

**International School**

**Software Process & Quality Management**

**CMU-SE 433 SAIS**

**Project Plan**

**Version 1.1**

**Date: June 18, 2025**

**Hotel Management System**

**Submitted by**

**Lanh, Do**

**Quyen, Truong Thi My**

**Hoang, Le Huy**

**Quoc, Pham Tan**

**Hung, Duong Van**

**Approved by**

**MSc Huy, Truong Dinh**

**Project Plan Review Panel Representative:**

Name Signature Date

**Software Process & Quality Management - Mentor:**

Name Signature Date

**PROJECT INFORMATION**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Project acronym** | HMS | | | |
| **Project Title** | Hotel Management System | | | |
| **Start Date** | 12 Jun 2025 | | **End Date** | July 23, 2025 |
| **Lead Institution** | International School, Duy Tan University | | | |
| **Project Mentor** | MSc Huy, Truong Dinh | | | |
| **Scrum master / Project Leader & contact details** | Lanh, Do  Email: ddolanh0@gmail.com  Tel: 0936212369 | | | |
| **Partner Organization** | Duy Tan University | | | |
| **Project Web URL** |  | | | |
| **Team members** | Name | Email | | Tel |
| 28219129939 | Lanh, Do | ddolanh0@gmail.com | | 0936212369 |
| 28201100757 | Quyen, Truong Thi My | thanhmieu2112@gmail.com | | 0768585726 |
| 28219027592 | Hoang, Le Huy | lehuyhoang123789@gmail.com | | 0935563105 |
| 28212306085 | Quoc, Pham Tan | phamtanquoc1@gmail.com | | 0763739254 |
| 28210201891 | Hung, Duong Van | hd795033@gmail.com | | 0334231904 |

**DOCUMENT APPROVALS**

The following signatures are required for approval of this document.

|  |  |  |
| --- | --- | --- |
| Lanh, Do  Student ID: 28219129939  *Scrum Master* | Signature | Date |
| Quyen, Truong Thi My  Student ID: 28201100757  *Team Member* | Signature | Date |
| Hoang, Le Huy  Student ID: 28219027592  *Team Member* | Signature | Date |
| Quoc, Pham Tan  Student ID: 28212306085  *Team Member* | Signature | Date |
| Hung, Duong Van  Student ID: 28210201891  *Team Member* | Signature | Date |

**DOCUMENT NAME**

|  |  |  |  |
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|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Person(s)** | **Date** | **Description** |
| **1.0** | Do Lanh | June 18, 2025 | Create Project plan document |
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**1.** **Introduction**

* 1. Purpose:

This document provides a summary of the project's objectives, division of work, the major milestones, required resources, time and overall schedule and budget allocation used and based on the document proposal to build the hotel management website application on time, as per requirements and plan.

* 1. Project Overview:

Reference to 2. Group\_8\_Project Plan\_ver\_1.1

* 1. Project Deliverable:

The project will be implemented for users such as Hotel management, receptionist room service staff, customer service, technical staff, finance department.

2. Team Organization

2.1 Scrum Team Information:

**Table 1:***Scrum Team Organization.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Full Name** | **Phone** | **Email** | **Position** |
| MSc Huy, Truong Dinh | 0982132352 | truongdinhhuy@dtu.edu.vn | Mentor |
| Lanh, Do | 0936212369 | ddolanh0@gmail.com | Scrum Master |
| Quyen, Truong Thi My | 0768585726 | thanhmieu2112@gmail.com | Member |
| Hoang, Le Huy | 0935563105 | lehuyhoang123789@gmail.com | Member |
| Quoc, Pham Tan | 0763739254 | phamtanquoc1@gmail.com | Member |
| Hung, Duong Van | 0334231904 | hd795033@gmail.com | Member |

* 1. Role and Responsibility:

**Table 2:***Role and Responsibilities.*

|  |  |  |
| --- | --- | --- |
| **Role** | **Responsibility** | **Name/Title** |
| **Product Owner** | * Understand the user and customers with their needs. * Collaborate with the development team. * Manage the stakeholders. * Describe the user experience and product features. * Provides detail user stories. | Duy Tan University |
| **Scrum Master** | * Communicate the value of Scrum * Teach the organization on Scrum to maximize business value * Attend all Scrum meetings * Preserve the integrity and spirit of the Scrum framework * Maintain the focus of the Team * Make the Team aware of impediments and facilitate efforts to resolve them * Serve as a coach and mentor to members of the Team * Respectfully hold the Team, Product Owner and Stakeholders accountable for their commitments * Continually work with the Team and business to find and implement improvements | Lanh, Do |
| **Secretary** | * Record the content of group meetings and activities of the member | Quyen, Truong Thi My |
| **Reviewer** | * Review documents | All Members |
| **Developer** | * Analysis of the functions and requirements of the product. * Code and test. * Fix error. | All Members |
| **Analyzer** | * Gather user stories. * Analysis user story to do specify Document. | All Members |
| **Tester** | * Do the Test plan * Creation of test designs, test processes, test cases and test data. * Carry out testing as per the defined procedures. * Graph the results and make sure people know when test results decline. * Prepare all reports related to software testing carried out. * Analysis and evaluate the Test result. * Ensure that all tested related work is carried out as per the defined standards and procedures. | All Members |
| **Mentor** | * Guide on the process. * Monitoring all activities of Team. * Help with anything. | MSc Huy, Truong Dinh |

* 1. Communication Methodology:

**Table 3:***Communication Methodology.*

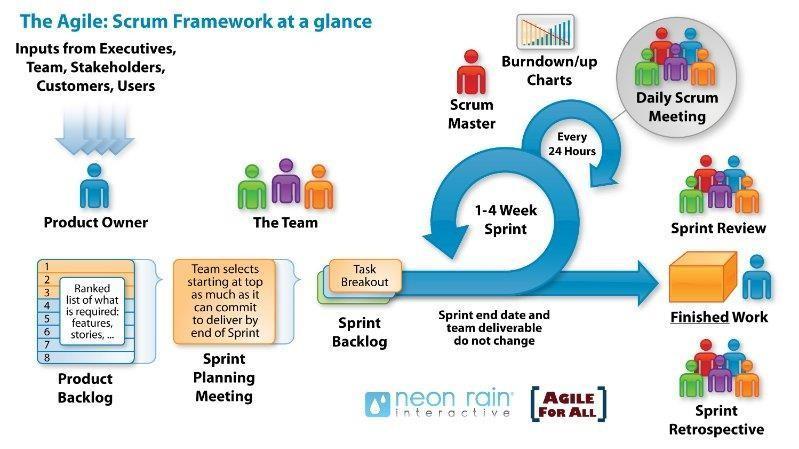
|  |  |  |  |
| --- | --- | --- | --- |
| **Audience/ Attendees** | **Topic/ Deliverable** | **Frequency** | **Method** |
| **Mentor and Team member** | Project Progress Review | Weekly | Meeting, Email,  Zalo |
| **Team Member** | Project Progress Review and Daily Meeting | Daily | Trello, GitHub, Zoom |

2.4 Communication and Report:

**Table 4:***Communication and Report.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of communication** | **Methods, tools** | **Frequency** | **Information** | **People** |
| **Communication among in group** | | | | |
| **Scrum meeting** | Face to face or Hangouts | Every two day | Informed about what was done in the last 24 hours, working on plans for today, the difficulties encountered and the solutions required, just meeting 10-15 minutes. | Project team |
| **Sprint Planning Meeting** | Meet face to face | 15-20 days | All members in team together to analyze the requirements, functions, working on the sprint going to do, planning and design for the sprint. | Project team |
| **Retrospective meeting** | Meet face to face | 15-20 days | Complete documentation. For each stage, sharing materials, given the strengths and weaknesses for each. Period for each member and the solution calculated measurement project. | Project team and Mentor |
| **Demo** | Meeting online | Every day | A web-based task tracking system. To manage or divide task, report bugs/issues. | Project team. |

3. Development Process

**Scrum Process**

**Figure 1.** *Overview of Scrum Process*

* Scrum is an iterative and incremental agile software development framework for managing software projects and product or application development.
* Scrum focuses on project management institutions where it is difficult to plan.
* Mechanisms of empirical process control, where feedback loops that constitute the core management technique are used as opposed to traditional command-and-control management.
* Its approach to planning and managing projects is by bringing decision-making authority to the level of operation properties and certainties.

Benefit of the methodology:

* Project can respond easily to change.
* Problems are identified early.
* Customers get the most beneficial work first.
* Work done will better meet the customer’s needs.
* Improved productivity.
* Ability to maintain a predictable schedule for delivery.

4. Schedule and Cost

* 1. Detailed Schedule:

Table 5. *Detailed Schedule*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Task Name** | **Start** | **Finish** | **Effort** |
| **1** | **Initial** | **12/06** | **17/06** | **27 hrs** |
| **1.1** | **Gathering Requirement** | **12/06** | **14/06** | **9 hrs** |
| 1.1.1 | Get requirement from Mentor MSc Huy Truong Dinh | 12/06 | 12/06 | 2 hrs |
| 1.1.2 | Analyzing requirement | 13/06 | 14/02 | 7 hrs |
| **1.2** | **Create Proposal Document** | **15/06** | **17/06** | **18 hrs** |
| 1.2.1 | Product Definition | 15/06 | 15/06 | 3 hrs |
| 1.2.2 | Business Need | 15/06 | 15/06 | 3 hrs |
| 1.2.3 | Prior Art | 16/06 | 16/06 | 3 hrs |
| 1.2.4 | Proposed Solution | 16/06 | 15/06 | 3 hrs |
| 1.2.5 | Master Plan | 17/06 | 17/06 | 6 hrs |
| **2** | **Start Up** | **18/06** | **23/06** | **45 hrs** |
| 2.1 | Project kick-off | 18/06 | 19/06 | 2 hrs |
| **2.2** | **Create Document** | **20/06** | **23/06** | **43 hrs** |
| 2.2.1 | Project’s Meeting | 20/06 | 20/06 | 3 hrs |
| 2.2.2 | Create User Stories | 20/06 | 20/06 | 7 hrs |
| 2.2.3 | Create Product Backlog | 21/06 | 21/06 | 8 hrs |
| 2.2.4 | Review Document | 22/06 | 22/06 | 4 hrs |
| 2.2.5 | Create Project Plan | 22/06 | 22/06 | 9 hrs |
| 2.2.6 | Create Architecture Design Document | 23/06 | 23/06 | 9 hrs |
| 2.2.7 | Review Document | 23/06 | 23/06 | 3 hrs |
| **3** | **Development** | **24/06** | **18/07** | **308 hrs** |
| **3.1** | **Sprint 1** | **24/06** | **2/07** | **103 hrs** |
| 3.1.1 | Sprint Planning Meeting | 24/06 | 24/06 | 5 hrs |
| 3.1.2 | Create Sprint Backlog | 24/06 | 24/06 | 4 hrs |
| 3.1.3 | Create Test Plan document for Sprint 1 | 25/06 | 25/06 | 4 hrs |
| 3.1.4 | Create Database document for Sprint 1 | 25/06 | 25/06 | 4 hrs |
| **3.1.5** | **Design** | **26/06** | **28/06** | **25 hrs** |
| 3.1.5.1 | Design Admin Login/Logout | 26/06 | 26/06 | 5 hrs |
| 3.1.5.2 | Design Hotel Staff Login/Logout | 26/06 | 26/06 | 5 hrs |
| 3.1.5.3 | Design Room Check-in/Check-out | 27/06 | 27/06 | 5 hrs |
| 3.1.5.4 | Design Room Status Update | 27/06 | 27/06 | 5 hrs |
| 3.1.5.5 | Design Invoice Generation | 28/06 | 28/06 | 5 hrs |
| **3.1.6** | **Coding** | **29/06** | **01/07** | **47 hrs** |
| 3.1.6.1 | Code Admin Login/Logout | 29/06 | 29/06 | 10 hrs |
| 3.1.6.2 | Code Hotel Staff Login/Logout | 30/06 | 30/06 | 12 hrs |
| 3.1.6.3 | Code Room Check-in/Check-out | 30/06 | 30/06 | 8 hrs |
| 3.1.6.4 | Code Room Status Update | 01/07 | 01/07 | 8 hrs |
| 3.1.6.5 | Code Invoice Generation | 01/07 | 01/07 | 9 hrs |
| **3.1.7** | **Testing & Fix Bug** | **02/07** | **02/07** | **10 hrs** |
| 3.1.7.1 | Test Admin Login/Logout | 02/07 | 02/07 | 2 hrs |
| 3.1.7.2 | Test Hotel Staff Login/Logout | 02/07 | 02/07 | 2 hrs |
| 3.1.7.3 | Test Room Check-in/Check-out | 02/07 | 02/07 | 2 hrs |
| 3.1.7.4 | Test Room Status Update | 02/07 | 02/07 | 2 hrs |
| 3.1.7.5 | Test Invoice Generation | 02/07 | 02/07 | 2 hrs |
| **3.1.8** | **Release Sprint 1** | **02/07** | **02/07** | **4 hrs** |
| 3.1.8.1 | Sprint 1 Review Meeting | 02/07 | 02/07 | 2 hrs |
| 3.1.8.2 | Sprint 1 Retrospective | 02/07 | 02/07 | 2 hrs |
| **3.2** | **Sprint 2** | **03/07** | **13/07** | **118 hrs** |
| 3.2.1 | Sprint Planning Meeting | 03/07 | 03/07 | 4 hrs |
| 3.2.2 | Create Sprint Backlog | 03/07 | 03/07 | 4 hrs |
| 3.2.3 | Create Test Plan document for Sprint 2 | 04/07 | 04/07 | 4 hrs |
| 3.2.4 | Create Database document for Sprint 2 | 04/07 | 04/07 | 4 hrs |
| **3.2.5** | **Design** | **05/07** | **07/07** | **25 hrs** |
| 3.2.5.1 | Design Payment Processing | 05/07 | 05/07 | 5 hrs |
| 3.2.5.2 | Design Billing Adjustments | 05/07 | 05/07 | 5 hrs |
| 3.2.5.3 | Design Payment History & Receipts | 06/07 | 06/07 | 5 hrs |
| 3.2.5.4 | Design Service Request Handling | 06/07 | 06/07 | 5 hrs |
| 3.2.5.5 | Design Housekeeping Task Tracking | 07/07 | 07/07 | 5 hrs |
| **3.2.6** | **Coding** | **08/07** | **10/07** | **48 hrs** |
| 3.2.6.1 | Code Payment Processing | 08/07 | 08/07 | 16 hrs |
| 3.2.6.2 | Code Billing Adjustments | 09/07 | 09/07 | 7 hrs |
| 3.2.6.3 | Code Payment History & Receipts | 09/07 | 09/07 | 9 hrs |
| 3.2.6.4 | Code Service Request Handling | 10/07 | 10/07 | 8 hrs |
| 3.2.6.5 | Code Housekeeping Task Tracking | 10/07 | 10/07 | 8 hrs |
| **3.2.7** | **Testing & Fix Bug** | **11/07** | **12/07** | **25 hrs** |
| 3.2.7.1 | Test Payment Processing | 11/07 | 11/07 | 7 hrs |
| 3.2.7.2 | Test Billing Adjustments | 11/07 | 11/07 | 5 hrs |
| 3.2.7.3 | Test Payment History & Receipts | 12/07 | 12/07 | 4 hrs |
| 3.2.7.4 | Test Service Request Handling | 12/07 | 12/07 | 4 hrs |
| 3.2.7.5 | Test Housekeeping Task Tracking | 12/07 | 12/07 | 5 hrs |
| **3.2.8** | **Release Sprint 2** | **13/07** | **13/07** | **4 hrs** |
| 3.2.8.1 | Sprint 2 Review Meeting | 13/07 | 13/07 | 2 hrs |
| 3.2.8.2 | Sprint 2 Retrospective | 13/07 | 13/07 | 2 hrs |
| **3.3** | **Sprint 3** | **14/07** | **18/07** | **88** |
| 3.3.1 | Sprint Planning Meeting | 14/07 | 14/07 | 4 hrs |
| 3.3.2 | Create Sprint Backlog | 14/07 | 14/07 | 4 hrs |
| 3.3.3 | Create Test Plan document for Sprint 3 | 14/07 | 14/07 | 4 hrs |
| 3.3.4 | Create Database document for Sprint 3 | 14/07 | 14/07 | 4 hrs |
| **3.3.5** | **Design** | **15/07** | **15/07** | **16 hrs** |
| 3.3.5.1 | Design Admin Summarized Operations View | 15/07 | 15/07 | 4 hrs |
| 3.3.5.2 | Design Admin Financial Reports View | 15/07 | 15/07 | 4 hrs |
| 3.3.5.3 | Design Admin Room Price Adjustment Tracking | 15/07 | 15/07 | 4 hrs |
| 3.3.5.4 | Design Admin User Permissions Monitoring | 15/07 | 15/07 | 4 hrs |
| **3.3.6** | **Coding** | **16/07** | **17/07** | **36 hrs** |
| 3.3.6.1 | Code Admin Summarized Operations View | 16/07 | 16/07 | 9 |
| 3.3.6.2 | Code Admin Financial Reports View | 16/07 | 16/07 | 9 |
| 3.3.6.3 | Code Admin Room Price Adjustment Tracking | 17/07 | 17/07 | 9 |
| 3.3.6.4 | Code Admin User Permissions Monitoring | 17/07 | 17/07 | 9 |
| **3.3.5** | **Testing & fix Bug** | **18/07** | **18/07** | **16 hrs** |
| 3.3.7.1 | Test Admin Summarized Operations View | 18/07 | 18/07 | 4 hrs |
| 3.3.7.2 | Test Admin Financial Reports View | 18/07 | 18/07 | 4 hrs |
| 3.3.7.3 | Test Admin Room Price Adjustment Tracking | 18/07 | 18/07 | 4 hrs |
| 3.3.7.4 | Test Admin User Permissions Monitoring | 18/07 | 18/07 | 4 hrs |
| **3.3.6** | **Release Sprint 3** | **18/07** | **18/07** | **4 hrs** |
| 3.3.6.1 | Sprint 3 Review Meeting | 18/07 | 18/07 | 2 hrs |
| 3.3.6.2 | Sprint 3 Retrospective | 18/07 | 18/07 | 1. hrs |

4.2 Cost

Table 6. *Cost person/hours*

|  |  |  |
| --- | --- | --- |
| **Full Name** | **Role** | **Salary Rate (USD/hour)** |
| Lanh, Do | Scrum Master | 2 |
| Quyen, Truong Thi My | Team Member | 2 |
| Hoang, Le Huy | Team Member | 2 |
| Quoc, Pham Tan | Team Member | 2 |
| Hung, Duong Van | Team Member | 2 |

**Table 7.***Total cost estimation*

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Criteria** | **Price** | **Total (USD)** |
| 1 | Working hours | 5 | 780 |
| 2 | Other cost | 100 | 500 |
|  |  |  | 1280 |

**Table 8.***Description*

|  |  |  |
| --- | --- | --- |
| **Description** | **Amount** | **Unit** |
| Number of members | 5 | Person |
| Number of working hours per day | 2 | Hours |
| The cost per hour per member | 5 | USD |
| The number of working days | 39 | Days |

**-** The explanation for the table

* Amount of working hours = 5 members \* 2 hours \* 39 days
* Other cost = 5 members \* 100 USD

5. Project Risk

**Table 9:***Rating for likelihood and seriousness for each risk.*

|  |  |  |  |
| --- | --- | --- | --- |
| **RATING FOR LIKELIHOOD AND SERIOUSNESS FOR EACH RISK** | | | |
| **L** | Rated as Low | **E** | Rated as Extreme (Used for Seriousness only) |
| **M** | Rated as Medium | **NA** | Not Assessed |
| **H** | Rated as High |  |  |

**Table 10:***Project Risk.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Risk** | **Definition** | **Level** | **Likelihood** | **Mitigation Strategy** |
| Estimates of project planning | The plan may be delayed for the initial estimate of the project. | L | L | Analysis and assessment of the scale.  Reduce requirements. |
| Requirements | Internal contradictions that may exist in the request.  Important requirements may be missing from the formal requirements specification. | H | H | Uniform requirements prior to analysis. |
| Estimated project schedule | Time sort of work. | E | E | Time project was created to be updated and evaluated regularly. |
| Programming experience | Programming Languages and technology | M | L | Experience sharing used to reduce the research time. |
| Technical processes | The standard procedure cannot meet the requirements of specific solutions.  The new process may be required.  The process can be improved and more efficient. | L | M | Analysis of requirements and processes to ensure appropriate levels.  If the new process is needed, we need to evaluate this response has improved over the old process. |
| Network | Block by Limited Bandwidth | H | H | Upgrade transmission line network |
| Time | Project implementation period is too short, so our team cannot complete this project on a short time.  During project implementation, our team to learn and have more work to do, our team cannot focus all their time to carry out this project. | H | M | Reduce time and increase individual personal time working in their stay on the 7th day and Sunday. |
| Project Management | Project management system may not be sufficient to support the requirements of the project. | L | H | Discuss with the group to offer solutions and consistent accuracy. |

1. Deliverables

**Table 11*:*** *Deliverables*

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Document** | **Deadline** | **File Name** |
| 1 | Proposal Document. | June 12, 2025 | Group 8\_Proposal\_ LET\_ver1.2.docx |
| 2 | Project Plan Document | June 21, 2025 | Group8\_ProjectPlan\_LET\_ver1.1.docx |