HOUSE RENTAL MANAGEMENT APP

A Project Report
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Under the Guidance of

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in partial fulfillment for the award of the degree of

MCA

IN BRANCH OF STUDY COMPUTER ENGINEERING

At



MUKESH PATEL SCHOOL OF TECHNOLOGY, MANAGEMENT AND ENGINEERING, NMIMS, MUMBAI APRIL, 2021

Annexure-II

DECLARATION

- I, Devika Rajvanshi, Pratyush Singh, Aamir Mansoori, Anushka Sikka, Nikunj Mistry, Roll No. A043, A058, A029, A055, A033 MCA (Computer Engineering), II semester understand that plagiarism is defined as anyone or combination of the following:
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Signature of the Students:

Names: Devika Rajvanshi, Pratyush Singh, Aamir Mansoori, Anushka Sikka, Nikunj Mistry

Roll Nos. A043, A058, A029, A055, A033

Place: MUKESH PATEL SCHOOL OF TECHNOLOGY, MANAGEMENT AND ENGINEERING, NMIMS, MUMBAI

Date: 27th April,2021

Annexure-III

CERTIFICATE

This is to certify that the project entitled " HOUSE RENTAL MANAGEMENT APP" is the bonafide work carried out by Devika Rajvanshi , Pratyush Singh , Aamir Mansoori , Anushka Sikka , Nikunj Mistry of MCA MPSTME (NMIMS), Mumbai, during the II semester of the academic year 2021, in partial fulfillment of the requirements for the Course Mobile Application Development.

	Prof. Ameyaa Biwalkar
	Internal Mentor
Examiner 1	Examiner 2

Annexure IV

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INTRODUCTION

The House rental Application project is an android application. We developed this project to serve the people for online property buying, selling, renting purpose. The users can register them self to the application and can get access to use the given feature in app for example, if the landlord wants to sell or purchase any property like House, Apartment etc. you can just register in this app and provide sufficient details and descriptions of our assets.

Customers can register with their profile details and search. After that, the customer can customize their search by providing their requirements. The system will display all the details one by one. Now the customer can contact the owner directly and ask for a house or land or, etc. the house's case rental, the owner can provide, the number of rooms, parking facility, house type, rental amount, advance amount, house location, area, etc. However, using your username and password the owner can select your advertisement to update. similarly, owners can alter the advertisement as many times free of cost.

Similarly, this application connects Landlords with property seekers easily. In other words, this project makes a revolution in the real estate business.

SOFTWARES AND API USED WITH DESCRIPTION

- 1. Android Studio: Our app is developed using Android Studio version 4.1, which is the is the official IDE for android application development. It helps developers build the highest-quality apps for every Android device. It offers custom tailored tools for Android developers, including rich code editing, debugging, testing, and profiling tool. Android studio supports various languages such as java, Kotlin and C++. I have used the language java to develop my app. Using java to develop apps has a few benefits, such as, it is easy to learn, understand and implement. Java is an object-oriented language and hence allow to create modular programs. Java is also designed to be platform-independent and secure, using virtual machines
- 2. Firebase Realtime database: we have used firebase Realtime database which is a cloud-hosted database and is used to store and sync data. Data is also synced across all clients in Realtime and its benefit is that, it remains available even when the app goes offline. During the initial stages of my app development, I had used SQL database, but then I shifted from SQL database to Firebase Realtime database. A few reasons that I shifted to Firebase was that- data in Firebase is made easier in the backend by visualizing it in a no-SQL type of setup. Also, I can watch my data is being updated, deleted, or added and see the flashes of colors that signify these actions. When adding a node, it flashes green. Update some data and the node flashes orange. Completely remove or delete a node and you'll see it flash red before disappearing. I need all the above functionalities such as add when a new user has signed up, update when the user updates his choice of services and, when he chooses to cancel his booking, all the data except for the data in the user node is deleted.

3. Google Map API: - Google Maps is a web-based mapping service application and technology provided by Google. The application provides detailed

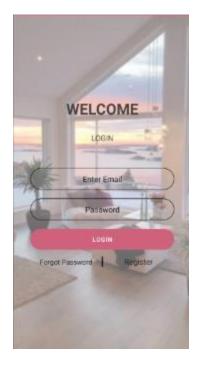
information about geographical regions, sites, street maps, a route planner for traveling by foot, car, aerial and satellite views of many places in numerous countries around the world. The Google maps API, gives you the freedom to create customized maps, which can do all sorts of cool staffs. This tutorial is designed to show the user (familiar with JavaScript programming and object-oriented programming concepts) how to create a Google Map and related application using the Google Maps JavaScript API V 3. Using an API key all *Maps API applications* load the maps. The API key is free, but Google monitor your application's Maps API usage and if it exceeds the <u>usage limits</u>

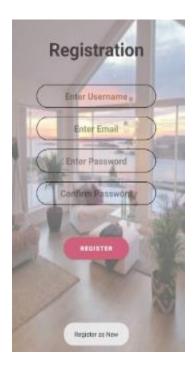
4. Razor Pay: - Razor pay being online payment-gateway-technology not only provides us with reliability, quick on boarding, and 24x7 support but also gives developers an API driven platform for easy integration and quick building of standard and custom checkout forms in their websites or android apps. It almost includes all sorts of payment modes like credit card, debit card, UPI and wallets such as OlaMoney, Payzapp, Free charge, etc. It helps in managing our marketplace, automates bank transfers, collect recurring payments, share invoices with customers — all from a single platform. The two run-modes i.e., test mode and live mode serves building a more enhanced and error-free gateway for e-commerce websites. Test mode, as the name suggests, helps testing of the API integrated product whether standard or customised. It does so by allowing fake transactions providing with a test key and secret to your razor pay account.

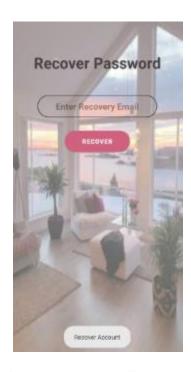
METHODS IMPLEMENTED

- 1. Registration: First user has to register them self in the application by giving all the correct info E.g., User Name with correct validations, user name can be only string and number no special characters. User has to give the valid credentials.
- 2. Login: -In login method user as to login using their Username and password they used while registering them self After login user can search for
- Forget Password: -The forget password method. User must select change password using OTP.
 If OTP selected user will receive email with OTP in it. At last user must enter new password and confirm new password.
- 4. Payment Gateway: The payment method user must have to give Card number, Select the year, Select the month, Card name, CVV number to complete the transaction user will get the acknowledge at their register email ID.
- 5. Google Maps: -They help us to find the houses in the specific location .

SCREENSHOTS







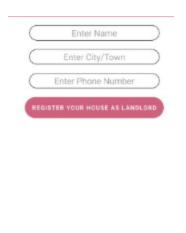






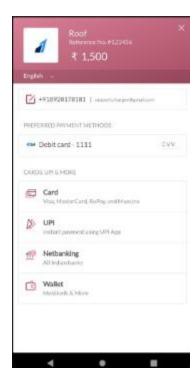






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CONCLUSION & FUTURE SCOPE

Effectively resolving the apartment issues is important to the tenant's long-term future, the Rental Property Management app will be an important tool for creating rental housing stability by helping tenants speak with greater credibility through initiating and documenting communications and building productive relationships with landlords. Rental property management provides tenants of specific housing associations and social landlords with a simple way to report and arrange repairs to properties. Finally, the goal of the app is to create a better relationship between tenants and a landlord which can be achieved through this app.

• Future scope

In the future this app:
☐ Can be extended to iOS Platform.
☐ Several apartments Database can be included.
☐ Could also allow local business to push deals/coupons within a certain geographic area.
\square Adding persons to the apartment by selecting email id of the registered users.

SOCIETAL APPLICATION

In 2021, property management has gone mobile. We called it before, but the pandemic has greatly accelerated the transition to digital tools.

A handy property management app offers significant time savings whether it's an application for a specific task such as rent collection, time management, or controlling keys to units.

We have made an app which eases the property finding at the finger tips. This House rental management platform aids in financial management, tenant communications and even lease signings.