# MODERN HOUSING MANAGEMENT SYSTEM

TEAM X

Introduction:

* **Write the background description that helps putting the project into the right context of a problem domain and gives everyone involved a common view of the project**

Modern Housing Management System is a system which will establish connection between Moderns and tenants so that person who seek for accommodation will be able to rent apartments, houses or buy apartments, houses or even plots from the software-based system. The system will basically focus on the problem that people face when they try to procure an accommodation of the above-mentioned factors.

* **What is the root cause of this problem? why is this problem is so important to consider?**

The root cause of this problem is our country being very small owing to the small land we have, planned housing has been a major issue. We can’t find affordable living space easily, we have to look for them a lot in order to get it, or sometimes we get really bad deals for the purchase or rentable home we are looking, or there can be a situation when the people who is from other cities is looking for proper accommodation and fast. Maybe a lot of students who come to the cities to study from their home town also may find it difficult to find a proper and affordable homing situation. There may be a situation where people are looking for a house to buy and they need it really soon, or people whom want to sell their house or apartment. There might be another situation, where a certain individual won’t have enough money to buy or rent an apartment, so there will be an insufficient balance crisis, which won’t be solved without the help of bank loan or charity. These are some examples of housing problems visible in our country’s current situation.

* **What are the solutions you are going to propose to deal with the problem? why is this solution is particularly appropriate to solve the problem? Is the solution feasible to the meet the business objective?**

The solve that we propose to deal with this certain problem is a software application which will deal with all the housing, renting, property buying and selling criteria. We are going to build a management system that will help us regarding this problem. The solution is particularly appropriate in our decision because we think our way of solving this matter is efficient and quite solidified. The solution will work like a all in one solution to all the common problems of this field, and it’s quite feasible and completely relevant to the subject matter.

* **Provide a short description of the software being specified and its purpose, including relevant benefits, objectives, and goals**

The software we are going to design is to nullify the over exhausting process of rent seeking labor or effort and make it easier for the consumers or buyers to find out their desired rental or buying habitation location. The benefits and outcome of this software is quite easy to understand. It is going to be an existential platform which will help both sellers and buyers the upper hand as they will be able to showcase their selling or suffice their buying needs in the same place. The main objective is to make the effort of house renting or buying or selling to be as easy as possible. And the goal is to make sure people find their desired habitable place with ease and within the bounds of their home.

Requirements:

## System Features

**Functional Requirements**

1. **Software Login**

**[SRS-1.1] System shall allow user to login to the system.**

**2. Background Color**

**[SRS-2.1]** System by default prefer black ground color to user.

**[SRS-2.2]** System allow user to choose their preferred color.

**[SRS-2.3]** After choosing the color, user can also change it.

**[SRS-2.4]** Users do not need to setup every-time background color. It will automatically saved by system.

**Priority level:**Low.

**Precondition:**Users need to login into the account first.

**Cross-references:** 1.1, 1.2, 1.3

**3. Language**

**[SRS-3.1]** System will automatically prefer the English language to user.

**[SRS-3.2]** System allow user to choose their preferred language.

**[SRS-3.3]** After choosing the language, user can also change it.

**[SRS-3.4]** Users do not need to setup every-time language. It will automatically saved by system.

**Priority level:**Low.

**Precondition:**Users need to login into the account first.

**Cross-references:** 1.1, 1.2, 1.3

**4. Search**

**[SRS-4.1]** User can search anything what he/she wants from writing in search bar.

**[SRS-4.2]**  User can see some filtering options from the search bar.

**[SRS-4.3]**  Users can see mostly search in last month by the search tab.

**[SRS-4.4]** User can search by selecting some specific requirements.

**[SRS-4.5]**  Users can see trending plot and flat ad results by the search tab.

**Priority level:** Medium.

**Precondition:** Users need to login into the account first.

**Cross-references:** 5.1, 5.2, 5.3, 5.4.

**5. Advertisement**

**[SRS-5.1]** Users like plot owner if he wants to rent or sell his plot he can advertise here.

**[SRS-5.2]** Users like land owner if he wants to rent or sell his land he can advertise here.

**[SRS-5.3]** Users like different banking companies can advertise here about their facilities of land and housing loan.

**[SRS-5.4]** Users like various financial aid agencies can advertise here about land and housing loans and also the benefits of these loans.

**Priority level:** High.

**Precondition:** User must have a valid ID and password

**Cross-references:** 4.2, 4.4.

**6. Money Transition**

**[SRS-6.1]** Users who want to advertise here can advertise for a certain amount of money.

**[SRS-6.2]** If users want, they can pay for the advertisement through online banking.

**[SRS-6.3]** If users want, they can pay for the advertisement through bKash, Nagad and Rocket.

**[SRS-6.4]** Users who purchase or rent land and houses must pay us a certain amount of money through online and mobile banking.

**Priority level:** High.

**Precondition:** User must have a valid ID and password

**Cross-references:** 5.1, 5.2, 5.3, 5.4.

**7. Monthly Selling and Renting Report**

**[SRS-7.1]** Every users’ can able to see this report.

**[SRS-7.2]** Users can get a clear idea of how many land and plot is being bought and sold also rented each month can be found.

**[SRS-7.3]** This report will help users to understand how popular is our software.

**Priority level:** Medium.

**Precondition:** User must have a valid ID and password

**Cross-references:** 5.1, 5.2

**8. Discount Offer**

**[SRS-8.1]** Users can see here whether any banking company has given any loan discount which will be beneficial for them.

**[SRS-8.2]** If a landowner wants to rent or sell his land for less than the pre-determined price, users can see it here.

**[SRS-8.3]** If a plot owner wants to rent or sell his plot for less than the pre-determined price, users can see it here.

**Priority level:** Medium.

**Precondition:** User must have a valid ID and password

**Cross-references:** 5.3, 5.4.

**9. Emergency Contact**

**[SRS-9.1]** If any user wants to buy or rent any land in a short time he can contact with us quickly.

**[SRS-9.2]** If any user wants to buy or rent any plot in a short time he can contact with us quickly.

**[SRS-9.3]** If any user wants to sell or rent any plot and land in a short time he can contact with us quickly.

**Priority level:** High.

**Precondition:** User must have a valid ID and password

**Cross-references:** N/A.

**10. Settings & Privacy**

**[SRS-10.1]** Users can update their name, phone number, email addresses.

**[SRS-10.2]** Users can hide their personal information from other users.

**[SRS-10.3]** Users can manage their location settings.

**[SRS-10.4]** Users can also delete and deactivate their account.

**Priority level:** High.

**Precondition:** User must have a valid ID and password

**Cross-references:** 1.1, 1.2, 1.4

**11.** **Account Security**

**[SRS-11.1]** Users can change their password.

**[SRS-11.2]** Users can use two-factor authentication.

**[SRS-11.3]** Users get alerts about unrecognized logins.

**[SRS-11.4]** Users will be able to see from which devices their account was logged in.

**Priority level:** High.

**Precondition:** User must have a valid ID and password

**Cross-references:** 1.1, 1.2, 1.4

**12. Terms and Conditions**

**[SRS-12.1]** In order to use this software, users must abide by certain terms and conditions that are explained here.

**Priority level:** Low.

**Precondition:** Users need to login into the account first.

**Cross-references:** N/A.

**13.Notifications**

**[SRS-13.1]** If any user is interested in a rental or sale ad, he/she may request that advertiser. The advertiser gets a notification.

**[SRS-13.12]** If an advertiser receives a request from a user about his ad and if he accepts it, that user will receive a notification.

**[SRS-13.3]** As developer we will receive notifications when any user tries to contact with us after they face any problems or technical errors.

**Priority level:** Medium.

**Precondition:** User must have a valid ID and password

**Cross-references:** N/A.

**14.Update**

**[SRS-14.1]** User phone regularly gets updates in the background.

**[SRS-14.2]** The Exposure Notifications System was introduced in an update to Google Play Service.

**[SRS-14.3]** The system is turned off by default. This technology only works if user decides to opt-in.

**[SRS-14.4]** If the user changes their mind, they can turn it off at any time.

**Priority level:** Medium.

**Precondition:** User must have a valid ID and password

**Cross-references:** N/A.

**15. Rating**

**[SRS-15.1]** Users will first-rate our software based on how they like our software.

**[SRS-15.2]** Here every user will be able to rate every user.

**[SRS-15.3]** Users can rate them based on the quality of service of banking and financial service providers.

**Priority level:** Low.

**Precondition:** Users need to login into the account first.

**Cross-references:** N/A.

**16. FAQ**

**[SRS-16.1]** There are answers to some common questions about what users should do if they encounter a technical problem.

**[SRS-16.2]** Here are answers to some common questions about how to use this software.

**Priority level:** Low.

**Precondition:** Users need to login into the account first.

**Cross-references:** N/A.

**17. Report**

**[SRS-17.1** If a user is cheated by another user, they can report it here.

**[SRS-17.2]** Users can report here any unpleasant incidents that already happened to them.

**Priority level:** Low.

**Precondition:** Users need to login into the account first.

**Cross-references:** N/A.

**18.Feedback**

**[SRS-18.1]** Users can select a feedback tab in which a page with a comment box shows up.

**[SRS-18.2]** Users can select some issues that we will give, and there will be other options that the user can define.

**[SRS-18.3]** Users can see some feedback of others their he/she can search for his problem.

**[SRS-18.4]** Users can send Photos with his/her issue so that he/she can give his/her explanation as he/she wants.

**[SRS-18.5]** Users can remove, edit, or update their feedback after submitting it by applying it to the developers.

**Priority level:** Low.

**Precondition:** Users need to login into the account first.

**Cross-references:** N/A.

## System Quality Attributes

Our designed application is internet and mainframe base application. That’s why we have to ensure some quality attributes.

**Availability:** Our system will available almost all the time. Every user will be able to take any facilities from this system. The system will be at least 95.5 percent available on weekdays between 5:00 AM to midnight local time, and at least 98.4 percent available on weekdays between 3:00 PM to 8:00 PM local time.

**Integrity:** Users' personal information is stored securely on our system. Only authorized users can access this system. Our system blocked all unauthorized access by itself.

**Maintainability:** We try our best to maintain our system. If there is any problem with the system we try to fix it as soon as possible so that the users do not face any interruptions while using this system.

**Usability:** Our application is very easy to use. We make our user interface reliable as if users' can easily find all options that they want. We continuously work on this to make our application more user-friendly.

**Portability:** An authorized user can log in to this system from anywhere via any device by using the internet.

**Reliability:** The system is totally reliable as it will be connected with the government in the future.

**Reusability:** Any component of our application can be used later in different software which will be able to reduce the work cost of the next project.

**Flexibility:** Our application is very flexible. Later, if we want to add any new feature to our application. we can easily do it and our users can witness a new experience.

## Project Requirements

In this part we give a description of system property, attribute and how the system of project Modern Housing Management System should behave. That’s why project conditions play a significant role in the development and implementation of the project. They may be a constraint on the development process of the system. Some project requirements are given below by analyzing all the data regarding the project. They are used to develop new products and improve existing ones. This requirement will collect from the stakeholders, such as business units, users, and operations and developer experts. The following are illustrative examples of project requirements.

**User:** The software is user-friendly, so requirements contributed by users are the lead users.

**Features:** The software shall have a securely mounted balance between users and developers. Features of the system should be updated with the time. Developer will ensure the newest features and keep up to date the system regularly.

**System Analyst**: The system will be updated every hour with recent and authentic information to deliver to the users.

**Business requirement:** Accurate monthly sales forecast required for the project. For that, a new sales system is needed to be developed. It will only authorize for specifics so that data will be secured.

**Resources:** Resources are strongly connected to the project cost. The amount of money that’s available for achieving the desired outcome will restrict the use and acquisition of resources, which creates a separate constraint. If resource is essential to the project, we’ll have to sacrifice making the deadline, because no reasonable amount of money could reduce the delivery time. Resources of project should be high utilized

**Performance:** The software shall have a maximum user efficiency of at least 90% so that everyone can use the software without issue. Maintaining performance in software development is tough, but important to satisfy users. The software is user-friendly, so requirements contributed by users are the lead users.

**Service requirement:** Services for the user and others will be available at least 99% of the time. Any bugs or malware issues can be fixed, and thus no one will face any interruption. If any user faces problem with their product or order, a team always there to response. They will solve the problem of the user. If any user comes with a wrong product, legal action will be taken against that user.

**Risk:** The software server might get crashed, or the website might get broken. Due to heavy users visit the website at a time, and the chance is 0.1-.05%. Managing risks is an important task for project managers. When you estimate probability, a risk will have a certain impact on your project. For instance, we can decide to avoid the risk and insist on the review step. But this decision would affect our timeline and our related costs, since the client would review each of your designs, and a project manager needs to oversee this process. The software server might get crashed, or the website might get broken.

**Quality:** The software will provide every user with a premium quality security and user interface since the software maintains resourceful data and security quality.

**Budget:** This software is a start-up, so it needs funding from the stakeholders. The percentage will be 60% for the stakeholders and 40% for the developers in the beginning.