

International School

**Capstone Project 2**

CMU-SE 450

**Product Backlog**

**Version 1.0**

**Date: March 19th, 2025**

**Classroom Teaching and Trivia Platform**

**Created by C1SE.28**

Khoi, Le Vu Anh Khoi - 26211238818

Tuan, Phan Phu - 26211241675

Viet, Doan Ngoc Quoc - 27211225657

Tu, Dang Ngoc - 26211235773

Tu, Nguyen Minh - 26211241700

**Approval of Mentor:**

**Name:** Huy, Truong Dinh **Signature:** **Date:** **18th May, 2025**

**PROJECT INFORMATION**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Project acronym** | **TripGo** | | | |
| **Project Title** | Al-Powered Chat Bot & Tour Recommendation System | | | |
| **Start Date** | 01 Sep 2024 | **End Date** | 19 Dec 2024 | |
| **Lead Institution** | International School, Duy Tan University | | | |
| **Project Mentor** | Huy, Truong Dinh | | | |
| **Scrum master/ Project Leader & contact details** | Khoi, Le Vu Anh  Email: [levuanhkhoi123@gmail.com](mailto:levuanhkhoi123@gmail.com)  Tel: 0985018002  ID: 26211238818 | | | |
| **Partner Organization** | Duy Tan University | | | |
| **Project Web URL** |  | | | |
| **Team members** | **Name** | **Email** | | **Tel** |
| 26211238818 | Khoi, Le Vu Anh | levuanhkhoi123@gmail.com | | 0985018002 |
| 26211241675 | Tuan, Phan Phu | phutuan112@gmail.com | | 0905978306 |
| 27211225657 | Viet, Doan Ngoc Quoc | doanngocquocviet1203@gmail.com | | 0969195236 |
| 26211235773 | Tu, Dang Ngoc | tudangm10@gmail.com | | 0347259766 |
| 26211241700 | Tu, Nguyen Minh | mtking4112@gmail.com | | 0968538729 |

**DOCUMENT NAME**

|  |  |  |  |
| --- | --- | --- | --- |
| **Document Title** | Product Backlog Document | | |
| **Author(s)** | Tu, Dang Ngoc | | |
| **Role** | Team Member, Scrum Master | | |
| **Date** | September 18th, 2024 | **File name:** | C1SE.17\_ProductBacklog\_TRIPGO\_ver1.0 |

**REVISION HISTORY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Comments** | **Author** | **Approval** |
| 1.0 | September 18th, 2024 | Initial Release | All members |  |
| 2.0 | December 18th, 2024 | Update | All members |  |

**TABLE OF CONTENTS**

[1. Introduction 1](#_Toc185788365)

[1.1. Purpose 1](#_Toc185788366)

[1.2. Scope 1](#_Toc185788367)

[1.3. References 1](#_Toc185788368)

[2. Product Backlog 1](#_Toc185788369)

[3. Constraint 4](#_Toc185788370)

[4. Stakeholders and User Descriptions Summary 5](#_Toc185788371)

**LIST OF TABLES**

[Table 1. References 1](#_Toc185788302)

[Table 2. Product Backlog Specification (Admin) 2](#_Toc185788303)

[Table 3. Product Backlog Specification (Customer) 3](#_Toc185788304)

[Table 4. Product Backlog Specification (Staff) 4](#_Toc185788305)

[Table 5. Constraint 4](#_Toc185788306)

[Table 6. Stakeholders and User Descriptions Summary 5](#_Toc185788307)

1. Introduction

The NQUIZ system is an online platform developed to support teachers in teaching and assessing students through automatic quizzes. The goal of NQUIZ is to provide an effective tool to help teachers save time in creating tests, monitoring student progress and improving teaching quality. The system provides features such as quiz creation, automatic scoring, analysis of learning outcomes and support for students to review knowledge. With the support of AI technology, NQUIZ not only helps teachers manage tests easily but also provides detailed reports on student learning performance, thereby helping teachers make appropriate adjustments in the teaching process. This system is designed to meet modern teaching needs, bringing convenience and efficiency to both teachers and students.

* 1. **Purpose**
* The purpose of the NQUIZ system is to provide a tool to support teachers in teaching and assessing students in an effective and time-saving way. The system allows teachers to easily create quizzes, test students' knowledge and track each student's progress through detailed reports.
* NQUIZ is designed to reduce the burden on teachers in grading and administering tests, while providing students with a method of active review and self-assessment of their learning outcomes. The purpose of the system is to help teachers have more time to focus on improving the quality of teaching, while creating conditions for students to develop their self-learning ability and improve their learning outcomes.
  1. Scope
* User Roles:
  + Teacher: Create quizzes, automatically grade, track student progress, analyze results.
  + Student: Participate in quizzes, receive results, review incorrect answers.
* User Requirements:
  + Teachers need a tool to quickly create quizzes, automatically grade them, and provide student progress reports.
  + Students need an easy-to-use interface and a feature for review.
* Main Functions of the System:
  + Create and manage quizzes.
  + Automatically grade quizzes.
  + Track student progress.
  + Analyze learning outcomes.
  + Support student review of incorrect answers.
  1. References

**Table 1.** References

|  |  |  |
| --- | --- | --- |
| **No** | **Reference** | **Note** |
| 1 | <http://agilebench.com/blog/the-product-backlog-for-agile-teams> | How to create product backlog |
| 2 | <http://www.mountaingoatsoftware.com/agile/scrum/product-backlog/example/> | Product Backlog Example |

1. Product Backlog

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** |
| PB01 | Manage account user | Admin | Manage information user | I can add new user to the website / add, delete, edit accounts. | 1 |
| PB02 | Login | Admin | Log in with my username and password | The system can authenticate me and I can trust it | 1 |
| PB03 | View dashboard | Admin | View dashboard | I can have an overview of the users and activity on the system | 2 |

**Table 3.** Product Backlog Specification (User)

| **ID** | **Theme** | **As a/an** | **I want to** | **So that** | **Priority** |
| --- | --- | --- | --- | --- | --- |
| PB01 | Register | User | Register by creating a username and password | The system can remember me and my data. | 1 |
| PB02 | Login | User | Log in with my username and password | The system can authenticate me and I can trust it | 1 |
| PB03 | AI-powered quiz creation | User | Generate quiz questions using AI | Save time and ensure high-quality questions | 1 |
| PB04 | Customizable quiz formats | User | Choose different question types | Make quizzes more engaging and flexible | 1 |
| PB05 | Live quiz hosting | User | Host and join quizzes in real-time | Participate in interactive learning sessions | 1 |
| PB06 | Self-learning mode | User | Access quizzes at my own pace | Learn independently without a live session | 2 |
| PB07 | Performance analytics | User | View reports on my participation and scores | Track progress and improve learning outcomes | 1 |
| PB08 | Easy Quiz Participation | User | Join quizzes using a game PIN or QR code | Quickly access quizzes without account setup | 1 |
| PB09 | Interactive Gameplay | User | See real-time feedback, leaderboards, and rewards | Stay engaged and motivated | 2 |
| PB10 | Adaptive Learning Experience | User | Get AI-generated questions that adjust dynamically | Have a personalized learning journey | 2 |
| PB11 | Cross-Platform Accessibility | User | Use the platform on desktop, mobile, and tablets | Access quizzes from any device | 1 |

1. Constraint

**Table 5.** Constraint

|  |  |
| --- | --- |
| **Constraint** | **Condition** |
| **Time** | Project completion time limit in 3 months so time to complete project be restricted |
| **People constraint** | 4 people working together to finish the project |
| **Requirements** | According to Product owner’s Requirements |

1. Stakeholders and User Descriptions Summary

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

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Role** |
| **Product Owner** | The Person who gives the Requirement. | Tuan, Phan Phu |
| **Scrum Master** | This is the stakeholder who leading, manage the website development Team. | Khoi, Le Vu Anh |
| **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. | All Member |
| **Coder** | This is a stakeholder that programs the software. | All Member |