**Project Proposal**

**On**

**House/Room rental system**

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# Introduction

## Project Introduction

House/Room rental system is an application which allows all the people to keep direct relationship between owners and buyers. In this application you can find all the listed house and rooms that is for rent or sale. Best deals can be viewed at top of the applications. This application is not limited up to the list you can also search for specific rooms, house and flats that you prefer. Old ways of searching house, rooms or flat will be removed with the help of this application. In Short it is an intelligent solution to find suitable home, office for you.

## Justification for project

### Background of the project

### Problem Statement

## Description of project

### Features

The features of the project are listed below:

* **User Signup and Login**

User can create their account incase they haven’t and can login to the application which will allow them to access rest of the feature.

* **Quick view of best value**

User can view the best value of property pinned at top of the application. It will primarily focus for least price products.

* **Can chat with owner of the property**

User will have a facility to chat with the owner of the property which will allow them to negotiate the price and other things

* **Feature of booking the property**

Desired property can be booked to make secure the purchase.

* **Can search property according to location**

User can search the property to the desired location where they find comfortable to commit their daily task

This project also consists other minor features which will make using the interface easy and convenient.

# Project Scope

## Scope and limitation of project

This project

## Aims and Objectives

**Aims:** The aims that I want to achieve are listed below:

* Make available of the facility of posting their property information.
* User should be able to buy the desired property.

**Objectives:** Action that I will take to achieve my aim are:

* User will have the facility to sign-up and login which will allow them to use the facility of posting the advertisement and also buy the property they desired (Rooms and Houses).
* User can provide the detail along with uploading the picture once they are logged in.

# Development Methodology

## Methodology used

I have used waterfall methodology to develop the application. Waterfall is the sequential process of developing application i.e. step by stem process so by implementing this methodology I can track my progress pretty smoothly. Other reasons for choosing waterfall methodology are:

* Waterfall model is simple and easy to understand
* Since my project is small and requirements are well understood so using this model will be suitable.
* Project will be easy to manage because the model is rigid itself.

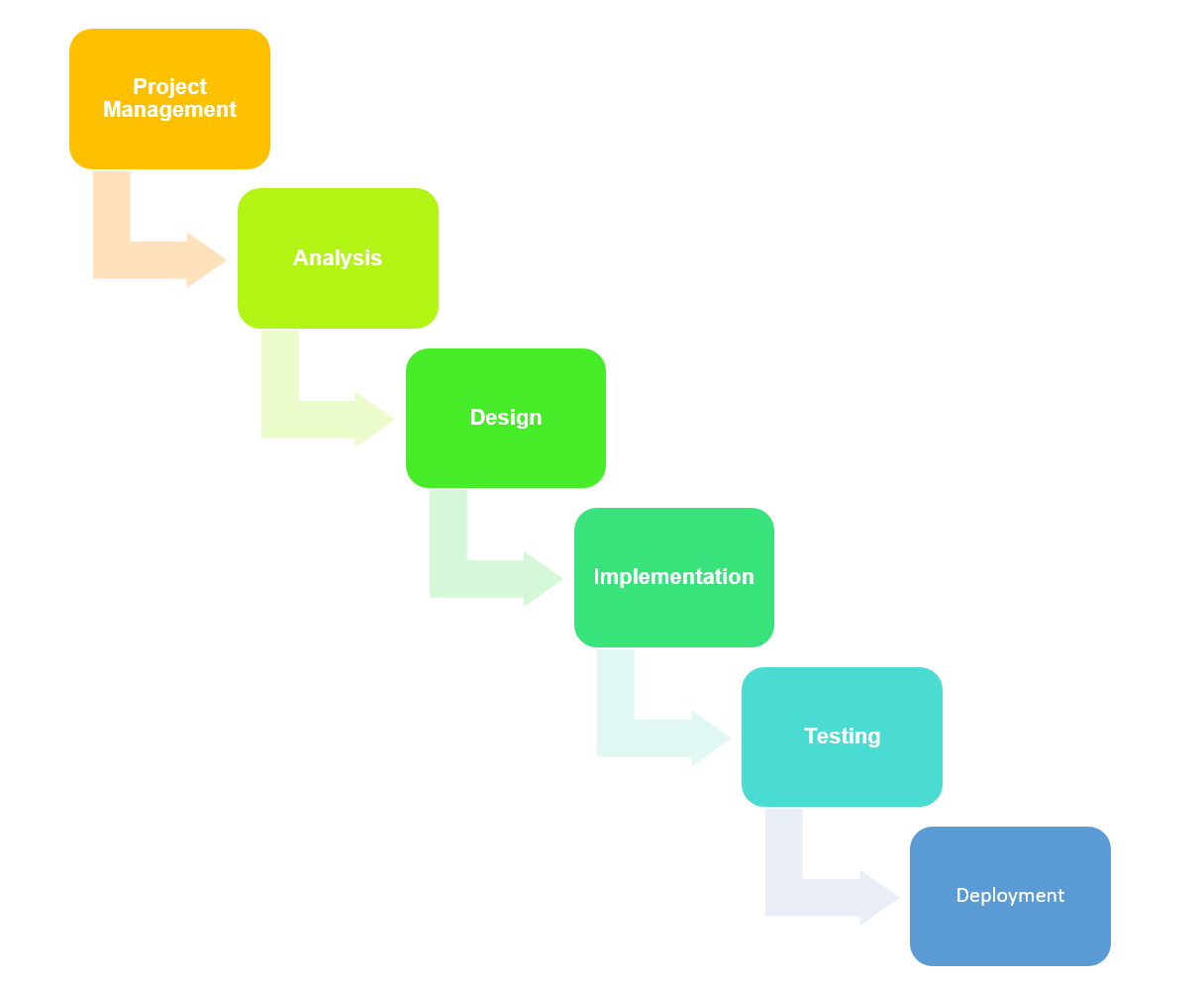


Figure 1 Phases of waterfall model

## Design Pattern

I have used MVC design pattern. Here M - Model, V - View and C – Controller. The reasons for using MVC pattern are: (Solution, 2019)

* Since Model deals with the logical implementation, View deals with the interface (UI) and controller handles user interaction MVC helps to categorize the responsibility of each fields.
* Modification: If we are requiring to make any sort of modification in the code then it will be easier as code are well managed. If modification is done in one class then it will not affect other classes since functionality are divided into individual classes.
* High Cohesion and Low coupling

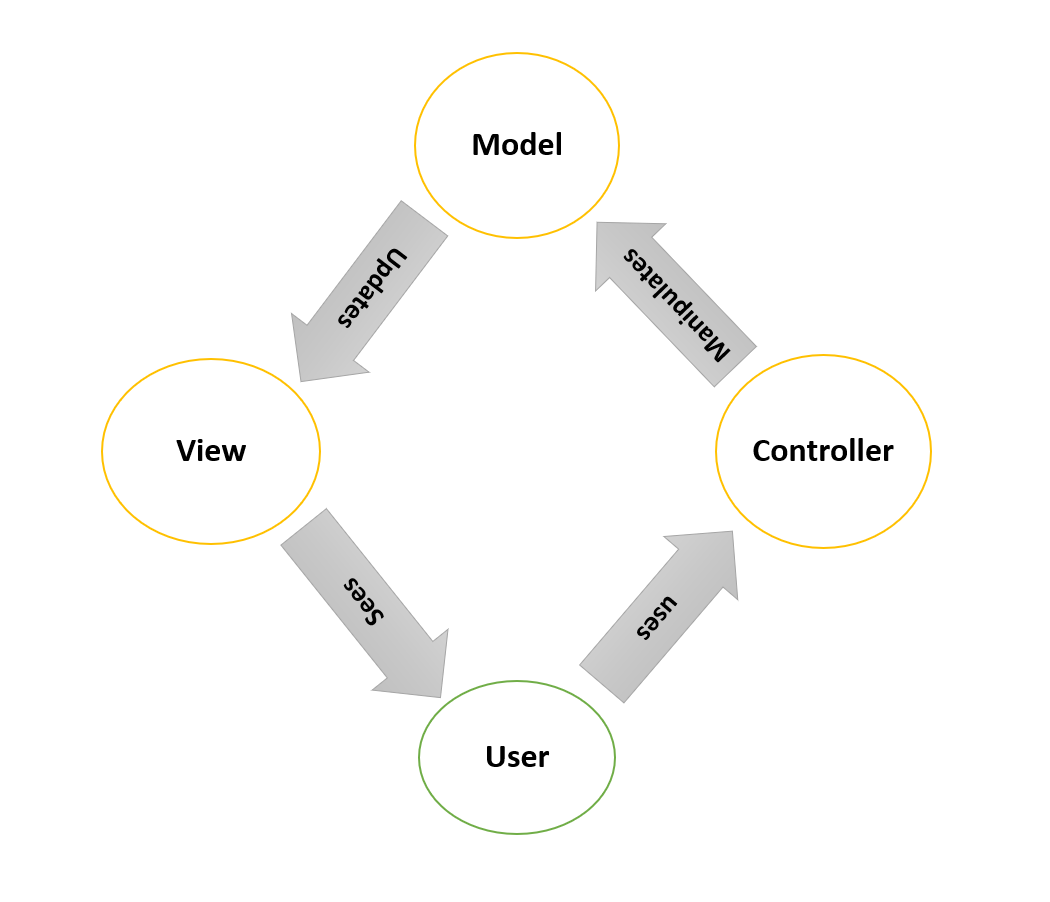


Figure 2 MVC Architecture

## System Architecture

I am going to use 3-tier Architecture. 3-tier architecture is a hierarchical software architecture which is divided into three layers: A presentation layer, An application layer and A data layer. Reasons for using this architecture are:

* Increase in efficiency: Work is divided into several system as each tier has their own function which will help to increase efficiency.
* Increase in security:

Since RDBMS provides single point access and governs who is retrieving the data and how it is updated.

* Increase in scalability

Since System can run in different hardware and OS. The technological stack (OS or related utilities) can be updated without impacting other areas of application.



Figure 3 Three tier architecture

# Work Breakdown Structure (WBS) / Scheduling

## Work Breakdown Structure

## Milestones

|  |  |
| --- | --- |
| **Milestones** | **Date** |
| **Project Management**  Risk Management  WBS  Configuration Management  Proposal Submission |  |
| **Analysis**  Feasibility Study  Requirement analysis  Planning  Use Case  Architecture (Initial Class Diagram) |  |
| **Design**  Structural Diagram  Behavioral Diagram  UI Design  Database Design (ER, Data Dictionary) |  |
| **Implementation**  Building Database  Coding |  |
| **Testing**  Unit Testing  Integration Testing  Blackbox Testing  Whitebox Testing |  |
| **Deployment**  User Training  Final Report |  |

## Scheduling / Gantt Chart

# Risk Management

# Configuration Management

# Conclusion of the project

# References