

Report on – GkQuiz



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L&T Technology Services

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Module : C-programming on multiple platforms



Document History

Ver. Rel. No.	Release Date	Prepared. By	Reviewed By	Approved By	Remarks/Revision Details
1	12/02/2022	Omkar Chitragar			

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Description

GkQuiz:

This quiz is designed to test the general knowledge of the user and help the user with an knowledge update. The user can take up the quiz by entering their credentials. Depending upon the user's score in the quiz, the user is provided with good/average/poor general knowledge as a result. User can end the quiz with end option and restart the quiz with restart option.

Features of the project:

- User can enter the username in order to participate in the quiz.
- User can attempt the quiz and view the result.
- User can end the quiz.
- User can restarts the quiz.

How each features is implemented:

- Prints the statement asking the credentials such as name of the user for the participation in the quiz.
- Displays the multiple choice general knowledge questions to the user.
- Takes input as right/wrong answer from the user.
- Displays result upon completion of the quiz.
- Provides user with end option to end the quiz.
- Provides user with restart option to restart the quiz.

Requirements

High Level Requirements

ID	Description
HP01	User can enter the username in order to participate in the quiz
HP02	User can attempt the quiz and view the result
HP03	User can end the quiz
HP04	User can restart the quiz

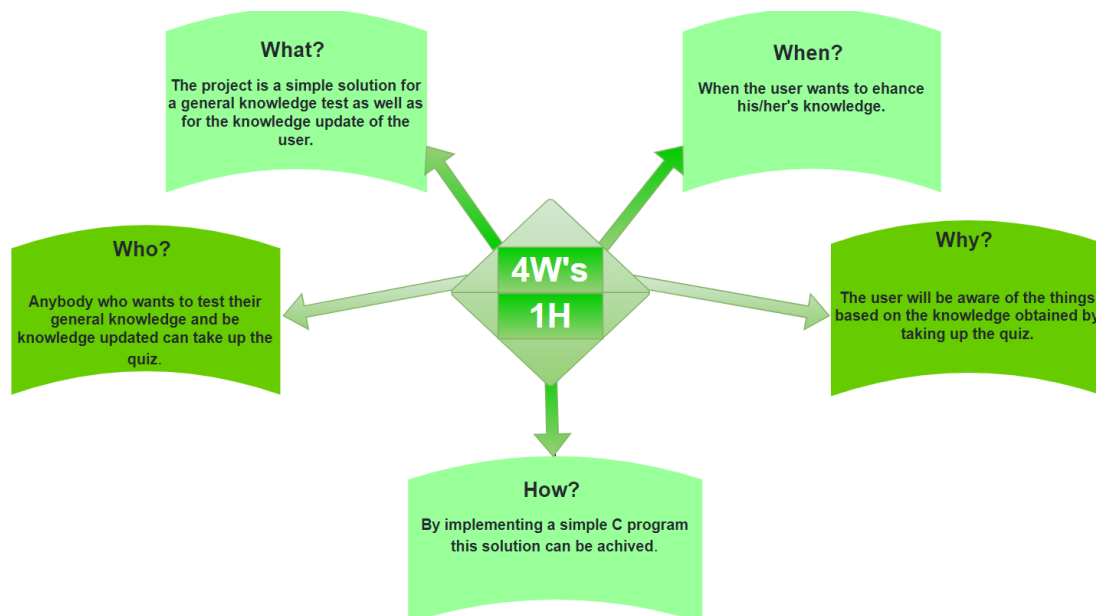
Low Level Requirements

ID	Description	ID
LP01	User is asked to enter username	HP01
LP02	User views the rules & starts the quiz	HP02
LP03	User views the mcqs and can enter the option	HP02
LP04	User views the result of answered question	HP02
LP05	User can continue/end the quiz	HP03
LP06	User can restart the quiz	HP04

SWOT analysis

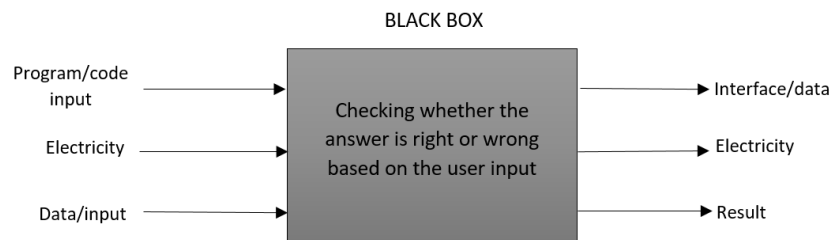
SWOT ANALYSIS	
Strengths: <ul style="list-style-type: none"> ➤ Enhances general knowledge of the user. ➤ User friendly and simple to use. ➤ Creates curiosity in the user to get them know about how good they are at GK. 	Weaknesses: <ul style="list-style-type: none"> ➤ It has a simple interface. ➤ Questions in the quiz can be limited, hence can't provide vast knowledge. ➤ Similar set of questions upon retaking of the quiz.
Opportunities: <ul style="list-style-type: none"> ➤ The quiz can be further developed and made more fun and interesting. ➤ Different set of questions occurring for every second chance feature can be added. 	Threats: <ul style="list-style-type: none"> ➤ User can cheat with the same set of questions occurring every time.

4W's & 1H

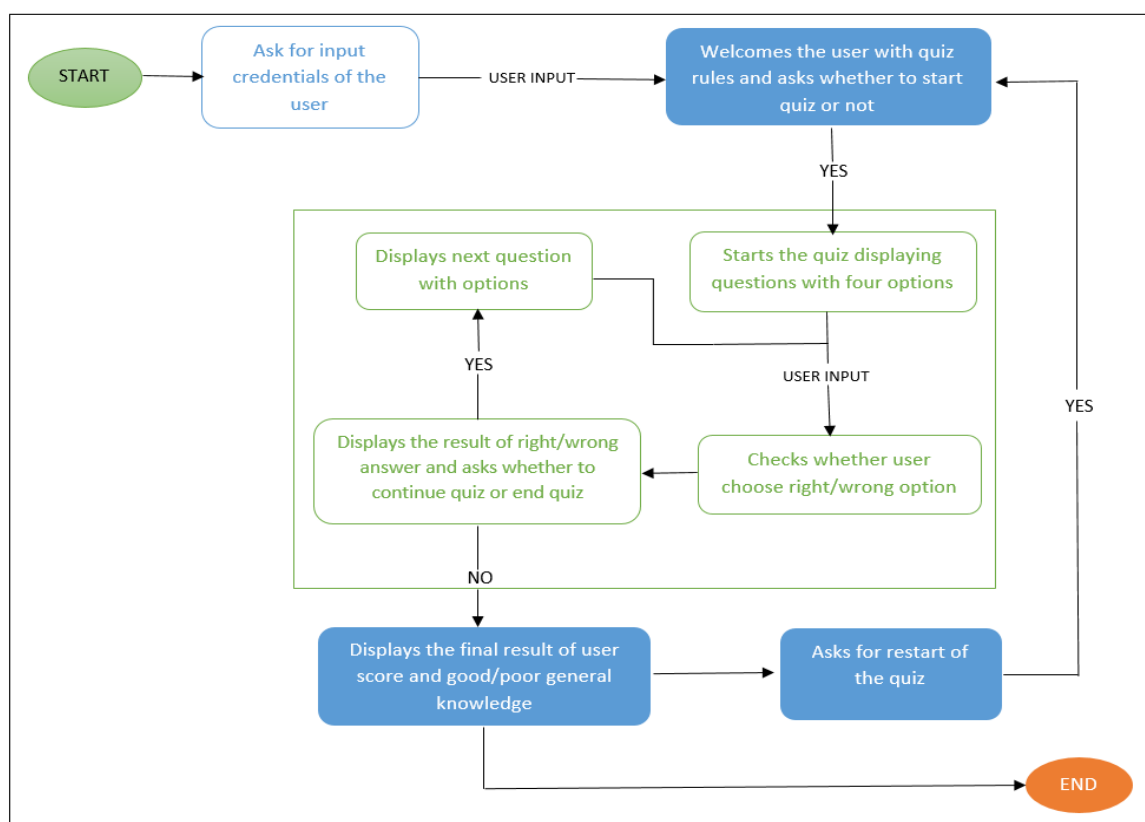


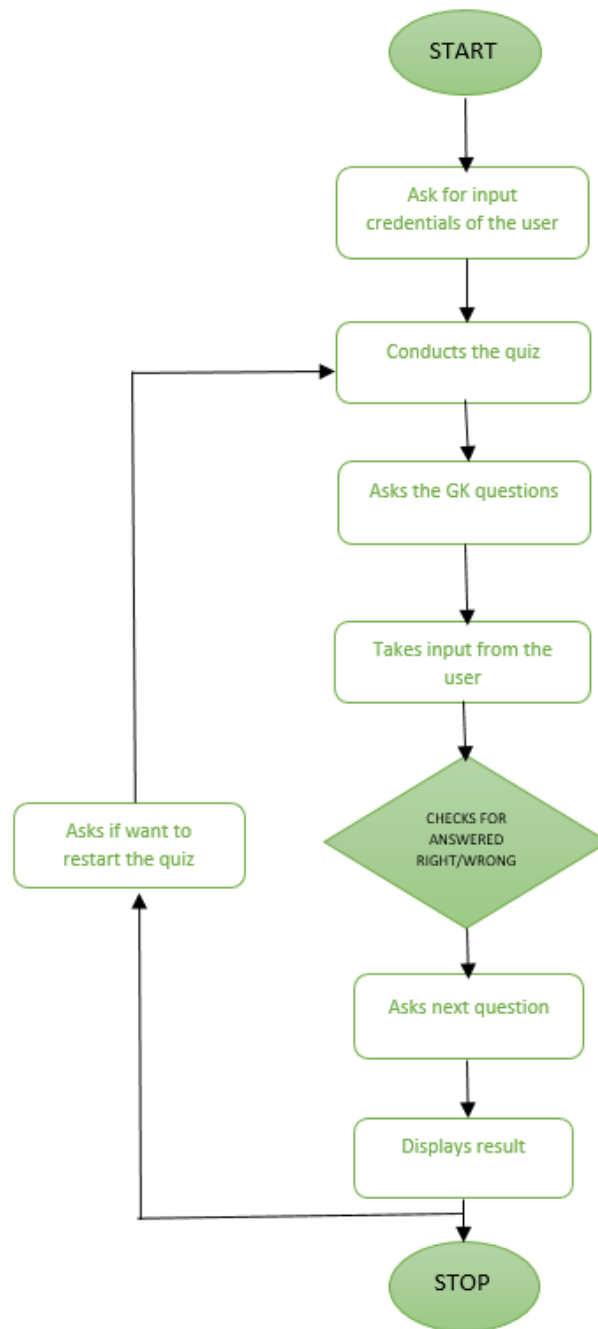
Architecture

Structural diagram: Black box

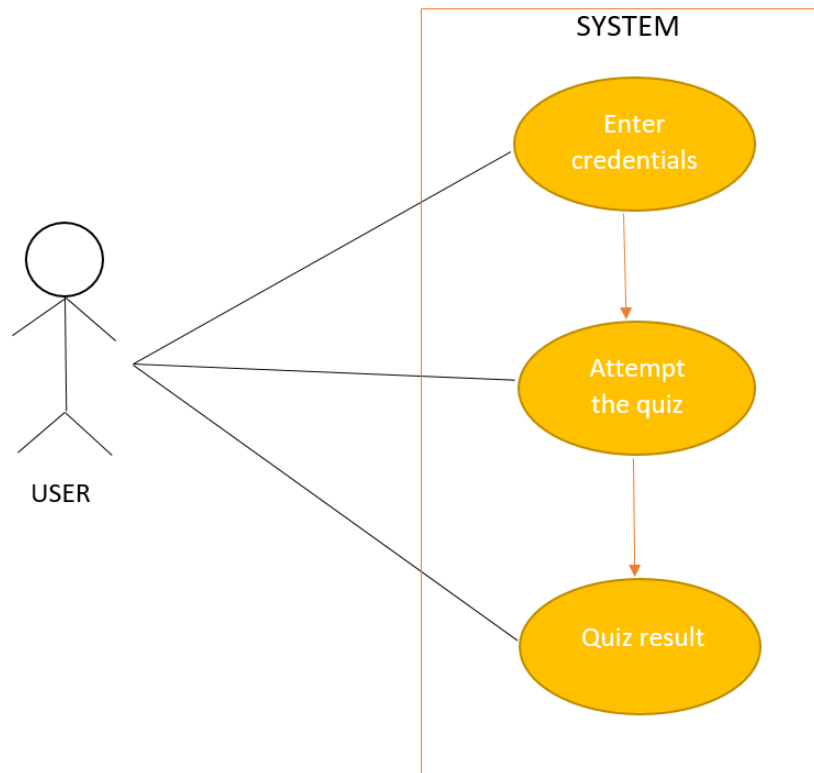


Functional diagram:



Behavioral diagram: Flowcharts

Usecase diagram:



Implementation

- In C programming.

Test Plan

High Level Test Plan

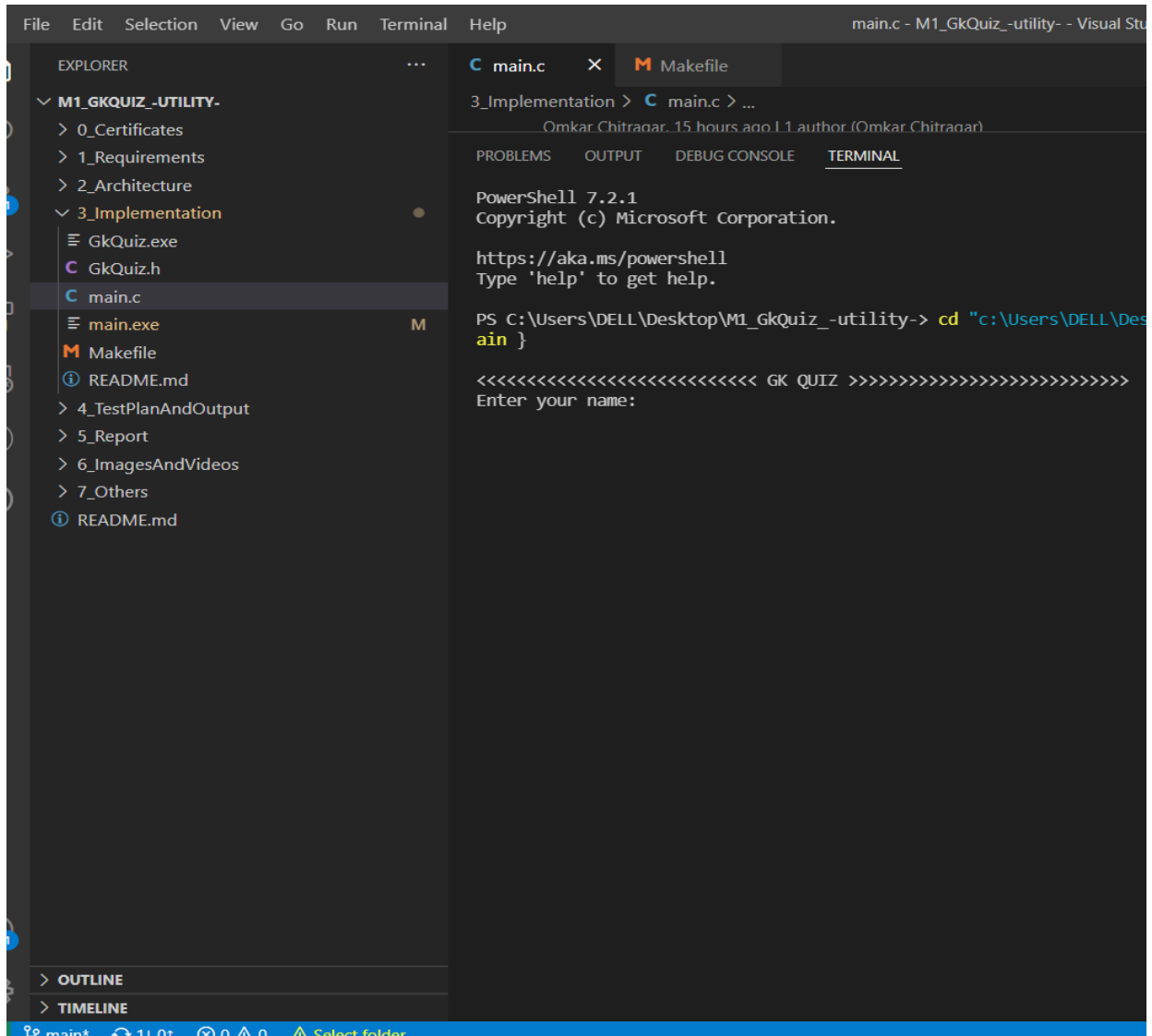
ID	Description	Expected I/P	Expected O/P	Actual O/P	Type of Test
HP01	User interface	Character username	Username	Pass	Requirement
HP02	User starts the quiz	Character Y	Start	Pass	Requirement
HP03	User ends the quiz	Character N	Result	Pass	Requirement
HP04	User restarts the quiz	Character R	Result	Pass	Requirement

Low Level Test Plan

ID	Description	Expected I/P	Expected O/P	Actual O/P	Type of Test	ID
LP01	User is asked to	Character	Views rules	Pass	Requirement	HP01
	enter username	username	of the game			
LP02	User views the rules &	Character Y	Quiz starts	Pass	Requirement	HP02
	starts the quiz					
LP03	User views the mcqs and	Character	Provides	Pass	Requirement	HP02
	enters the option	a/b/c/d	result			
LP04	User views the option to	Character Y	Continues	Pass	Requirement	HP02
	continue/end the quiz		the quiz			
LP05	User views the option to	Character N	Ends quiz & pro	Pass	Requirement	HP03
	continue/end the quiz		-vids result			
LP06	User views the option to	Character R	Restarts quiz	Pass	Requirement	HP04
	restart the quiz					

Test Plan Outputs

- **Interface Output:**



```
File Edit Selection View Go Run Terminal Help main.c - M1_GkQuiz_-utility- - Visual Studio Code

EXPLORER
M1_GKQUIZ_-UTILITY-
  > 0_Certificates
  > 1_Requirements
  > 2_Architecture
  > 3_Implementation
    GkQuiz.exe
    GkQuiz.h
    main.c
    main.exe
    Makefile
    README.md
  > 4_TestPlanAndOutput
  > 5_Report
  > 6_ImagesAndVideos
  > 7_Others
  README.md

OUTLINE
TIMELINE

3_Implementation > C main.c > ...
Omkar.Chitraoar_15 hours ago 1.1 author (Omkar.Chitraoar)

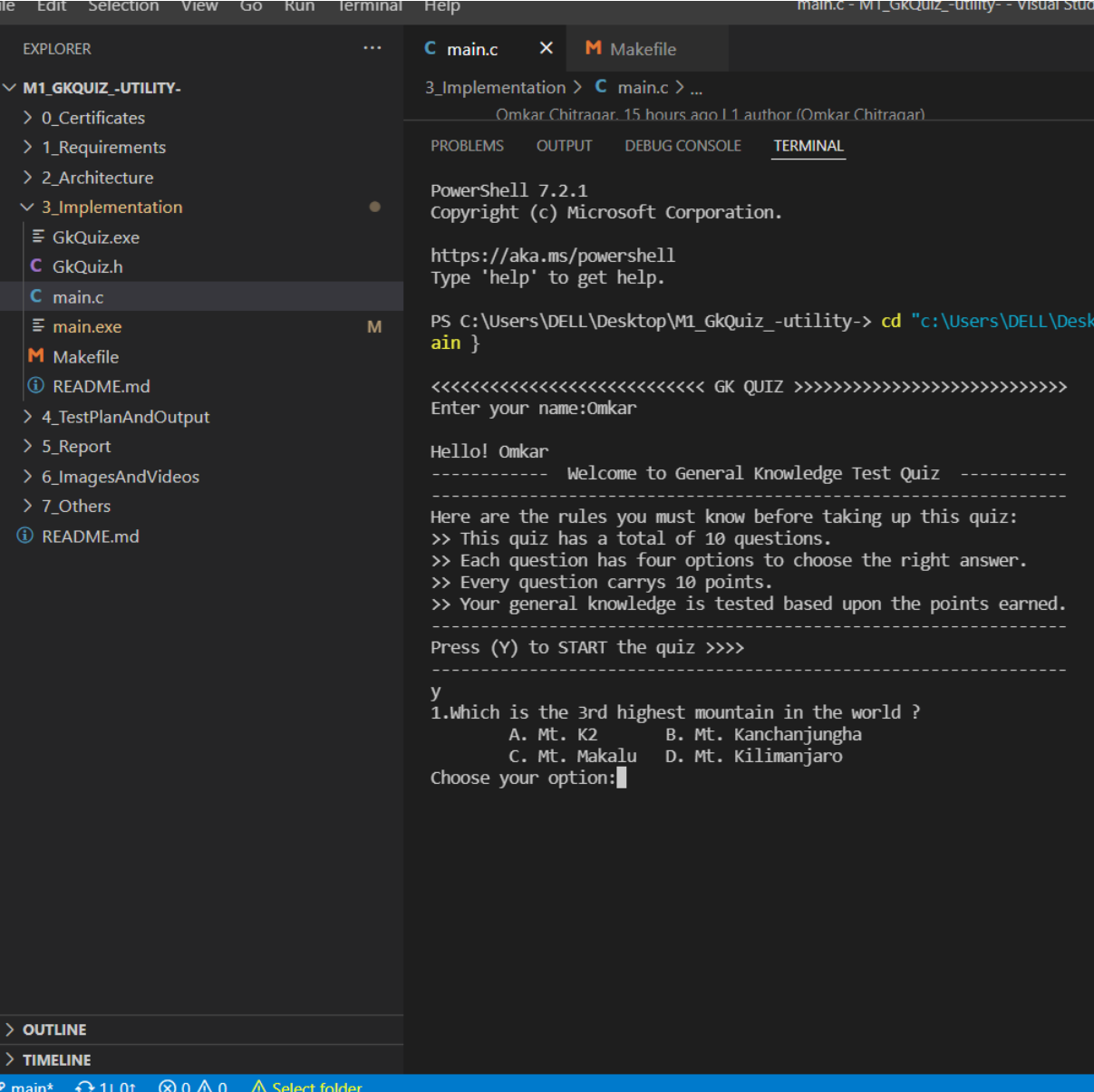
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PowerShell 7.2.1
Copyright (c) Microsoft Corporation.

https://aka.ms/powershell
Type 'help' to get help.

PS C:\Users\DELL\Desktop\M1_GkQuiz_-utility-> cd "c:\Users\DELL\Desktop\M1_GkQuiz_-utility-"
Enter your name:
```

- User enters the username and starts the quiz:



```

File Edit Selection View Go Run Terminal Help
main.c - M1_GkQuiz-utility - Visual Studio Code

EXPLORER
M1_GKQUIZ-UTILITY-
  > 0_Certificates
  > 1_Requirements
  > 2_Architecture
  > 3_Implementation
    GkQuiz.exe
    GkQuiz.h
    main.c
    main.exe
    Makefile
    README.md
  > 4_TestPlanAndOutput
  > 5_Report
  > 6_ImagesAndVideos
  > 7_Others
  > README.md

main.c
3_Implementation > main.c > ...
Omkar.Chitraoar_15 hours ago 1.1 author (Omkar.Chitraoar)

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PowerShell 7.2.1
Copyright (c) Microsoft Corporation.

https://aka.ms/powershell
Type 'help' to get help.

PS C:\Users\DELL\Desktop\M1_GkQuiz-utility-> cd "c:\Users\DELL\Desktop\M1_GkQuiz-utility"
Enter your name:Omkar

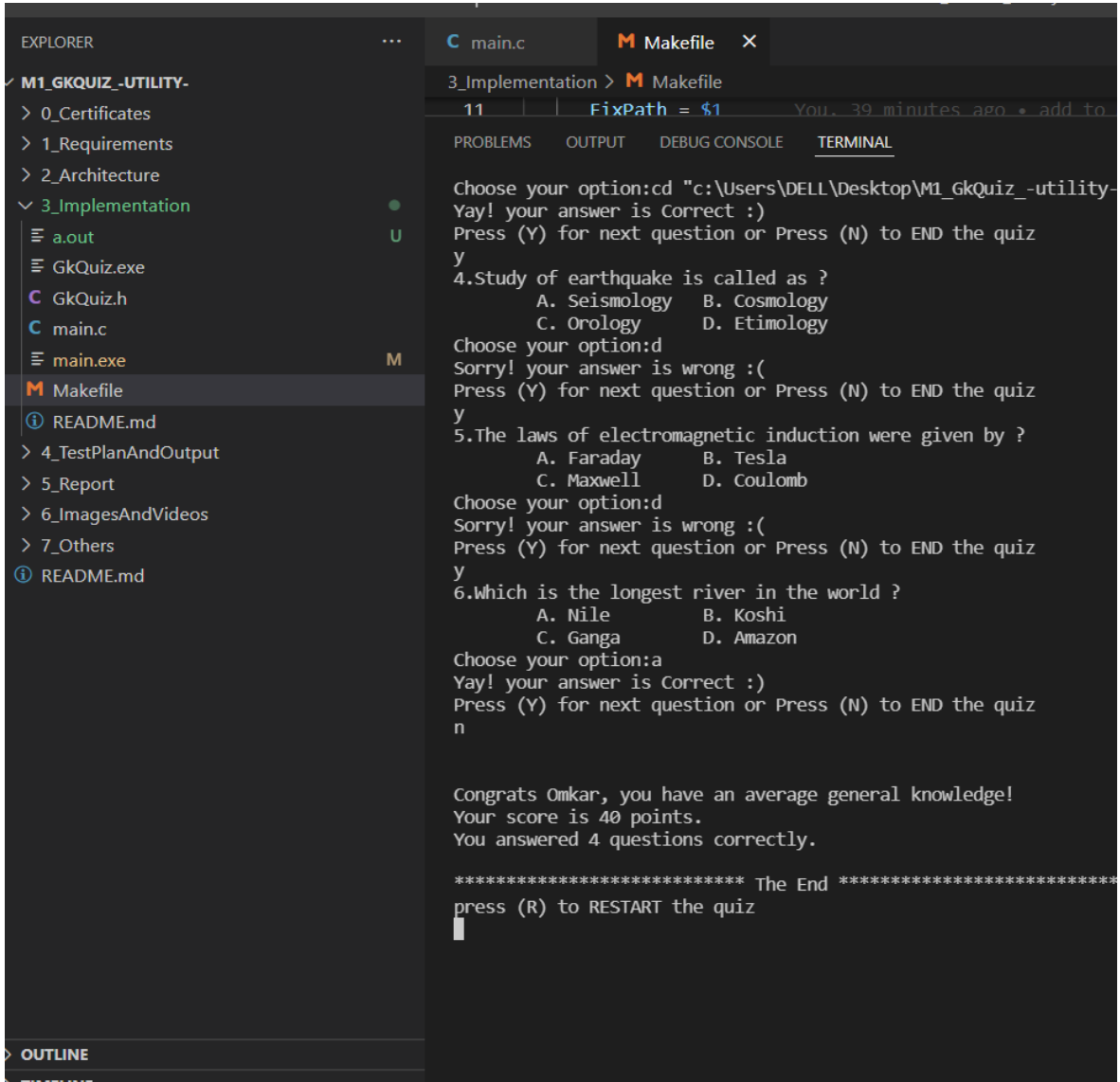
Hello! Omkar
----- Welcome to General Knowledge Test Quiz -----
Here are the rules you must know before taking up this quiz:
>> This quiz has a total of 10 questions.
>> Each question has four options to choose the right answer.
>> Every question carries 10 points.
>> Your general knowledge is tested based upon the points earned.
Press (Y) to START the quiz >>>>
y
1.Which is the 3rd highest mountain in the world ?
    A. Mt. K2      B. Mt. Kanchanjungha
    C. Mt. Makalu  D. Mt. Kilimanjaro
Choose your option:

```

- **User attempts the quiz entering option a/b/c/d and gets result output:**

[illegible]

- User ends by entering input 'N' the quiz:



```
EXPLORER
M1_GKQUIZ_-UTILITY-
  > 0_Certificates
  > 1_Requirements
  > 2_Architecture
  > 3_Implementation
    a.out
    GkQuiz.exe
    GkQuiz.h
    main.c
    main.exe
    Makefile
  > 4_TestPlanAndOutput
  > 5_Report
  > 6_ImagesAndVideos
  > 7_Others
  README.md
  OUTLINE
  TIMELINE

main.c
Makefile

3_Implementation > Makefile
11 | FixPath = $1 | You, 39 minutes ago • add to...

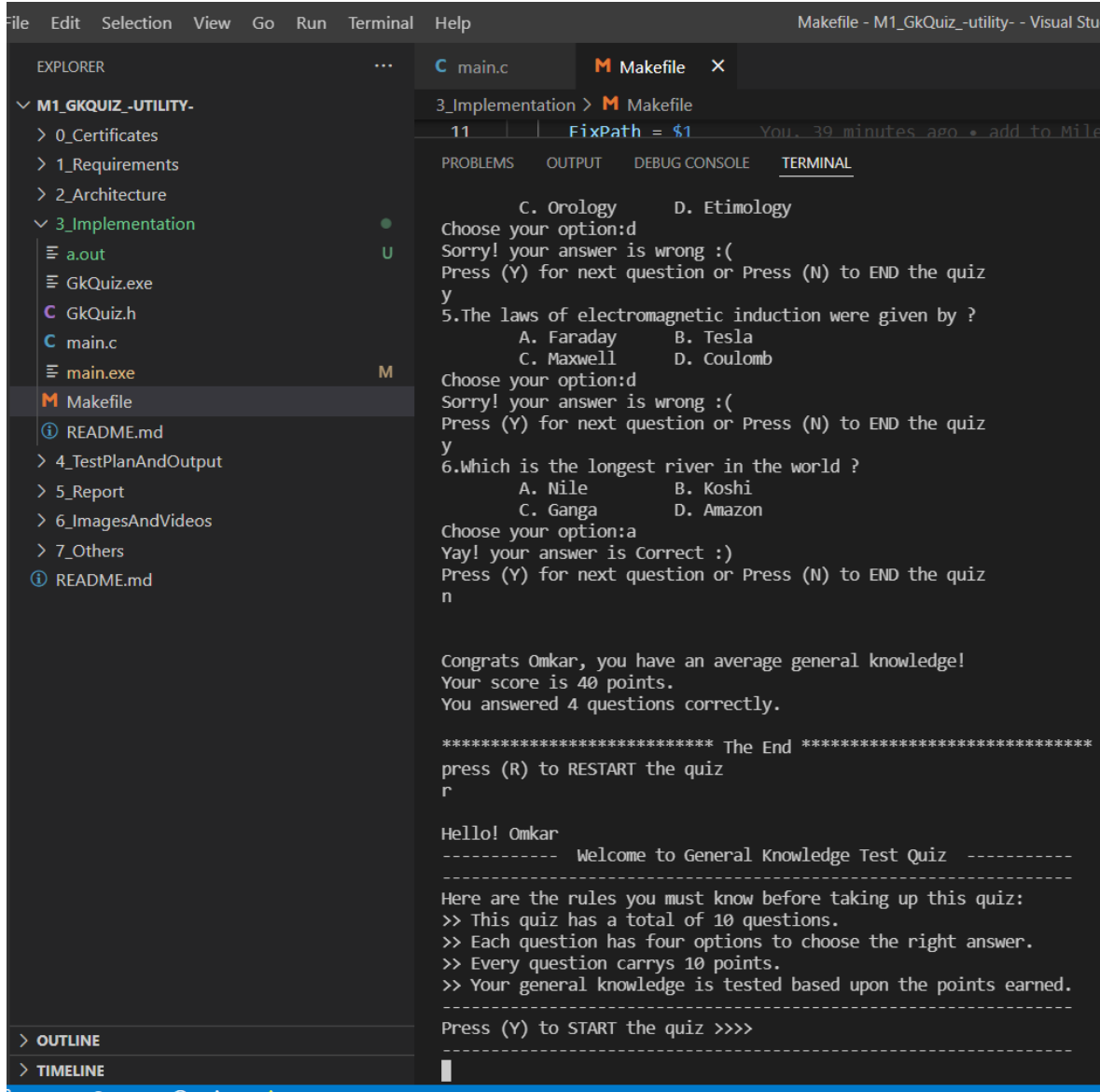
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Choose your option:cd "c:\Users\DELL\Desktop\M1_GkQuiz_-utility-
Yay! your answer is Correct :)
Press (Y) for next question or Press (N) to END the quiz
y
4.Study of earthquake is called as ?
A. Seismology B. Cosmology
C. Orology D. Etimology
Choose your option:d
Sorry! your answer is wrong :(
Press (Y) for next question or Press (N) to END the quiz
y
5.The laws of electromagnetic induction were given by ?
A. Faraday B. Tesla
C. Maxwell D. Coulomb
Choose your option:d
Sorry! your answer is wrong :(
Press (Y) for next question or Press (N) to END the quiz
y
6.Which is the longest river in the world ?
A. Nile B. Koshi
C. Ganga D. Amazon
Choose your option:a
Yay! your answer is Correct :)
Press (Y) for next question or Press (N) to END the quiz
n

Congrats Omkar, you have an average general knowledge!
Your score is 40 points.
You answered 4 questions correctly.

***** The End *****
press (R) to RESTART the quiz
|
```

- User can restart the quiz by entering the input 'R' after the quiz ends :



```

File Edit Selection View Go Run Terminal Help
Makefile - M1_GkQuiz-utility- - Visual Studio Code

EXPLORER
M1_GKQUIZ-UTILITY-
  > 0_Certificates
  > 1_Requirements
  > 2_Architecture
  > 3_Implementation
    a.out
    GkQuiz.exe
    GkQuiz.h
    main.c
    main.exe
    Makefile
    README.md
  > 4_TestPlanAndOutput
  > 5_Report
  > 6_ImagesAndVideos
  > 7_Others
  README.md

3_Implementation > Makefile
11 | FixPath = $1
You, 39 minutes ago • add to Mile

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

C. Orology D. Etymology
Choose your option:d
Sorry! your answer is wrong :(
Press (Y) for next question or Press (N) to END the quiz
y
5.The laws of electromagnetic induction were given by ?
A. Faraday B. Tesla
C. Maxwell D. Coulomb
Choose your option:d
Sorry! your answer is wrong :(
Press (Y) for next question or Press (N) to END the quiz
y
6.Which is the longest river in the world ?
A. Nile B. Koshi
C. Ganga D. Amazon
Choose your option:a
Yay! your answer is Correct :)
Press (Y) for next question or Press (N) to END the quiz
n

Congrats Omkar, you have an average general knowledge!
Your score is 40 points.
You answered 4 questions correctly.

***** The End *****
press (R) to RESTART the quiz
r

Hello! Omkar
----- Welcome to General Knowledge Test Quiz -----
Here are the rules you must know before taking up this quiz:
>> This quiz has a total of 10 questions.
>> Each question has four options to choose the right answer.
>> Every question carries 10 points.
>> Your general knowledge is tested based upon the points earned.
-----
Press (Y) to START the quiz >>>>
-----

```

THANK YOU!