be given to sign-in/sign-up as a teacher or a student. And then different login forms will open for different choices where general information will be added by the user. We need to create a UI for this and add functionality to save their data in a realtime database, give them user access through firebase authorization.

We have also prepared the recycler view for the course tab where different courses will be listed and a brief info will be listed about that course. That view will also contain the search bar to search the courses according to the student's needs. Then an intent will open for different courses where detailed information along with the course material will be present.

Now we have to connect this recycler view to the firebase database so it can take data from relatime database. We need to give authorization to the user to access the realtime database at the time of sign up also we have to verify the email id through OTP system.

Along with that there is work for the front end also. Many activities like course overview, activity for teacher to upload courses are still pending. We need to work there also. We need to implement a video player so that students can see the lectures.

In conclusion all what we need to do is create user interface so that they can access the data(courses for student) and upload data to firebase(for teacher)

Software/Hardware Requirements:
Tools.
Android studio, StarUML
Programming Languages:
Java

Conclusions (1 Page)

To conclude this project, One can say that it is a complete package for the online apartments finder where every requirement of a tenant and owner is fulfilled along with the doubts. This application provides access to everyone for a smooth lending system. This application brought a lot of challenges with itself in the beginning such as we all had to go through the firebase working for the database management, there were some functionalities which were difficult to implement and we had to search for the resources where we could find those solutions. However the team support and team spirit made it a lot easier and we all got through those problems and were able to implement all the things that we decided to.

We have come up with a great idea and as we are working on a project, new ideas keep on coming. There is a lot of functionality which can be added in this app like chat box, live classes etc. So all this needs proper teamwork and hard work. We are trying to give our best and come up with the best online coaching app.

Open issues and Challenges (1-2 Pages)

The main challenge or domain where we have to work is to understand the working of firebase because we need a strong backend. Firebase realtime database is stored as JSON Object which uses tree hierarchy. All data is stored in key and value manner. Unlike sql objects there are no tables or records. Actually we have worked with relational databases and working with sql query only. So working with a new database and creating a complex database is a really big challenge for us. In our case we need to retrieve data, filter the data, this makes it more difficult.