🎨 PROJECT REPORT ON QUIZ GAME USING C

Project Title: Quiz Game Using C Programming
Course: Programming in C
Course Code: CSEG1032
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ABSTRACT

This project is a simple Quiz Game implemented using the C programming language. The aim of the project is to test the user's general knowledge through multiple choice questions. The user is asked a series of questions, and for each correct answer, the score increases.

The program uses basic C concepts such as variables, functions, decision-making statements, loops, and file handling (optional). This project helps in improving logical thinking and understanding of core programming concepts. It is user-friendly and runs on a command-line interface.

The project can be further improved by adding more questions, levels, a timer, and a graphical interface in future.

PROBLEM DEFINITION

Many students want a simple and interesting way to test their knowledge using a computer program. Existing quiz applications are often complex and require internet access or advanced software.

The problem is to design and develop a simple Quiz Game in C that:

- Works offline

- Is easy to use

- Gives instant results

- Runs on a command-line interface

The system should allow the user to:

- Start the quiz

- Answer multiple choice questions

- Get the final score at the end

4. SYSTEM DESIGN

1. Start the program

2. Display welcome message

3. Ask the first question with options

4. Take user input (answer)

5. Check if the answer is correct

6. Increase score if correct

7. Move to next question

8. Repeat until all questions are done

9. Display final score

10. End program

Step 1: Initialize score = 0
Step 2: Display "Welcome to Quiz Game"
Step 3: Display Question 1 and options
Step 4: Take user answer
Step 5: If answer is correct, score = score + 1
Step 6: Repeat steps 3–5 for all questions
Step 7: Display total score
Step 8: End

The quiz game is written in C language and mainly uses:

- printf() and scanf() for input/output

- if-else statements for decision making

- Functions to organize questions

- Variables to store answers and scores

Main features of the code:

- A separate function for each question

- User input validation

- Final result display

Example concept used in code:

- Each question has 4 options (A, B, C, D)

- User enters their choice

- Program checks if the choice is correct

- If correct, the score increases

The program is modular, readable, and easy to modify for adding more questions.

Sample Input:

User starts the quiz
User answers:
Q1: A
Q2: C
Q3: B
Q4: D
Q5: A

Sample Output:

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Welcome to the Advanced Quiz Game!

Q1: Which gas do plants release during photosynthesis?
(a) Oxygen
(b) Carbon Dioxide
(c) Nitrogen
Enter your answer (a/b/c): a
Correct!

Q2: What is the capital of France?
(a) Paris
(b) London
(c) Berlin
Enter your answer (a/b/c): b
Wrong! The correct answer is 'a'.

Q3: Which planet has rings?
(a) Saturn
(b) Venus
(c) Mercury
Enter your answer (a/b/c): c
Wrong! The correct answer is 'a'.

Q4: Which is the smallest prime number?
(a) 1
(b) 2
(c) 3
Enter your answer (a/b/c): a
Wrong! The correct answer is 'b'.

Q5: What is the currency of Japan?
(a) Yen
(b) Dollar
(c) Euro
Enter your answer (a/b/c): b
Wrong! The correct answer is 'a'.
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Q6: Which language is used for system programming?
(a) Python
(b) C
(c) HTML
Enter your answer (a/b/c): c
Wrong! The correct answer is 'b'.

Q7: Which planet is known as the Red Planet?
(a) Earth
(b) Mars
(c) Jupiter
Enter your answer (a/b/c): b
Correct!

Q8: Which is the largest ocean on Earth?
(a) Atlantic
(b) Indian
(c) Pacific
Enter your answer (a/b/c): c
Correct!

Q9: Who wrote 'Romeo and Juliet'?
(a) Charles Dickens
(b) William Shakespeare
(c) Mark Twain
Enter your answer (a/b/c): a
Wrong! The correct answer is 'b'.

Q10: What is the boiling point of water?
(a) 100°C
(b) 0°C
(c) 50°C
Enter your answer (a/b/c): a
Correct!

Quiz Over! Your final score: 4/10
Not bad, but you can do better.
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Testing Observations

- The program runs without errors

- Correct answers increase the score properly

- Wrong answers do not increase the score

- The output is displayed correctly at the end

In this project, a Quiz Game in C was successfully developed using basic programming concepts. The project achieved its goal of testing user knowledge in a simple and interactive way.

The main learning outcomes from this project are:

- Better understanding of functions and conditions in C

- Improved problem-solving skills

- Experience with real-world program design

Future improvements of this project may include:

- Adding more questions

- Adding difficulty levels (Easy, Medium, Hard)

- Adding a timer for each question

- Creating a graphical user interface (GUI)

- Saving high scores in a file

REFERENCES

- E. Balagurusamy – Programming in ANSI C

- C Programming Notes (Class Material)

- www.geeksforgeeks.org – C Programming tutorials