



**Names:**

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**Project topic:**

- Quiz Game

**T.A name:**

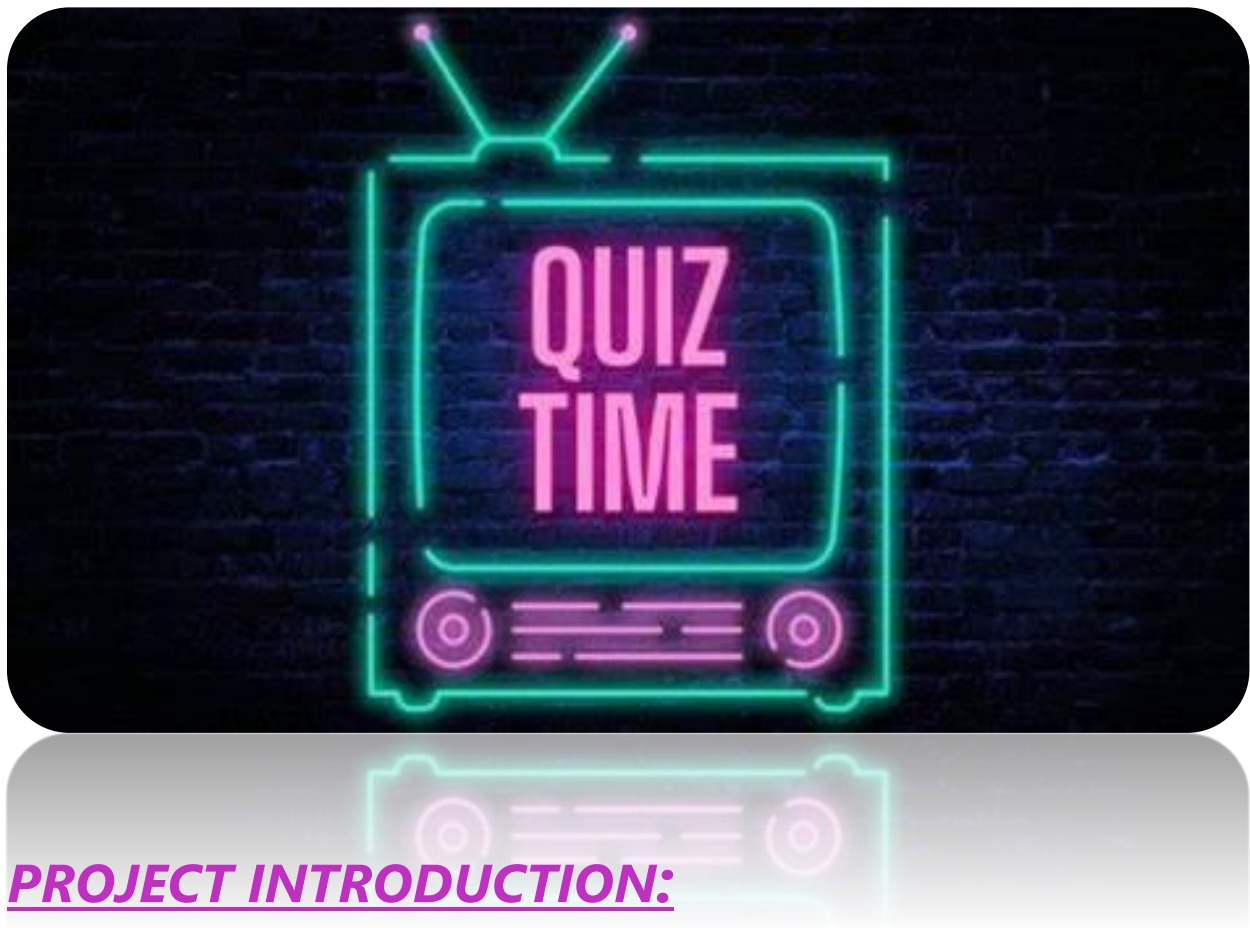
- Eng. Eslam Saeed

**Sec:**

- Mon (9:00 am)

**CRN:**

- 5671



## **PROJECT INTRODUCTION:**

This is a complete Quiz Game designed as a simple console application. In this project, a few questions are asked (this question is talked about object-oriented programming), and the user is awarded points for each correct answer given is 20.

In this quiz game, you can [store](#) the username. Additionally, to make the game look a little more interesting, it is divided into two levels, user must pass the first level to reach the second level and user must have a code of level 1 to play level 2.

In the level one, the user is asked a total of five simple questions, and they must be able to answer at least three of them correctly (mean the number of points to enter the level two must be greater than 50) If the user is not capable of doing that, he is not permitted to enter level two.

The game ends when the user pass level two. For each question asked, there are 4 options, namely A, B, C and D. There are no negative markings, so the user's points are constant for wrong answers to the questions.

## PROJECT MAIN IDEA:

I have divided this project into two constructor and some functions and listed below are some of those which may help you understand the project better.

- 1- Home ();
- 2- Game ();
- 3- virtual void play() = 0; \* here we achieved polymorphism(pure\_virtual\_fun()) \*
- 4- void play(); \*(overriding\_fun)
- 5- void setQuestion(string, string, string, string, string, string, int); // \* setter for Question \*
- 6- void askQuestion(); // \* getter for Question

Class Home (class Home has one default constructor , the constructor will work wherever the object is created).The definition of constructor has start window appears to user and some hints about what level he wants and there is a statement appears that force the user to press enter to continue.

Second class is called Game (class Game has one default constructor). The definition of constructor has a some of questions like age, and after that force the user choose the level "to continue the program", what he wants(if the user choice age less than 18 the program is end).

If user choose 1or 2, the program will create object from class level1 or level2 that depend on user's choice, and the function called play() will work and in this point the game start.

The definition of play() has some questions (must be answered to continue the program) like name and statement ask the user to write yes if he want to play level and if he answered no he will return to start window ,if he entered yes the questions will be started (and every question you answer it correct you get 20 point). And the score of user's points must be grater of 50 to pass the level if the score less than it the program told you failed and return you to start window.

The definition of setQuestion() it has 7 variables (6 of them string ) the first parameter has the question , 4 next parameters has the answers a,b,c,d, the sixth parameter has the correct answer and the last one It contain the number of points.

The definition of askQuestion() is doing print for question and answers, and ask user for the correct answer After the program get the answer from the user he compare if it correct or wrong ,if it correct he add the Point to the score variable and print it to user it correct if wrong print wrong and print to the user the correct answer is.

## **CONCLUSION:**

**The main idea for this quiz is to be knowledgeable about object-oriented programming and fun. In this quiz game you play two levels and you must play level one to get the code for level two, the game is end when the user pass in two levels.**

## Screenshot OF OUTPUT

```

Welcome to the Quiz
-----
"Do you want level one or level two?"

***HINT***
- if you want level one please press num 1.
- if you want level two please press num 2.
- if you want to exit please press any button.

Press enter to start...
```

```

Please ...Enter your age !!
20
OK ...Press enter to continue.

```

```

What's the level that you want?
1
What's your name?
Ahmed
Hi Ahmed
*To start the 'level 1' quiz, Enter Yes
*TO return home, Enter No
yes
OK ...Good luck!
Press enter to continue.
```

```
1. How many access specifiers are there?  
a. 1  
b. 2  
c. 3  
d. 4
```

```
What is your answer?  
c
```

```
Correct!
```

```
Press enter to continue.  

```

```
2. What does a class contain in C++?  
a. Data  
b. Methods  
c. Data and Methods  
d. Arrays
```

```
What is your answer?  
b
```

```
Sorry, you're wrong.  
The correct answer is c.
```

```
Press enter to continue.  

```

```
3. What operator does a pointer object of a class use to access its data members and member functions?  
a. ::  
b. .  
c. ->  
d. :
```

```
What is your answer?  
c
```

```
Correct!
```

```
Press enter to continue.  

```

```
4. The members of a class in C++ are by default?  
a. private  
b. public  
c. protected  
d. private and public
```

```
What is your answer?  
a
```

```
Correct!
```

```
Press enter to continue.  

```

```
5. Objects can be used?  
a. To access any member of a class  
b. To access only public members of a class  
c. To access only protected members of a class  
d. To access only private members of a class
```

```
What is your answer?  
d
```

```
Sorry, you're wrong.  
The correct answer is b.
```

```
Press enter to continue.  

```

Your Total Score is 60

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

THE CODE OF LEVEL 1 IS: AJ2003

Press enter to continue.

█

If you succeed in level 1, Enter Yes  
IF No, Enter No and return to solve level 1  
yes

Enter The Code Of Level 1  
AJ2003

WELLCOME TO LEVEL 2!!

Press enter to continue.█

What's your name?

jana

Hi jana

\*To start the 'level 2' quiz, Enter Yes

\*TO return home, Enter No

yes

OK ...Good luck!

Press enter to continue.█

```
1. Which one is a valid class declaration?
a. public class A {}
b. class A {}
c. class A {int x;};
d. object A {int x;};
```

```
What is your answer?
c
```

Correct!

```
Press enter to continue.
█
```

```
2. What's function object?
a. An object with a single function.
b. An object with only functions.
c. An object with more than one function.
d. An object with no functions.
```

```
What is your answer?
a
```

Correct!

```
Press enter to continue.
█
```

```
3. Which among the following is the main use of object?
a. To create instance of a function.
b. To create instance of a program.
c. To create instance of class.
d. To create instance of structures.
```

```
What is your answer?
d
```

Sorry, you're wrong.  
The correct answer is c.

```
Press enter to continue.
█
```

```
4. Objects type _____
a. Can be changed in runtime.
b. Can't be changed in runtime.
c. Can be changed in compile time.
d. May or may not get changed.
```

```
What is your answer?
b
```

Correct!

```
Press enter to continue.
█
```

```
5. Which among the following is called first, automatically, whenever an object is created?
a. Class
b. Constructor
c. New
d. Tigger
```

```
What is your answer?
a
```

Sorry, you're wrong.  
The correct answer is b.

```
Press enter to continue.
█
```



Your Total Score is 60

*Xmas*

Press any key to continue . . .

PS E:\GAME> █

END OF PROGRAM

## ANOTHER CASES IN OUTPUT

```
Your Total Score is 20
You failed... Sorry, better luck next time.

Press enter to return home.[]
```

Your Total Score is 80

please enter to continue

```
Do you want play with me in level 2?  
yes
```

What's the level that you want?  
1

What's your name?  
Ahmed

Hi Ahmed

\*To start the 'level 1' quiz, Enter Yes

\*TO return home, Enter No

no

OK ...Goodbye!

Press enter to return home.

What's the level that you want?

2

If you succeeded in level 1, Enter Yes  
If No, Enter No and return to solve level 1  
No

OK ...Good luck in level 1.

What's the level that you want?

5

Your choice is wrong ...Try again!

□

Please ...Enter your age !!

11

Sorry ...You are too young to play.

Press enter to return home.□

What's the level that you want?

2

If you succeed in level 1, Enter Yes

IF No, Enter No and return to solve level 1

yes

Enter The Code Of Level 1

aaaa

the code you entered is false

Press enter to return to level one....

□