**Use Case Name:** Pre-proposal Meeting

**Use Case Number**: 1

**Description:** This meeting is the beginning of brainstorming to prepose how tasks will be broken down during the duration of the project. It is the job of the project manager and sponsor to distribute tasks to stakeholders, and everyone else involved with the project.

**Primary Actor: Project Manager, Project Sponsor, Stakeholders**

**Priority:** High

**Type:** External

**Trigger:** Housing AI needs to complete tasks before the final project date

| **Major Inputs** | **Source** |
| --- | --- |
| Proposals | Project Manager, Project Sponsor |
| Availability | Stakeholders |

| **Major Outputs** | **Destination** |
| --- | --- |
| Work Breakdown Structure(WBS) | Stakeholders |
| Tasks for Project | Stakeholders |

**Basic Flow:**

| **Step** | **Action** | **Actors** |
| --- | --- | --- |
| 1 | Project Manager and Sponsor sets up a pre-proposal meeting. | Project Manager, Project Sponsor |
| 2 | Project Manager and Sponsor give stakeholders information on taks and the WBS to begin completing vital steps for the project. | Project Manager, Project Sponsor,  Stakeholders |

**Use Case Name:** Review Existing Systems and Plan a design for the Project

**Use Case Number**: 2

**Description:** It is the job of the system analyst to review the existing system and develop a way to improve effectiveness in order to complete the project in a timely and cost-efficient manner. After this, the project team and analyst must plan a design for the project that must be strictly followed. The design, if acceptable, is approved by the Housing AI Project Manager.

**Primary Actor: System Analyst, System, Project Management Team, Project Manager**

**Priority:** High

**Type:** External

**Trigger:** Housing AI needs to have a design in order to commence operations on the project.

| **Major Inputs** | **Source** |
| --- | --- |
| System Review | System Analyst |
| Design Proposal | Project Management Team, System Analyst |

| **Major Outputs** | **Destination** |
| --- | --- |
| System Report | System Analyst |
| Approved Design | Project Manager |

**Basic Flow:**

| **Step** | **Action** | **Actor** |
| --- | --- | --- |
| 1 | System Analyst begins a review of the current information system. | System Analyst, System |
| 1.1 | If any changes must be made, this must be approved by Housing AI and relayed to the project team before completing the report | System Analyst, Project Management Team |
| 2 | The system report is complete. | System Analyst, System |
| 3 | Using the system report, the project team and system analyst plan a design for the overall project. | System Analyst, Project Management Team |
| 4 | Plan is approved by the Housing AI Project Manager. | Project Manager |

**Use Case Name:** Begin Programming Functions and Design Elements

**Use Case Number**: 3

**Description:** Developing the program functions and various design elements incorporated with artificial intelligence.

**Primary Actor: Lead Programmer, Software Engineer, System Analyst, Project Manager**

**Priority:** High

**Type:** External

**Trigger:** It is a High Priority the Housing AI must have a solid foundation for our AI service, and application as a whole.

| **Major Inputs** | **Source** |
| --- | --- |
| Algorithm/ Solve Test Case | Software Engineer |
| Prototype Functions | Lead Programmer |
| Project Design | System Analyst |

| **Major Outputs** | **Destination** |
| --- | --- |
| Full Program Integrated with Application | System Analyst |
| Updated Project Design | Project Manager |

**Basic Flow:**

| **Step** | **Action** | **Actor** |
| --- | --- | --- |
| 1 | System Analyst gives the project design to the Lead Programmer and Software Engineer. | System Analyst, Lead Programmer, Software Engineer |
| 1.1 | System Analyst addresses any questions or concerns the Programmer or Engineer may have. | System Analyst, Lead Programmer, Software Engineer |
| 2 | Software Engineer develops solution/algorithm for Lead Programmer to use. | Software Engineer,  Lead Programmer |
| 3 | Lead Programmer uses algorithms to develop code to implement into the application for the system analyst. | System Analyst, Lead Programmer |
| 4 | System Analyst completes final review of the completed program with the Lead Programmer and Software Engineer. | System Analyst, Lead Programmer, Software Engineer |
| 4.1 | If there are any specific changes to be made, the team will address them before the final product is decided. | System Analyst, Lead Programmer, Software Engineer |
| 6 | System Analyst updates the project design and delivers it to the Project Manager with the full implemented program. | System Analyst,  Project Manager |

**Use Case Name:** Q & A Team Test Project and Final Project Release

**Use Case Number**: 4

**Description:** The Q & A Team will test the final proposed version of the project. If everything is in working order, they will notify the project manager who will then prepare the project for release.

**Primary Actor: Q & A Team, Project Manager**

**Priority:** High

**Type:** External

**Trigger:**

| **Major Inputs** | **Source** |
| --- | --- |
| Project Test | Q & A Team |
| Final Project Proposal | Project Manager |

| **Major Outputs** | **Destination** |
| --- | --- |
| Test Results | Project Manager |
| Project Release | End Users |

**Basic Flow:**

| **Step** | **Action** | **Actor** |
| --- | --- | --- |
| 1 | Q & A Team receives the full version of the project from the Project Manager. | Project Manager,  Q & A Team |
| 2 | Q & A Team test project to ensure that it is ready for release. | Q & A Team |
| 2.1 | If any part of the project is incomplete, the Q & A Team will notify the Project Manager | Project Manager,  Q & A Team |
| 3 | The Q & A Team approves the final version of the project. | Q & A Team |
| 4 | Project Manager gathers stakeholders and the entire project team before release to the end users | Project Manager |
| 4.1 | All concerns will be addressed before release to the public. | Project Manager |
| 5 | Project is released to all end users. | Project Manager |