

**International School**

**Software Process & Quality Management**

**CMU-SE 433**

**Product Backlog**

**Version 1.0**

**Date: June 19th, 2025**

**Hotel Management System**

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**PROJECT INFORMATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **Project acronym** | HMS | | |
| **Project Title** | Hotel Management System | | |
| **Start Date** | 12 Jun 2025 | **End Date** | 23 July 2025 |
| **Lead Institution** | International School, Duy Tan University | | |
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**DOCUMENT NAME**

|  |  |  |  |
| --- | --- | --- | --- |
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| **Role** | Product Owner, Team Member, Scrum Master | | |
| **Date** | 19-Jun-2025 | **File name:** | C2SE.12\_ProductBacklog\_LET\_ver1.0.doc |

**REVISION HISTORY**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Person(s)** | **Date** | **Description** |
| **1.0** | Truong Thi My Quyen | 19-Jun-2025 | Create product backlog document |

**TABLE OF CONTENTS**

1. Introduction…………………………………………………………………………………..6

1.1. Purpose……………………………………………………………………………..6

1.2. Scope……………………………………………………………………………….6

1.3. References………………………………………………………………………….6

2. Product Backlog……………………………………………………………………………...7

2.1. Product Backlog Specification……………………………………………………..7

3. Constraint…………………………………………………………………………………….9

4. Stakeholders and User Descriptions Summary………………………………………………9

**TABLE OF TABLES**

Table 1. *References*…………………………………………………………………………….6

Table 2. *Product Backlog Specification (Admin)*……………………………………………...7

Table 3. *Product Backlog Specification (Hotel Staff)* ………………………………………...8

Table 4. *Product Backlog Specification (Hotel Owner)*….…………………………………...8

Table 5: *Constraint*……………………………………………………………………………9

Table 6. *Stakeholders and User Descriptions Summary*………………...……………………9

1. Introduction

The agile product backlog in Scrum is a prioritized features list, containing short descriptions of all functionality desired in the product. When applying Scrum, it’s not necessary to start a project with a lengthy, upfront effort to document all requirements. Typically, a Scrum team and its product owner begin by writing down everything they can think of for agile backlog prioritization. This agile product backlog is almost always more than enough for a first sprint. The Scrum product backlog is then allowed to grow and change as more is learned about the product and its clients.

* 1. Purpose
* Provide a prioritized features list, containing short description of all functionality desired in the product.
* Lists everything that the product owner and Scrum team feels should be included in the software they are developing.
  1. Scope
* Lists the user’s role.
* Write all the user’s requirements.
* Lists some main function of website.
* Short description of all the functionality desired in the product.
* Given the priority of each feature and function of the product
  1. References

**Table 1.***References*

|  |  |  |
| --- | --- | --- |
| **No** | **Reference** | **Note** |
| 1 | <https://en.wikipedia.org/wiki/Scrum_(software_development)> | Scrum process |
| 2 | [http://www.mountaingoatsoftware.com/agile/scrum/prod uct-backlog/example/](http://www.mountaingoatsoftware.com/agile/scrum/product-backlog/example/) |
| 3 | Proposal Document  User Story Document | Information |

2. Product Backlog

* 1. Product Backlog Specification

Priority and Estimates

Priorities are set from 1 to 5.

+ The maximum priorities are 5

+ The minimum priorities are 1

+ Priorities of some user stories can be the same with others

+ If a user story has dependencies, it must have lower priority than its dependencies

**Table 2.** *Product Backlog Specification (Admin)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **Theme** | **As a/an** | **I want to** | **So that** | **Priority** |
| PD01 | Authentication | Admin | Log in and log out | I can access and manage the hotel system securely. | High |
| PD02 | Dashboard | Admin | View summarized information on hotel operations | I can quickly grasp the overall situation for more effective decision-making. | High |
| PD03 | Financial Management | Admin | View reports on revenue, expenses, and profits | I can assist management in making accurate financial decisions. | High |
| PD04 | Room Pricing | Admin | Track historical room price adjustments | I can monitor revenue forecasts based on past data. | Medium |
| PD05 | User Management | Admin | Monitor user permissions and system settings | I can ensure they align with the hotel's requirements. | Medium |
| PD06 | Room Availability | Admin | Monitor the synchronization process of room availability and pricing with online travel agencies | I can ensure real-time data accuracy and avoid overbookings. | High |
| PD07 | Competitor Analysis | Admin | View market and competitor analysis reports | I can support strategic planning based on market positioning. | Medium |
| PD08 | Revenue Optimization | Admin | View booking trend forecasts and price adjustments | I can optimize revenue strategies. | High |
| PD09 | Marketing Analytics | Admin | View reports analyzing customer data | I can support more effective marketing campaigns. | Medium |

**Table 3.***Product Backlog Specification (Hotel Staff)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID | Theme | As a/an | I want to | So that | Priority |
| PD1 | Authentication | Hotel Staff | Log in and log out | I can access the system to perform my tasks. | High |
| PD2 | Room Management | Hotel Staff | Manage room check-ins, check-outs, and update room status | I can keep track of room availability and status effectively. | High |
| PD3 | Billing and Invoicing | Hotel Staff | Generate invoices, process payments, handle billing adjustments, and generate receipts for guests | I can ensure smooth financial transactions for guests. | High |
| PD4 | Service Management | Hotel Staff | Handle service requests like room service, laundry, and repairs | I can update guests on request statuses and ensure timely services. | Medium |
| PD5 | Housekeeping Management | Hotel Staff | Track housekeeping tasks, assign responsibilities, and monitor completion | I can maintain room cleanliness and order. | Medium |
| PD6 | Maintenance Management | Hotel Staff | Manage maintenance requests, schedule repairs, and track issue resolution | I can ensure prompt resolution of maintenance issues. | Medium |

**Table 4.***Product Backlog Specification (Hotel Owner)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **Theme** | **As a/an** | **I want to** | **So that** | **Priority** |
| PD1 | Financial Dashboard | Hotel Owner | Access comprehensive financial reports and performance dashboards | I can evaluate the financial health and performance of the hotel. | High |
| PD2 | KPI Monitoring | Hotel Owner | Track key performance indicators like RevPAR and ADR | I can monitor operational efficiency and guest satisfaction metrics to ensure success. | High |
| PD3 | Market Trend Analysis | Hotel Owner | Analyze market trends and competitive positioning | I can make informed strategic decisions for future growth. | Medium |
| PD4 | Revenue Forecasting | Hotel Owner | Access predictive analytics for revenue forecasting | I can plan better revenue strategies and optimize profit. | High |
| PD5 | ROI Assessment | Hotel Owner | Assess the return on investment (ROI) of operational changes and improvements | I can analyze the impact of various strategies and improve profitability. | Medium |

3. Constraint

**Table 5:** *Constraint*

|  |  |
| --- | --- |
| **Constraint** | **Condition** |
| **Time** | Project completion time limit in 1.5 months so time to complete project be restricted |
| **People constraint** | 5 people working together to finish the project |
| **The integrated system** | Must be connected to the Internet network to operate. |
| **Requirements** | According to Product owner’s Requirements |

4. Stakeholders and User Descriptions Summary

**Table 6.***Stakeholders and User Descriptions Summary*

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Role** |
| **Product Owner** | The Person who gives the Requirement. | Duy Tan University |
| **Scrum Master** | This is the stakeholder who leading, manage the website development Team. | Do Lanh |
| **Requirement Analyzer** | This is a stakeholder that works with the Analysts to correctly translate requests or needs into requirements to be used for design. | All Member |
| **Software Architect** | This is a stakeholder that is primary for leading the website development. | Truong Thi My Quyen |
| **Coder** | This is a stakeholder that programs the software. | All Member |