A screenshot of a cell phone

Description automatically generated

**MAD-315**

**Mobile Application Development**

**Project Report A close up of a sign

Description automatically generatedOn**

|  |
| --- |
| **RENTALS** |

***Date- September 29, 2020***

***+***

**Submitted To: Submitted By:**

**Pargol Poshtareh Saumik Patel 1992509**

**Harsh Divecha Vidhee Savani 1992536**

**Lucas Brancatella Viraj Gandhi 1993547**

**Sébastien Richer Smit Panchal 1992516**

**Sahil Saini 1992480**

**Parthiv Patel 1992571**

# 

Table of Contents

[1.Introduction 1](#_Toc51181258)

[1.1 Purpose 2](#_Toc51181259)

[1.2 Scope 2](#_Toc51181260)

[2.General Description 3](#_Toc51181261)

[2.1 Product Functions 3](#_Toc51181262)

[2.2 User Characteristics 4](#_Toc51181263)

[3. Specific Requirements 5](#_Toc51181264)

[1.3 3.1 Functional Requirements 5](#_Toc51181265)

[1.4 3.2 Non-Functional Requirements 6](#_Toc51181266)

[4. Analysis Model 7](#_Toc51181267)

[1.5 4.1 Use-case Diagram 7](#_Toc51181268)

[1.6 4.2 Use-case Description 7](#_Toc51181269)

[1.7 4.3 Sequence Diagram 7](#_Toc51181270)

[1.8 4.4 Screen-flow Diagram 7](#_Toc51181271)

[5. Database 7](#_Toc51181272)

[1.9 5.1 Database -schema 7](#_Toc51181273)

[1.10 5.2 Data Dictionaries 7](#_Toc51181274)

[1.11 5.3 Database Queries 7](#_Toc51181275)

[6. Use-Case Scenarios 7](#_Toc51181276)

[7.Web Calls 7](#_Toc51181277)

[8. Test Cases 7](#_Toc51181278)

# 1.Introduction

The “Apartment Rental Application” is a new and amazing app to help everyone to save time in finding apartment! Absolutely free to download. It's based simply on apartments for rent and share apartment. Register, log in and add all your favorites to your "favs" that way your apartments will come up. Need a apartment in your budget? just search for it, watch all the results pop up near by you. If you want to change neighbourhood click on the map where you want to move. It’s ease without roaming around all the streets. Apartment Rentals is safe and secure way to rent an apartment. It has been designed to allow students to save time and money. Stop wasting your time for searching in apartments by going there personally. You can see the nearby grocery stores, transits, schools by using this app.

It is a free and user-friendly app and very easy to learn and use the app. It is designed to find an apartment in any area, in your budget in an easier way. There’s no need for posting any advertise to see apartment.

Apartment Rental Application is built by using the following technologies.

Front End: XML

Backend: JAVA and Firebase Database

## Purpose

There are lots of problems in looking for apartments without knowing apartments details prior hand. We have to go each street where as per our requirements. Sometimes, we find an apartment but it has at-least one problem such as it is available from in 5-10 days but we need it after one month. In other situation apartments are not pet-friendly, don’t have elevators, don’t have some basic amenities, it’s out of our budget, there is not public transit available nearby apartments. As we all faced these problems in past, we want to provide an easy to use application .The purpose of this app is solution of all of above problems in just one application where registered use can post advertise of apartment with all the details including pictures, amenities, and all relevant property details. And other user can search for apartments based on their requirements with just one clock and can have all the necessary apartment details before scheduling a visit.

## Scope

The main function of this application is to help users to post advertise of their apartment, so that they can reach out to the maximum people. This app will not provide service to sign a lease of any apartment or make any payments for lease or rent.

It is an application for android users which eliminates all the manual work regarding apartments for rent. It provides better and Responsive Graphic User Interface. It provides efficient way to find an apartment as per user’s requirements

Owner and Registered users are the main users of this system.

Registered user can send a text message from their application to the owner or person who is handling the post for renting apartments. They can also send them an e-mail to take an appointment for visiting an apartment. Registered user can manage their profile by using this application, they can also post an add for renting an apartment without any cost, with pictures. They can update their post; they can mark it as rented their post if it is rented to someone.

# 2.General Description

## 2.1 Product Functions

* Search Apartments
* Search an apartment using filters like location and price.
* Add New Post for Rent an apartment
* Edit Post of Apartment
* Register Users
* Manage password
* Delete post of apartment
* Like post of apartment
* Send message to owner of post
* Login
* Logout
* Manage user profile

## 2.2 User Characteristics

* If user is not registered user than App will ask to login
* User can login or signup
* User can search apartment by price and location filter.
* User can send message or call or Email owner to arrange a visit of apartment.
* User can see apartment details which is posted by owner.
* User can save apartment by using like button of particular post of apartment.
* User can see all the listing of particular city on a map.
* User can manage their profile.
* User can mark his post as rented to hide apartment listing.

# 3. Specific Requirements

## 3.1 Functional Requirements

|  |  |  |
| --- | --- | --- |
| ID | Statement | MOSCOW |
| FR01 | Login | MUST |
| FR02 | Signup | MUST |
| FR03 | Login as guest | MUST |
| FR04 | Add to Wishlist any apartment post | MUST |
| FR05 | Search apartment by location | MUST |
| FR06 | Manage User profile | MUST |
| FR07 | Reset Password | MUST |
| FR08 | Add New Apartments Post | MUST |
| FR09 | Update their Apartments Details | MUST |
| FR10 | Delete Apartments Details | MUST |
| FR11 | Sent Email to arrange visit | MUST |
| FR12 | Sent Text to owner arrange visit | MUST |
| FR13 | Search apartment by location | MUST |
| FR14 | Search apartment by price | MUST |
| FR15 | Search apartment by bedrooms | SHOULD |
| FR16 | See nearby available local Contents and Walk Score | SHOULD |
| FR17 | Mark Apartment Post as rented | MUST |
| FR18 | Mark Apartment Post to Rent Again | MUST |

## 3.2 Non-Functional Requirements

|  |  |  |
| --- | --- | --- |
| ID | Statement | MOSCOW |
| NFR1 | Available on Google Play store | MUST |
| NFR2 | App UI needs to be Effective, Efficient,  Engaging, Error Tolerant, Easy to learn so even first-time user will be  able to use app easily. | MUST |
| NFR3 | App is available to all the user but Only registered-logged in user are allowed to add post, manage post, Wishlist and to contact owner of particular post | MUST |
| NFR4 | App should be available 24 hours a day, 7 days a week. | MUST |
| NFR5 | Minimum Android version 6.0 | MUST |
| NFR6 | User will be allowed to make one account per email id. | MUST |
| NFR7 | Application should to able to render its layout to different screen sizes of mobile devices and tablet devices. Along with automatic adjustment of Font size and image rendering. | MUST |

# 4. Analysis Model

## 4.1 Use-case Diagram

## 4.2 Use-case Description

## 4.3 Sequence Diagram

## 4.4 Screen-flow Diagram

# 5. Database

## 5.1 Database -schema

## 5.2 Data Dictionaries

## 5.3 Database Queries

# 6. Use-Case Scenarios

# 7.Web Calls

# 8. Test Cases