

# Skill development project I- ICT 1108 Bachelor of Information and Communication Technology (BICT)

**Degree Programme** 

Department of Information and Communication Technology
Faculty of Technology
Rajarta Univercity of Sri Lanka
Mihintale

# **Details of the Project**

Project Title : Quiz Game

Group Number: 08

Group Name : Enforcers

Submission Date: 29/03/2023

## Group Members:

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#### Introduction

This is a comprehensive and error-free Quiz Game Project in C that is meant to run on an interface.

The quiz game asks a series of questions from the player about different subjects. By playing this game a person can be able to test his knowledge in different fields. A user can access/play 20 questions and they have only one chance to answer each question.

For each correct answer user will get a credit score and at the end of the game, the program will reveal the player's final score. This game is fun to play and anyone can play game.

We hope to include in this app,

- Logging into the app
- Select the category
- Timer to answer for the question
- Show the final result

#### **Problem Statement**

There are many quiz applications available currently on the internet. But there are few which provide better understanding between users and the application like, providing proper answers, user query solving, uploading user questions as well as the answer to them, etc. The issue of universal education exists on a global scale. So, this is being developed to increase users' level of education in a more efficient way because the activities carried out for the development of knowledge in the education system are not more effective.

This gives an opportunity to provide knowledge through an attractive and entertaining medium for children who do not acquire knowledge nowadays.

## **Proposed Solution**

Examples of proposed solutions for a C programming project proposal. These solutions will depend on the specific problem you are trying to solve, but here are some general examples:

- 1. Implementation of data structures, such as linked lists, stacks, and queues, to efficiently store and retrieve data.
- 2. Implementation of user input validation techniques to ensure that user input is correct and does not cause errors or crashes.
- 3. Use of optimization techniques, such as loop unrolling or compiler flags, to improve program speed and efficiency.
- 4. Use of unit testing or automated testing tools to ensure that the program functions correctly and meets the requirements.
- 5. Implementation of security measures, such as encryption or password protection, to protect user data and prevent unauthorized access.

These are just a few examples of proposed solutions for a C programming project. The specific solutions will depend on the project requirements and the problem you are trying to solve.

- 1. Design and implementation of a user-friendly interface using C graphics libraries, such as SDL or OpenGL, to create an engaging and interactive experience for the players.
- 2. Development of a scoring system that calculates the score based on the number of correct answers and the time taken to complete the quiz, motivating players to compete and improve their scores.
- 3. Integration of different categories of questions, such as history, science, literature, etc., to cater to different interests and age groups.
- 4. Implementation of a timer to limit the time for each question and the overall quiz, adding a sense of urgency and excitement to the game.
- 5. Randomly generate questions from a pool of questions, making each game unique and challenging.
- 6. Integration of sound effects and background music to enhance the gaming experience.

## Scope of the Project

The scope of a quiz game project may vary depending on the requirements and objectives, but here are some possible components that can be included in the project scope:

- 1. User Interface: The quiz game should have a user-friendly interface that allows players to select quiz categories, view questions, submit answers, and track their progress.
- 2. Categories: The quiz game can include different categories of questions, such as history, science, literature, etc., to cater to different interests and age groups.
- 3. Scoring System: The quiz game should have a scoring system that calculates the score based on the number of correct answers and the time taken to complete the quiz.
- 4. Timer: The quiz game should have a timer that limits the time for each question and the overall quiz, adding a sense of urgency and excitement to the game.
- 5. Sound Effects and Background Music: The quiz game can include sound effects and background music to enhance the gaming experience.

These are just a few examples of the possible components that can be included in the project scope of a quiz game. The specific scope will depend on the requirements and objectives of the game.

# Aim and Objective

#### Aim

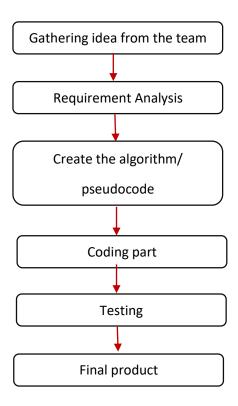
This quiz game system can be used as a short assessment in education and similar fields to improve and measure the development of knowledge, abilities, or skills.

#### Objective

- To provide players with a convenient and accessible platform for quiz gaming system.
- To Improve and check players' knowledge.
- To attract people for the quiz game without age limit.
- To provide a good platform for users to develop their knowledge about various subjects. Like; Science, History, Health

# **Technical Approach**

Mainly this app will be developed by using C language and Visual Studio Code text editor will be used as the platform. Java language will be used to develop the interface of this quiz game. Lucid chart software is used to design the flow chart.



# Project Work Plan

The project plan will consist of the following phases;

	Janu	Feb	March	April	May	June	July	Aug	Sep	Oct
Teaming up										
Discussion of topic										
Fixing the topic										
Creating the project proposal										
Creating system										
Running and solving errors										
Fixing system										
presentation										

## **Project Resources**

#### **Human Resources**

Team Enforce, we are undergraduates from faculty of technology in Rajarata University of Sri Lanka. We are going to develop a quiz game app as our first-year skill development project under ICT. In this system, we try to provide a user-friendly interface, logging part, providing the result and etc.

• Analysis idea from the team- A.K.P.H.Imasha, W.A.D.R.Devinda

Create algorithm
 Coding part
 -W.W.P.D.Wijerathna, A.K.P.H.Imasha
 -R.M.M.K.B.Rathnayake ,A.J.M.I.Malinda

• Testing -R.M.M.K.B.Rathnayake, K.G.I.D.Kamnathilaka

#### **Physical Resources**

- Websites
- Magazine

#### Conclusion

We plan to use this initiative for coming knowledge-improving projects. Throughout this project, we learned how game programming in C differs from standard procedural programming.

We also learned how to:

- Implement event loops
- Draw items on the screen
- Handle user input

Finally, by integrating a user-friendly platform, cutting-edge technology, and an efficient interface, we hope to improve the entire experience and increase education for users and this platform.

#### References

https://youtu.be/u-AMQulSbM8

https://youtu.be/f3a\_JWmXS1A

https://www.w3schools.com/c/c\_quiz.php

https://ieeexplore.ieee.org/document/9971253/