

**Capstone Project Report**

**Report 2 – Project Management Plan**

– Hanoi, October 2022 –

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# I. Record of Changes

|  |  |  |  |
| --- | --- | --- | --- |
| Date | A\* M, D | In charge | Change Description |
| 07/10/2022 | A | HuyenBN | Responsibility Assignments, Project Communications, and Configuration Managements |
| 09/10/2022 | A | AnNT | Overview; Management Approach; Deliverables |
| 09/10/2022 | M | GiangNT | Review all Document; Change “Configuration Management” |
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\*A - Added M - Modified D - Deleted

# II. Project Management Plan

## 1. Overview

### 1.1 Scope & Estimation

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **WBS Item** | **Complexity** | **Est. Effort**  **(man-days)** |
| ***1*** | ***Login*** |  | **13** |
| 1.1 | ADMIN - ADMISSION - Login with username | Simple | 3 |
| 1.2 | Login with Facebook | Medium | 5 |
| 1.3 | Login with Google | Medium | 5 |
| ***2*** | ***LANDLORD - Sign Up*** |  | **17** |
| 2.1 | Sign Up with Facebook | Medium | 5 |
| 2.2 | Sign Up with Google | Medium | 5 |
| 2.3 | Upload ID Card | Simple | 3 |
| 2.4 | Choose Campus | Simple | 2 |
| 2.5 | Provide Basic Information | Simple | 2 |
| ***3*** | ***GUEST - List of houses*** |  | **36** |
| 3.1 | View List of Available Houses | Simple | 3 |
| 3.2 | Search Available House | Complex | 10 |
| 3.3 | View List of all Houses | Simple | 3 |
| 3.4 | View List of Reported Houses | Medium | 5 |
| 3.5 | House - Room Statistic | Medium | 5 |
| 3.6 | Filter Result | Complex | 10 |
| 3.6.1 | Filter by Type | Simple | 2 |
| 3.6.2 | Filter by Address | Simple | 2 |
| 3.6.3 | Filter by Price | Simple | 2 |
| 3.6.4 | Filter by Distance | Medium | 2 |
| 3.6.5 | Filter by Services | Medium | 2 |
| ***4*** | ***GUEST - House Details*** |  | **19** |
| 4.1 | House basic details | Medium | 5 |
| 4.2 | Maps position | Complex | 8 |
| 4.3 | View House Review | Simple | 2 |
| 4.4 | Available Room List | Simple | 2 |
| 4.5 | Landlord Information | Simple | 2 |
| ***5*** | ***GUEST - Room Details*** |  | **2** |
| 5.1 | View Room Details | Simple | 2 |
| ***6*** | ***GUEST - Review House*** |  | **8** |
| 6.1 | Star Rating | Medium | 4 |
| 6.2 | Comment | Medium | 4 |
| ***7*** | ***Report Violation*** |  | **4** |
|  | Report Violation | Medium | 4 |
| ***8*** | ***LANDLORD - List of Houses*** |  | **3** |
| 8.1 | View List of Houses | Medium | 3 |
| ***9*** | ***LANDLORD - Manage Houses*** |  | **25** |
| 9.1 | Update House Information | Medium | 4 |
| 9.2 | Delete House | Medium | 3 |
| 9.3 | Add New House | Complex | 10 |
| 9.3.1 | Download Templates | Medium | 2 |
| 9.3.2 | Import Data | Complex | 8 |
| 9.4 | Search House | Complex | 8 |
| 9.4.1 | Filter by Status | Simple | 2 |
| ***10*** | ***LANDLORD - Manage Rooms*** |  | **24** |
| 10.1 | Room List | Simple | 2 |
| 10.2 | View Room Details | Simple | 3 |
| 10.3 | Change Room status | Simple | 2 |
| 10.4 | Add Room | Complex | 8 |
| 10.5 | Delete Room | Medium | 4 |
| 10.6 | Update Room Information | Medium | 5 |
| ***11*** | ***LANDLORD - Profile*** |  | **6** |
| 11.1 | View Profile | Simple | 2 |
| 11.2 | Update Profile | Medium | 4 |
| ***12*** | ***ADMIN - Manage Staff Account*** |  | **18** |
| 12.1 | Change Password | Medium | 4 |
| 12.2 | Staff List | Simple | 2 |
| 12.3 | Create Staff Account | Medium | 5 |
| 12.4 | Change Active Status | Simple | 3 |
| 12.5 | Reset Password | Medium | 4 |
| ***13*** | ***STAFF - Landlord Sign Up Request*** |  | **6** |
| 13.1 | View Sign Up Request | Simple | 2 |
| 13.2 | Approve/Reject Sign Up Request | Medium | 4 |
| ***14*** | ***STAFF - Manage Landlord Account*** |  | **8** |
| 14.1 | Landlord List | Simple | 2 |
| 14.2 | Landlord Details | Medium | 4 |
| 14.3 | Change Active Status | Simple | 2 |
| ***15*** | ***STAFF - Manage Houses*** |  | **12** |
| 15.1 | View List of House | Simple | 2 |
| 15.2 | Filter list | Complex | 6 |
| 15.2.1 | Filter by Area | Medium | 3 |
| 15.2.2 | Filter by Availability Status | Medium | 3 |
| 15.3 | View List of Reported House | Medium | 4 |
| 15.3.1 | Change Active Status | Simple | 2 |
| 15.3.2 | List of Reports | Simple | 2 |
| ***Total Estimated Effort (man-days)*** | | | ***201*** |

### 1.2 Project Objectives

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **#** | **Testing Stage** | **Test Coverage** | **No. of Defects** | **% of Defect** | **Notes** |
| 1 | Reviewing | 95% |  |  |  |
| 2 | Unit Test | 90% |  |  |  |
| 3 | Integration Test | 85% |  |  |  |
| 4 | System Test | 80% |  |  |  |
| 5 | Acceptance Test | 80% |  |  |  |

**Milestone Timelines (%): 100**

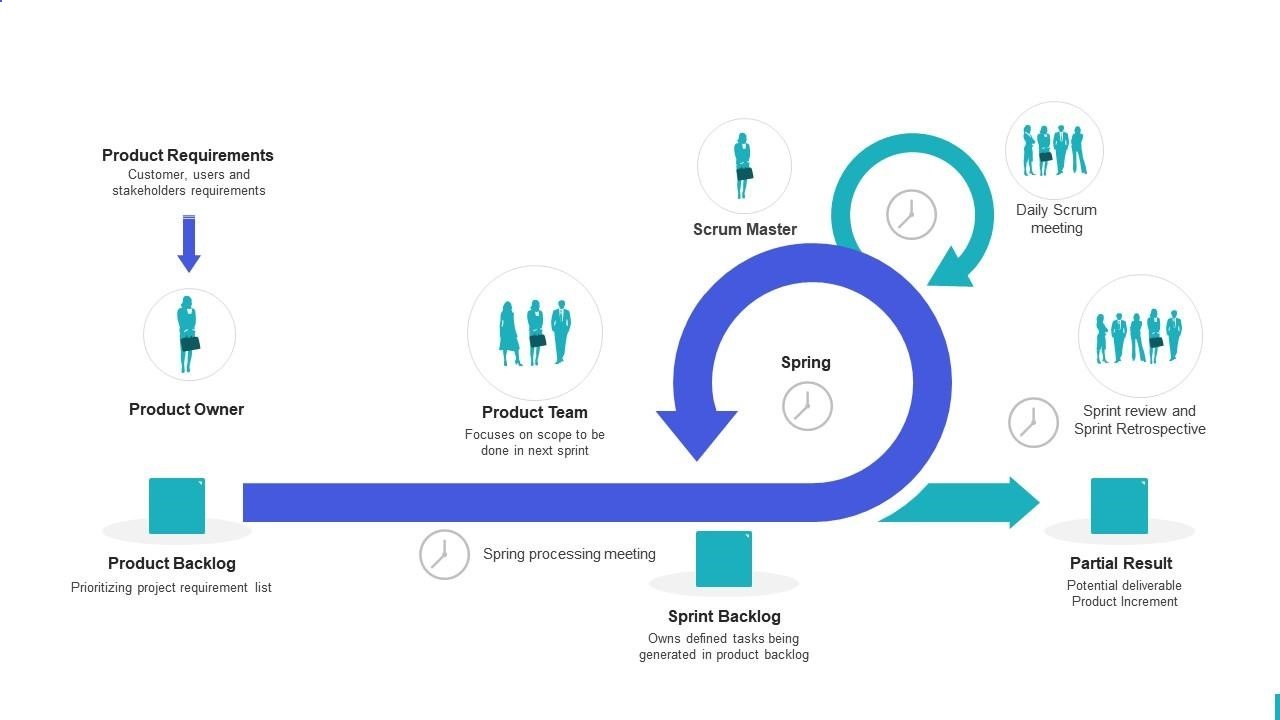
**Allocated Effort (man-days): 201**

### 1.3 Project Risks

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Risk Description** | **Impact** | **Possibility** | **Response Plans** |
| 1 | Miss Deadline | Severe | High | Working over time |
| 2 | Requirement Change | Severe | Medium | Adjust Task and Schedule |

## 2. Management Approach

### 2.1 Project Process

**

The project is developed with Scrum Model - an Agile methodology which will help the team deliver value in an incremental and collaborative manner.

The project development process follows the following process:

* The Product Owner gathers requirements from customer
* The Product Owner refines requirements into product backlog
* The Scrum Team turns a selection of the work into an Increment of value during  a Sprint
* The Scrum Team and stakeholders inspect the results and adjust for the next Sprints

Events in Scrum Model:

* Sprint
* Sprint Planning
* Daily Meeting
* Sprint Review

### 2.2 Quality Management

To improve the quality of the project, these approaches are included:

* Defect Prevention
* Unit Testing
* Integration Testing
* System Testing
* Acceptance Testing

### 2.3 Training Plan

|  |  |  |  |
| --- | --- | --- | --- |
| Training Area | Participants | When, Duration | Waiver Criteria |
| Angular 12 | All Member | 11/09/2022 - 17/09/2022 | Mandatory |
| Git, Github | All Member | 09/09/2022 | Mandatory |

## 3. Project Deliverables

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Deliverable** | **Due Date** | **Notes** |
| 1 | Product Vision  Basic Use case  System actors  Report 1 | 10/09/2022 | Initiate Project |
| 2 | Project Scope  Requirements  Business Rules | 15/09/2022 | Customer Meeting  Functional Requirements  Non-functional Requirements |
| 3 | Plan and Schedule  Report 2 | 08/10/2022 |  |
| 4 | System Design  Report 3  Report 4 | 15/10/2022 | Screen Design  Architectural Design  Database Design  Etc. |
| 5 | Sprint 1 | 22/10/2022 | Coding  Unit Testing  Integration Testing |
| 6 | Sprint 2 | 05/11/2022 | Coding  Unit Testing  Integration Testing |
| 7 | Sprint 3 | 19/11/2022 | Coding  Unit Testing  Integration Testing  System Testing  User Acceptance Testing |
| 8 | Sprint 4 | 26/11/2022 | Coding  Unit Testing  Integration Testing  System Testing  User Acceptance Testing |
| 9 | Sprint 5 | 03/12/2022 | System Testing  User Acceptance Testing  Deploy Final Product |
| 10 | Final Report  Final Product  User Guides  Presentation | 10/12/2022 |  |

## 4. Responsibility Assignments

*D~Do; R~Review; S~Support; I~Informed; <blank>- Omitted*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Responsibility** | **GiangNTHE153046** | **HuyenBNHE150346** | **ThongPQHE150340** | **AnNTHE150432** | **KienNTHE150160** |
| Collect Requirements | R,D | D | D | D | D |
| Prepare Project Introduction Document | R,D | I | D | I | I |
| Prepare Project Management Plan | R | D | I | D | R |
| Prepare SRS Document (User Requirements) | R,D | I | I | I | D |
| Create Screen Mockups | R,D | D | D | D | D |
| Design Database | R,D | D | D | D | D |
| Collect Administrative Unit Data | D | I | I | I | I |
| Draw Use Case Diagram | R | D | I | I | I |
| Coge Function Login | R | I | I | D | I |
| Dram Entity Relationship Diagram | R | D | I | I | I |
| Draw Screen Flow Diagrams | D | I | I | I | I |

## 5. Project Communications

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Communication Item** | **Who/ Target** | **Purpose** | **When, Frequency** | **Type, Tool, Method(s)** |
| Daily Meeting | All team members | - Checking progress of assigned tasks  - Finding solutions for difficult problems | 9 p.m everyday | Discord |
| Assign Tasks | All team members | - Project Manager assigns tasks to other team members | Everyday | Jira |
| Weekly Meeting With Supervisor | All team members | - Checking progress of project  - Plan upcoming tasks  - Update requirements | Once a week | Offline |

## 6. Configuration Management

### 6.1 Document Management

* Management Tools:
  + Google Drive
  + OneDrive
  + GitHub
* Team leader assigns and describes tasks through Facebook & Discords. All Documents will be submitted to management tools to keep track of changes. Team leader then collects them all to submit to the mentor.

### 6.2 Source Code Management

* Management Tools:
  + GitHub
* Team leader assigns and describes tasks through Facebook & Discords. All source code will be pushed to Github for version control. Team leader then pull it back to run on deployment environment.

### 6.3 Tools & Infrastructures

|  |  |
| --- | --- |
| **Category** | **Tools / Infrastructure** |
| **Technology** | Angular 12 (FrontEnd); C# .NET 5 (BackEnd) |
| **Database** | Microsoft SQL Server |
| **IDEs/Editors** | Visual Studio Code; Visual Studio |
| **Diagramming** | DrawIO; Mindmeister |
| **Documentation** | Ms Offic;, Google Docs; Microsoft Office |
| **Version Control** | GitHub (Source Codes), Google Drive (Documents); OneDrive (Documents) |
| **Deployment server** |  |
| **Project management** | Jira (Schedule, Tasks, Defects) |
| **UI/UX Design** | Figma |