Quiz Game University of Liechtenstein

Information Systems Development

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Project paper

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Degree Course: Information Systems

Module: Information Systems Development

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Contents

1 Introduction of the project and the paper

As part of our lectures in Information Systems Development, all students must provide an introduction to programming with web frameworks in an online environment like e-commerce platforms or blog systems.

Our group CAR, which stays for Claudia, Adrian and Roshan, decided to build an online University of Liechtenstein Quiz which contains questions about the 1. semester lectures. The project started in the middle of September and ends with the presentation on the 17th. of December 2020.

In order to have an overview of all the documents and codes we created, we decided to upload all the relevant information to GitHub and document it in our project application document. This way, we can ensure that the documentation is sufficiently commented and that the most important content cannot be forgotten.

IMPORTANT:

At the time of submitting this document, you should have received permission from us for GitHub and Trello with your Uni.li mail address.

1.1 Project organisation

For the organization part, we set up a Trello-board with the main task and responsibilities. At our weekly meeting, we watched the progress of the board and the issues which resulted from the tasks.

As specified, all team members have programmed and documented. However, we divided the tasks according to the study backgrounds. Roshan was responsible for most of the programming, with support and partial programming from Claudia and Adrian. Due to their business experience, Adrian and Claudia were responsible for the clean documentation and model creation.

1.2 GitHub user and access

GitHub username	Person
Claudi13	Claudia Schedler
Boomi93	Adrian Baumgartner
Cyberboa	Roshan Hausammann

All documents incl. the project documents are stored on GitHub (https://github.com/Cyberboa/Quiz-game-Uni-li/tree/master)

Additional information: Commitments from user Boomi93 on GitHub were used only for documenting. Python code was shared with the user Adrian Baumgartner.

2 Documentation overview

In the following subchapters, the respective documentations are briefly described.

The documentation is split into the following subchapters for a better understanding and documentation storage.

- Project documentation
- Programming documentation
- Model documentation

2.1 Project documentation

The following instruments and documents are used for the project organization and documentation. As mentioned over the whole project time we did some weekly meetings to discuss what every single group member has done; not done and what kind of issues are now open or what is preventing "me" to finish the task.

All documents are stored under the "Project documentation" folder (Quiz-game-Uni-li/Documentation/Project documentation/) and are listed in the table below with a short description.

Name (with link)	Description
Trello Quiz Game Board (instrument)	Task and progress board with an overview of all necessarily issues for the project.
Examples_ideas (folder)	First brainstorming examples of the project and how we could build our project quiz game. The folder contains pictures of different quizzes and possibilities from questions up to login page situations.
Requirements_Quiz_Game_01	Summary of functional requirements and which we want to implement.
Questions_for_Quiz_Game_01	Summary of all questions in the quiz game.
projectTask_KW42	Print of our Trello task board
CAR_Bild_01	Project group picture CAR (Claudia, Adrian, Roshan)

2.2 Programming documentation

The following subchapters contains all prints of our website. All prints are also listed in our programming documentation folder on GitHub.

Name (with link)	Description
Programming documentation (folder)	Contains all prints of our code.
Welcome_page	Print of the welcome page site
Question_list_page	Print of the question page site
Result_page	Print of the result page after answering the questions

Login_page	Print of the login page site
Create_question_page	Print of the create question page
High_score_list_page	Print of the high score page with the results of the participants
Register_user	Print of the admin page shows the options for the admin in the website
Contact_us_page	Print of the contact us page
About_us_page	Print of the about us page

2.3 Model documentation

In the model documentation folder are all models which we found are useful as an additional documentation.

Name (with link)	Description
ER- Modell idee	First idea of an ER-Modell.
Process_description_user_01	Process draft for the quiz game.
Quizgame.drawio	Quiz game UML drawio file for editing (https://app.diagrams.net/)
Quizgame_UML_01	Quiz game UML as jpeg file.
Robust_diagram_01.vpd	Robust diagram file for editing on visual-paradigm.com
Robust_diagram_answerquestion_01	Robust diagram for the use case answer questions.
Robust_diagram_login_01	Robust diagram for the use case login.

2.3.1 Process description user

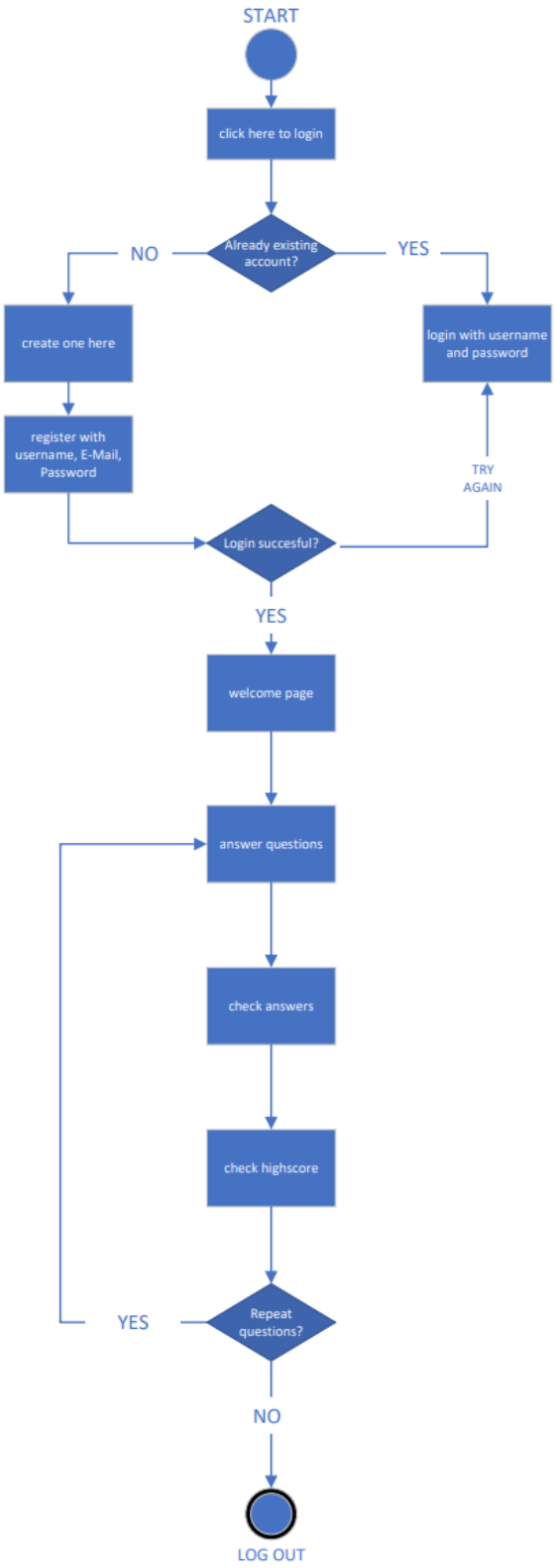

Figure 1 process description for a user

The process description shows a standard process how the user can participate in the Quiz Game and what types of different functions the game has. Furthermore, we were able to derive further models from the process

2.3.2 Quiz game UML

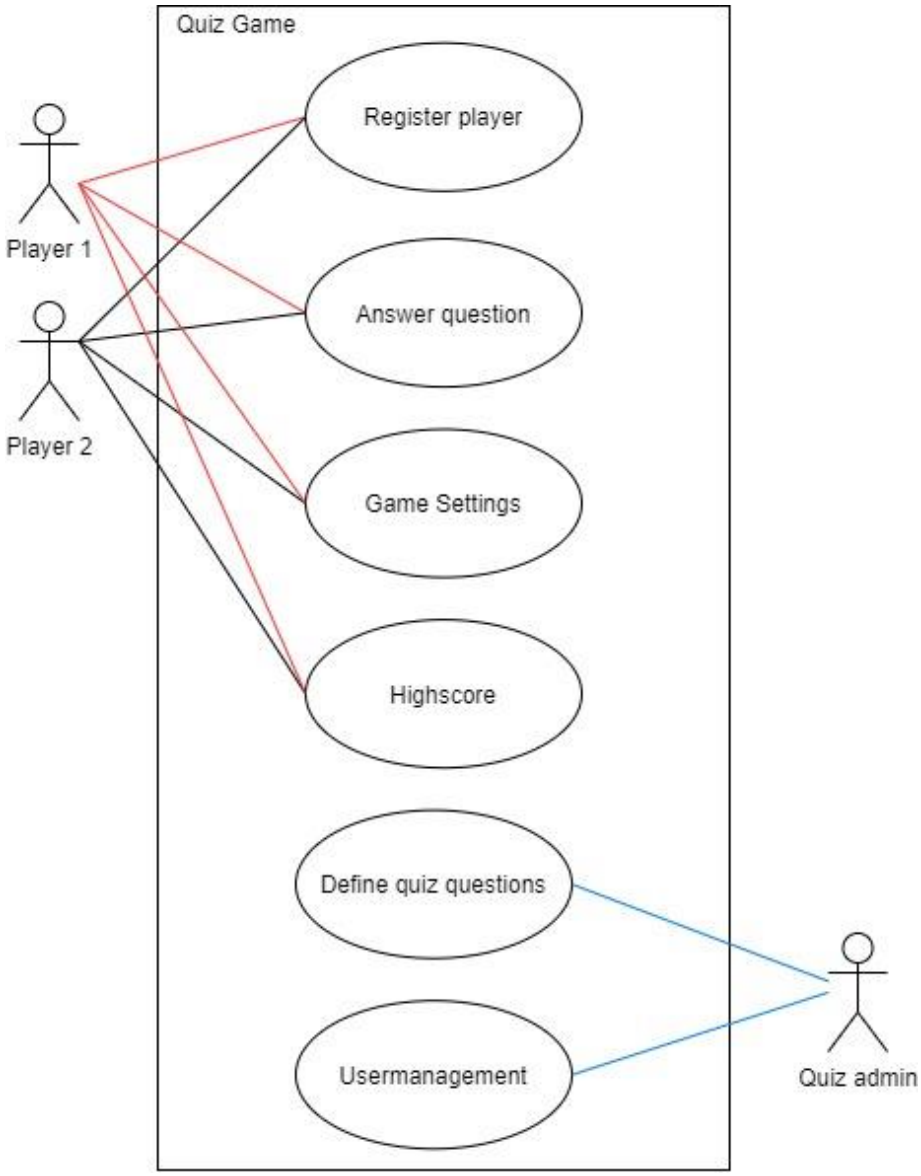

Figure 2 Quiz game UML

This quiz game UML describes shortly the interaction between one or more user and the quiz admin with the system. These UML was useful for the creation of the creation of the requirements, which are linked in the subchapter 2.1 project documentation.

2.3.3 Robust diagramm login

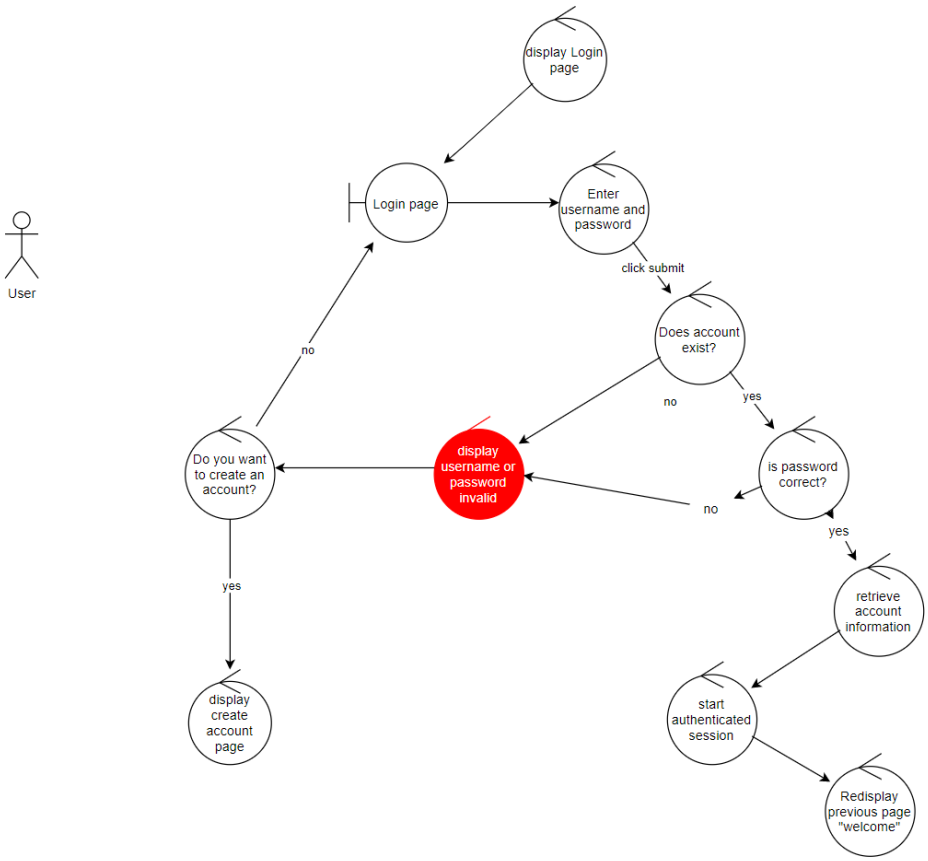

Figure 3 Robust diagram use case login

The user clicks on the login link. The system displays the login page. If the user has an account, the user enters their username and password. The system checks if the account exists. If the user exists, the system checks if it is the correct password. The system retrieves the account information and starts an authenticated session. In the end, the user sees a redisplayed welcome page.

2.3.4 Robust diagram answer question

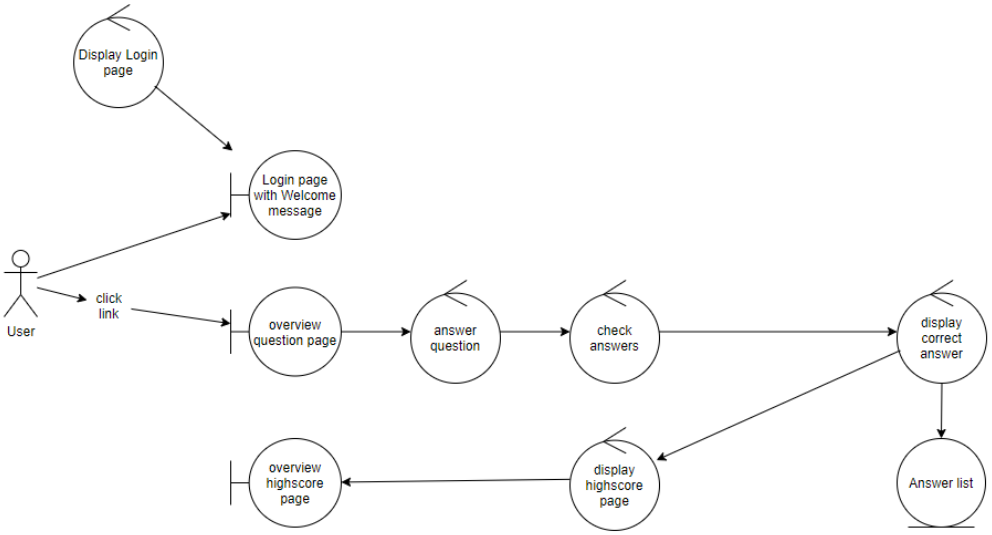

Figure 4 Robust diagram use case answer questions

The user is successfully loged in and clicks on the question page link. The system displays the question page. The user can answer the questions and check the results at the end of the page with the check answer button. The system returns the wrong answers in red and the right answers in green. The system saves the information and transmits the information to the high score page.

3 Table of figures