A screenshot of a cell phone

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**MAD-315**

**Mobile Application Development**

**Project Report A close up of a sign

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**APARTMENT RENTAL PPLICATION**

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# 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 wants 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
* Apply Filters
* 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
* Reset User’s password

## 2.2 User Characteristics

* If user is not registered user than App will ask to login
* User can login or signup
* User can search by available bedrooms in one apartment.
* User can search by available bathroom in apartment.
* User can find the apartment is pet friendly or not.
* User can search apartment by the types of apartments.
* User can Register their self.
* User can login.
* User can send message or contact them to arrange a visit of apartment.
* User can communicate about the apartment and see the pictures of apartment
* User can save apartment by using like button of particular post of apartment.
* User can put alert on to see that the apartment is rented to someone else or not after some time.
* User can see all the listing by clicking on the map.
* User can manage their profile .

# 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 App store as well as Google Play store | SHOULD |
| NFR2 | Weekly Updates | SHOULD |
| NFR3 | Unauthorized access blocked | SHOULD |
| NFR4 | Available All time | SHOULD |
| NFR5 | Minimum Android version 6.0 and iOS version 10.0 | MUST |
| NFR6 | Support All device including different size | SHOULD |
| NFR7 | App crash handled with release of stable version | SHOULD |
| NFR8 | Immediately roll back to the previous version of the app if update fails | MUST |
| NFR9 | System not available more than 1 per 1000 hours of operation | SHOULD |
| NFR10 | Estimated data loss in case of disk crash will be less than 0.01% | SHOULD |
| NFR11 | Copyright control | SHOULD |
| NFR12 | Security masseurs | MUST |
| NFR13 | App should be capable enough to handle 20 million users without affecting it’s performance | MUST |
| NFR14 | User will be allow to make one account per device | COULD |
| NFR15 | Passwords never be visible anytime | 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