



Republic of the Philippines  
RIZAL TECHNOLOGICAL UNIVERSITY  
Cities of Mandaluyong and Pasig

COLLEGE OF ENGINEERING, ARCHITECTURE AND  
TECHNOLOGY

# COMPUTER PROGRAMMING 1 (ITC111L)

## QUIZ WIZARD

GRADE

*Submitted by:*



Morales, Jade  
BSIT  
CEIT-37-202A



Almazan, Janna Ricci  
BSIT  
CEIT-37-202A



Lugod, Brendan Jane  
BSIT  
CEIT-37-202A



Bondad, John Christopher  
BSIT  
CEIT-37-202A



Advincula, Chino Clarence  
BSIT  
CEIT-37-202A



Depra, Dewell Helsen  
BSIT  
CEIT-37-202A



Misagal, Edgar Allan  
BSIT  
CEIT-37-202A



Francis, Mark Ghian  
BSIT  
CEIT-37-202A

*Submitted to:*

Prof. May Barcelona Figueroa

Professor May 26, 2023



## I. INTRODUCTION

Welcome to our C++-based quiz game software! The purpose of this project is to give people a fun and interactive way to learn new material while also testing their knowledge. We made the decision to start this initiative for a variety of reasons. First of all, we acknowledged the appeal of quiz games and the fun that they provide for players of all ages. We intended to design an application that might provide a comparable experience, giving users a place to test their limits and compete with one another. Quizzes, in our view, are a great approach to improve knowledge acquisition and memory. Our application acts as a useful tool for knowledge development and self-improvement by including instructional questions from a range of areas. We want to create a quiz that is both entertaining and educational. During the course of the development process, we encountered some challenges to overcome. Making a user-friendly, intuitive interface that can accommodate users of all ability levels was one of the key challenges. We wanted to make sure that users of all skill levels could use the application with ease and enjoy taking quizzes. We thoroughly studied C++ programming procedures and made use of our knowledge of data structures and algorithms to overcome these difficulties. To ensure the dependability and stability of our application, we have created a strict testing and debugging procedure. Overall, we want users to have a smooth and delightful experience while being entertained, educated, and challenged by our quiz game program.

## II. DESCRIPTION OF THE PROJECT

The researcher has developed a Quiz Game project that offers various game modes upon compiling and running the source code. These modes include classic, time trial, pass and play, and survival. In the classic mode, there are randomly multiple-choice or identification questions consisting of 10 unique questions. Players must answer all the questions correctly to pass the game. The time trial mode challenges players to answer each question within a 60-second time limit. If a player fails to respond within the given time frame, the game automatically moves on to the next question. Pass and play mode is designed for multiplayer gameplay with two participants. Prior to starting the game, players enter their names. The first player to achieve a score of 10 emerges as the winner. Once the game ends, the results display which player has secured the victory. In survival mode, players begin with 4 lives and are tasked with answering 10 questions in each level. If a player loses, a message appears indicating "you lost the game," along with the player's remaining lives and score. Conversely, if a player emerges victorious, a message is displayed stating "you won the game." During the "Add Question" process, users can add questions to all available modes. They have the option to choose whether the questions will be in multiple-choice format or not. Furthermore, users are prompted to input the desired number of questions. Additionally, the program features a menu that offers access to various options, including credits, information about the game, its benefits, documentation, and the game's version.



### III. OBJECTIVES

The main objective of this system is to provide an alternative learning platform that consists of different modes and features to help users in their studies, especially in their programming examinations. and our system objective includes:

- 1) To make a program use C++ that allows users to assess themselves using this system.
- 2) To use programming techniques like vector, filehandling, conio.h, cstdlib, string.h, stdio.h, windows.h and essential.h

### IV. SIGNIFICANCE OF THE STUDY

The significance of our program resides in the fact that quiz games encourage students' self-awareness and self-evaluation. By completing quizzes, students may easily get feedback on their responses, identifying their strengths and weaknesses and highlighting their accomplishments. The difficulty levels, time constraints, multiple choice questions, different kinds of questions, and feedback are the most crucial information in this work. Students can increase their speed and accuracy by using varied difficulty levels, time constraints, multiple choice questions, different sorts of questions, and feedback.

### V. SCOPE AND DELIMITATIONS

This C++ program is designed to make an interactive Quizz system that provides the user choices with different mode options. This program is focused on giving the users their remark through numbering system that they could access in the attempt history, this program covers features such as:

- Usersign-up
- Userattempthistory
- Numbersystem

#### Delimitations

In order to maintain focus and ensure the feasibility of the system, certain delimitations have been established. These delimitations outline the boundaries and limitations within which the study will be conducted. The delimitations of this research include:

- In Pass and Play, two(2) users can access this mode using one device only.
- In Custom Write, users cannot exit or cancel the process during creation of questions and options.



## VI. SCREENOUTPUT

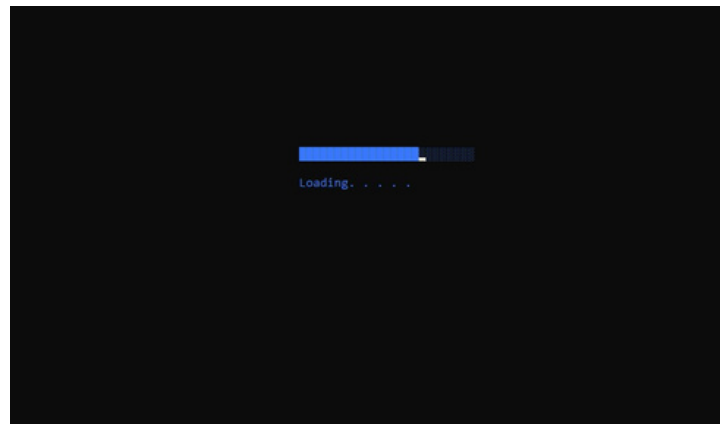


Figure 1. Loading Screen

Figure 1 shows the loading of the screen before the Quiz Wizzard starts



Figure 2. Menu Options

Figure shows the menu option:

**Start Quiz** - Shows the modes of the quizzes

**Instruction** - shows the instructions on how to play

**Game History**- shows the previous plays the user have done in the history

**Custom Question**- lets the user make their own questionnaire

**Exit** - exits the program /system

User can type his/ her beside the word "choice:"



Figure 3. Mode option

Figure 3 shows the mode options whereas:

**Classic** - will let the user choose the quiz type whether identification or multiple choice

**Time Trial**- in a multiple choice setting user will have to answer the questions inside the given time only

**Pass and play**- lets the user play with a friend (multiplayer)

**Survival**- user has to answer the multiple choice correctly or its lives will be deducted on wrong answer

**Menu** - leads the user back to the main menu



Figure 4. Game Instructions

Figure 4 Shows the instructions of all the game modes

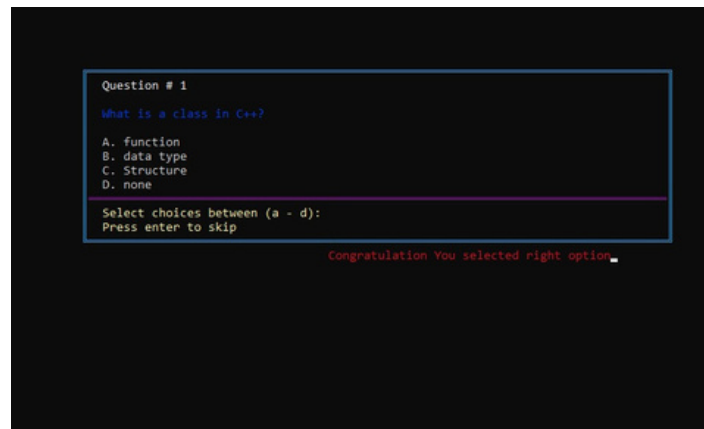


Figure 5. Classic Mode

Figure 5 shows questions in classic mode. For each correct answer, your score will increase by 1 point

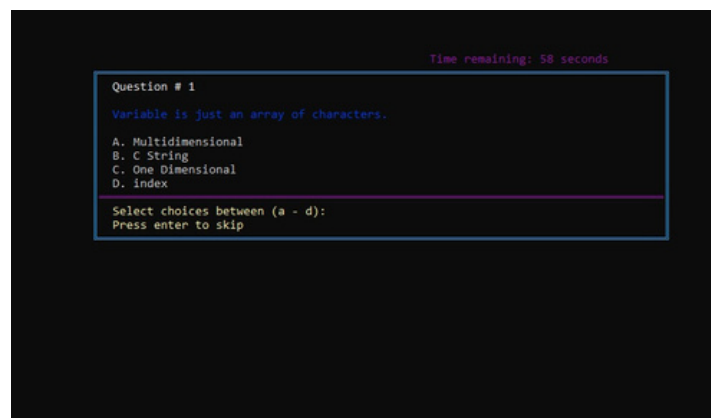


Figure 6. Time Trial  
Mode

Figure 6 shows the questions for time trial mode. If time runs out and all questions are not answered, the user loses.

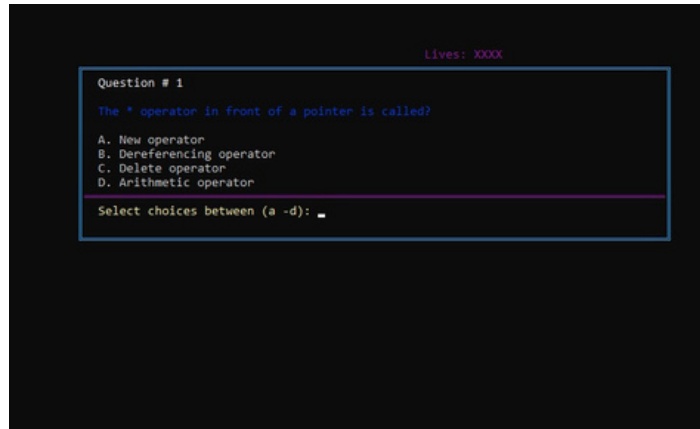


Figure 7. Survival Mode

Figure 7 shows the questions for survival mode. The user will be given 4 lives. Each wrong answer costs 1 life

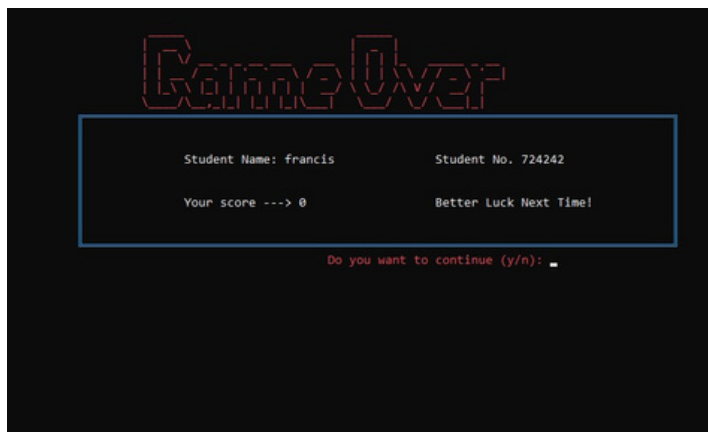


Figure 8. Game Over  
Screen

Figure 8 shows the game over screen. This screen will show when the user loses the game.

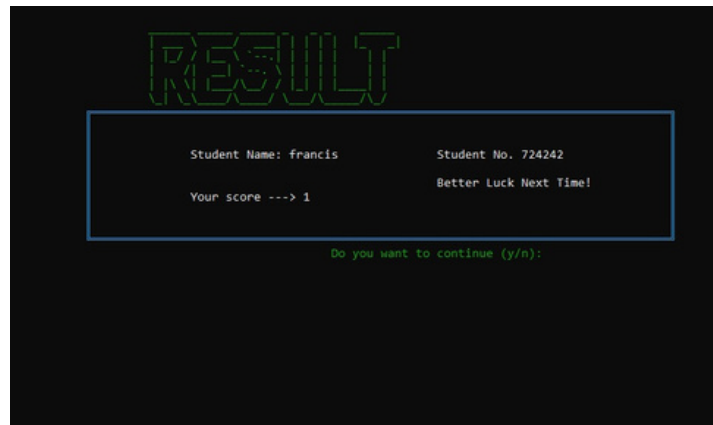


Figure 9. Result  
Screen

Figure 9 shows the user's score.

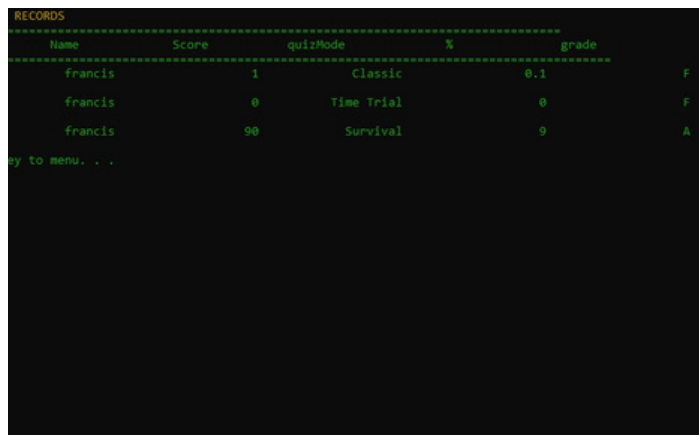


Figure 10. Game  
History

Figure 10 shows the scores of the users for each mode with their name.



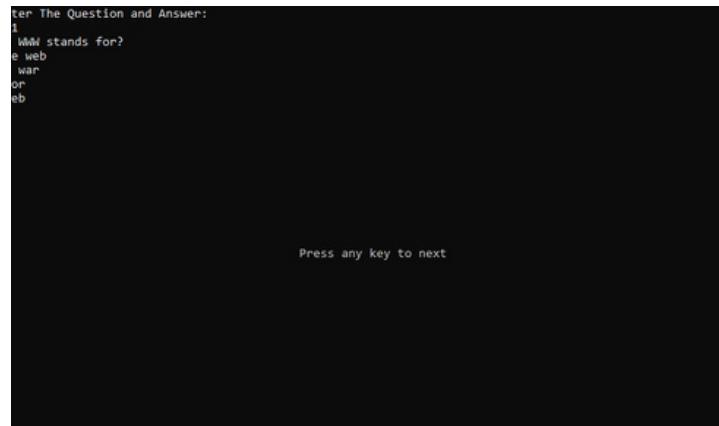


Figure 1. Loading Screen

Figure 1 shows the loading of the screen before the Quiz Wizzard starts

## VII. SOURCECODE

## VIII. CONCLUSION

Understanding and applying advanced programming concepts in C++ empowered our group to develop a robust system. Despite the challenges, we successfully integrated these concepts into our program, ensuring compatibility and efficiency. Our Quiz Wizard system is accessible directly on the device, eliminating the need for online subscriptions. Students and teachers can freely assess knowledge without any additional costs. By leveraging advanced C++ programming, we optimized performance, enhanced data handling, and revolutionized offline learning experiences.



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