Software Requirements Specifications (SRS)

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1. Introduction

1.1 Product overview

- **What is a quiz?:** Generally, a quiz is a form of game or mind sport in which the players (as individuals or in teams) attempt to answer questions correctly. In education, a quiz is a set of multiple choices questions used to measure the growth in knowledge, abilities, and skills of students.

- **Why we should use quizzes:** The quizzes are used for the teachers to test and manage the progress of students. Frequent quizzing reduces massed practice and procrastination, keeps students focused on what they need to do , and helps them decide how their studying is proceeding. Besides, do quizzes online help the teachers store the quizzes, get the feedbacks and reduce time for preparing.

- **Quizzes project:** In order to provide a convenient technology tool for teachers and students, Quizzes project have deployed. There are many quizzes on the Internet so that everyone can access and use it. They can also create their own quizzes for their purposes. The user can do their own or the other's quizzes to test their abilities and to see their growth.

   Group 1 - K55CA Computer Science – University of Engineering and Technology developed this project under the suggestion and guidance of **Dr. Truong Anh Hoang.**

2. Specific Requirement

2.1 External Interface Requirements

2.1.1 User interface:

- **At main page, users can**
  - Register
  - Log in
  - Do a quiz

- **After logging in, users will be turn back to the main page, but they can**
  - Access and edit their profiles
  - Upload or change avatar
  - See their progress
  - Add, edit, or delete their own quizzes

- **How to do quiz**
  - There is a list of quizzes on the main page, with the authors of each quiz, users can click on one of them or click on doing random quiz.
  - After clicking one quiz, the questions in this quizz will appear, users answer them by clicking on one of the answer (usually there are 4 answers for one question).
  - After doing a quiz, user can hit the button submit to submit their answers, the system will display the result.
  - After the that, there are one button for the users to vote (giving score for the quiz) or to give feedbacks.

2.1.2 Hardware Interface:

- **Input:** Use mouse to select functions or to choose the answer of each question.

- **Output:** The activities and results are described on the screen.

2.1.3 Software Interface:

2.1.4 Communication Protocols

- **Framework:** Django
- **Programming language:** Python, HTML, Java Scripts, CSS
- **Application:** Web-based application

2.2   Software Product Features

- **User profile**

  - **Manage information**
    - Register
    - Log in
    - Log out
    - Upload avatar
    - Change password
    - Change avatar

  - **Manage own quizzes**
    - **Add more quizzes**
      - Choose subject
      - Add description
      - Add questions
      - Add answers
    - **Edit quizzes**
      - Edit questions
      - Edit answers
    - **Delete quizzes**

- **Quizz**

  - **Do a quiz**
    - See list of quizzes
    - Choose a particular quiz or choose a random quiz to do
    - Do a quiz by answering the questions
    - Submit the answer
    - Get the result

  - **Vote a quiz – only with the non-random quizz**
    - Give the score of satisfaction of the just-done quiz
    - Give the feedback to the owner of the quizz

2.3   Software System Attributes

2.3.1   Reliability

The reiability of quizzes totally depend on the owner of those quizzes. Usually, the teachers are the one creating quizzes. Therefore, the users can believe in the information and the correctness. Besides, the users should choose doing quizzes of prestigious authors – through experience or the score of other's voting.

2.3.2 Availability

Once a quiz be created sucessfully, it can be seen – and took as well by every one. The system will be available on the Internet all the time, 24 hours a day, 7 days a week, until errors or problems happen.

2.3.3 Security

We do not know much about hacking, so we hardly guarantee that the information of users will leak outside. Additionally, the content of quizzes could be modified by non-permitted person. However, in the scope of this project, we think that the above problems possibly never occur.

2.3.4 Maintainability

We do not have the intent to develop this project into larger system in the future. Thus, after finishing this semester, we will not do anything to maintain or to develop this software. If anyone feel interested, they should not hesistate to contact us for source code or other materials related to this project.

2.3.5 Portability

This is a web – based application, so there is no need to worry about portability. Everyone who has a computer connecting internet can easily acess and use this application.

2.3.6 Performance

We have already demonstrated this software twice on the class. We hope that at the end of this semester, all the fuctions will work smoothly and effectively.

2.4   Database Requirements

- **Database is critical:** It means that no data loss can be tolerated.

- **Need 27 X 7 availability: The** database should be available all the time for the users to access.

- **No need to backup and recovery:** In the scope of this project, we do not need to backup and recover the database.

- **The database need no more than 1Gb disk space**: In this project, we think 1Gb is sufficient.

- **Run from a single server:** There is no need and not large enough for running **on several sites.**

- **Multiple access**: Many concurrent uers can have database access simultaneously.

- **Need to be accessible till the end of this semester.**