

FINAL REPORT

Project Title: Online Quiz Conduction

Team Members:

Sl. No.	Student Name	Roll Number
1.	Kavali Sri Vyshnavi Devi	200010023
2.	Sahaja Nandyala	200010032
3.	Manche Pavanitha	200010027
4.	Divyamani Nidhi Agrawarti	200010014

Problem Statement :

Write a C program to simulate online Quiz conduction. The program should have features like:

- Login details entry.
- Display question.
- User enters the answer.
- Validate answer and display result.
- Total questions, attempted questions, correct answers, wrong answers, and total score.
- The Quiz should have a Re-attempt option, and in reattempt, questions should not be the same as previous.
- As an Admin, have the privilege to add new questions to the quiz.

Design Steps:

1. The main code contains some functions declared at the beginning and then the main function is declared.
2. In the main function, the welcome page is displayed using the patwriting.h.
3. After this, the main function calls the registration function, where it asks the user whether he/she is a new user or an already registered user.
4. If the user is new, then the newuser function is called. In that function, the user is asked to create a password and after creating the password, the strength of the password created is shown. If the strength of the password is poor then the user is asked whether he/she wants to change the password. For yes, the user is again directed to newuser function. After that, the user is assigned a roll number. Now, the login details function is called.
5. The login details page is common for both new users and existing users. For new users, this page is displayed after the new user function and for existing users, this page is shown after selecting no. In this function, the user is asked to enter the username, roll number, and password.
6. After the creation of a password for any user, the strength of the password will be shown.
7. After that, in the main function, the navigation_menu() function is called which takes the control to that function and in that function, there are options to start the quiz(option S), instructions about the quiz(option H), and to view the best score of each topic(option B) until then.
8. If the user chooses option B or H, then the best score and instructions pages are displayed respectively. After that, the navigation_menu() function is called and then the navigation menu is displayed again. If the user enters any option other than S, B and H then the warning() function is called which displays "Please select a valid option".
9. If the user selects option S, then topics of the quiz will be displayed and the user will have to choose a valid option to start the quiz on a particular topic. If the user enters any option other than the given option then the warning() function is called which displays "Please select a valid option".

10. After choosing the topic, questions from the file of questions of that topic will be displayed on the screen one by one. For answering the questions the user will have to type A, B, C, or D. If the user enters any other key then the question will remain unattempted.
11. After attempting all the questions, the result will be displayed (answers will be compared by a file containing answers of the chosen topic). In the result, total questions, attempted questions, unattempted questions, correct questions, wrong questions, total marks, percentage, and the remark will be given.
12. Now function review is called, the user will be given the option to review the questions. If the user chooses a Y to review then the questions along with the user's answer and correct answer will be displayed.
13. After that, the function reattempt is called in which the user will be given the option to attempt the quiz again (maximum 3 attempts are allowed). If the user chooses the option to attempt the quiz again then the process will be the same as from step 9.
14. Now, a function quiz_analytics will be called in which the user is given the option to view quiz analytics if the user chooses Y to view then the marks and percentage in each attempt will be displayed.

Files used :

1. **Question_CS.txt** - contains questions on computer programming topic.
2. **Question_GK.txt** - contains questions on general knowledge topic.
3. **Answers_CS.txt** - contains correct answers for questions on computer programming.
4. **Answers_GK.txt** - contains correct answers of general knowledge.
5. **students_CS.txt** - saves scores of the users on the CS quiz.
6. **students_GK.txt** - saves scores of the users on the GK quiz.

7. **Review.txt** - used to save the question, user answer, correct answer, and displays when the user clicks Y to review.
8. **passwords.txt** - used to save passwords of users.
9. **User_Answers** - saves username, roll number and answers entered by users.

Additional features:

- Included password option which has new user to register and existing user to login
- There is navigation option to start the quiz, to view the instructions and the best score
- There is a option to view the best score among all of them who have attempted quiz so far
- A review option has been provided to view the questions after the quiz
- There is a option to view the quiz analytics of all the quizzes attempted by the user
- Added colour to background of console window and text

Role of Team members:

S.No	Student Name	Role
1.	Kavali Sri Vyshnavi Devi	Password,strength,colour,questions,change of password (if strength is poor),report,slides,readme file.
2.	Sahaja Nandyala	Connecting code with files, clear function, report, slides, flowchart.
3.	Manche Pavanitha	Connecting code with Functions, best score, report, slides.
4.	Divyamani Nidhi Agrawarti	Questions,login details, report, slides.

References:

1. Geeks for geeks
2. C tutorialspoint

Results:

- ## 1. Display of welcome page

[illegible]

- ## 2. Asking whether the user is new or already registered

ARE YOU A NEW USER?
(Enter Y for yes and N for no)

Your choice : ☒

- ### 3. Creating password if the user is new

```

Password requirements
>> Length should be 4-10 characters
>> No spaces should be there in password
Create your password (enter here) : nobita
strength of password                : poor

```

4. Asking the user to change password if strength of password is poor

```
Your password strength is poor !
```

```
Do you want to change password ?  
(Enter Y for yes,N for no)
```

```
Your Choice : Y
```

If yes then password change page will appear else user will be directed to login page

```
Password requirements
```

```
>> Length should be 4-10 characters
```

```
>> No spaces should be there in password
```

```
Create your password (enter here) : nobita@123
```

```
strength of password           : strong
```

5. Showing assigned roll number to the user

```
Registered successfully!
```

```
Your Roll number : 4
```

```
Remember your Roll number for future purpose
```

6. Login details

```

                                LOGIN DETAILS
                                _____

ENTER USERNAME   : nobita

ENTER ROLL NUMBER: 4

ENTER PASSWORD   : nobita@123

Login successful!!!

```

7. Instruction page

```

Username   : nobita
Roll number: 4

                                INSTRUCTION PAGE
                                *****

>>> Select the topic on which you want to attempt the quiz
>>> Press the option number(A or B or C or D ) to select the respective option
>>> If you enter any option other than (A or B or C or D) your answer will be considered as unattempted
>>> Each topic consists of 5 questions
>>> Each question of 2 marks and no negative marking
>>> Enter any key twice if you don't want to attempt the question
>>> If you want to go for next question click ENTER

                                *****
                                ALL THE BEST !!!

```

8. Navigation menu

```

Username   : nobita
Roll number: 4

                                NAVIGATION MENU
                                *****

Press S to start the QUIZ
Press H for help
Press B to view the best score

Your choice : 

```

9. On choosing H, the instructions page will be displayed

```
Username   : nobita
Roll number: 4

                                INSTRUCTION PAGE
*****

>>> Select the topic on which you want to attempt the quiz
>>> Press the option number(A or B or C or D ) to select the respective option
>>> If you enter any option other than (A or B or C or D) your answer will be considered as unattempted
>>> Each topic consists of 5 questions
>>> Each question of 2 marks and no negative marking
>>> Enter any key twice if you don't want to attempt the question
>>> If you want to go for next question click ENTER

*****

                                ALL THE BEST !!!
```

10. On choosing B, the best score until then will be displayed

```
Username   : nobita
Roll number: 4

>> Best score in GK - 6
>> Best score in CS - 6
```

If option other than S or H or B is selected then warning page appears

```
Please select a valid option!!
```

11. On choosing S, quiz starts with Selection of topic

According to the topic selected the set of questions appear

```
Username   : nobita
Roll number: 4

                                Select a topic :

                                A. General Knowledge
                                B. Computer Programming

                                Your choice : B_
```


12. Display of Questions

In the same way remaining questions will be displayed

Question 1

In which library the key word clrscr() is used ?

- A. conio.h
- B. string.h
- C. stdio.h
- D. stdlib.h

Your Answer : A

13. Result

Username : nobita
Roll number: 4

RESULT

Total Questions	- 5
attempted Questions	- 5
unattempted questions	- 0
Correct Questions	- 3
Wrong Questions	- 2
Total Marks	- 6
Percentage	- 60%
Remark	- GOOD

14. Review

If yes then the following evaluated answer sheet appears If no then reattempt page appears else warning page appears

Username : nobita
Roll number: 4

REVIEW

Question 1

In which library the key word clrscr() is used ?

- A. conio.h
- B. string.h
- C. stdio.h
- D. stdlib.h

Your Answer : A
Correct Answer : A

Question 2

What is the output if we print the given input ?
printf("%d",010);

- A. 10
- B. 8
- C. 9
- D. 11

Your Answer : B
Correct Answer : B

Question 3

Which of the following is not a basic data type in c language ?

- A. int
- B. float
- C. structures
- D. char

Your Answer : D

Correct Answer : C

Question 4

Under which data type 'a' comes?

- A. char
- B. int
- C. float
- D. double

Your Answer : A

Correct Answer : A

Question 5

What does keyword char represent?

- A. integer
- B. floating point
- C. array
- D. character

Your Answer : C

Correct Answer : D

15. Reattempt option

If yes then set of questions will be displayed if no quiz analytics page will be displayed else warning page appears

Username : nobita
Roll number: 4

Do you want to attempt the quiz again?
(Enter Y for yes or N for no)

Your choice :

16. Quiz analytics

If yes then quiz analytics will be shown else then user exits from the quiz

```
Username   : nobita
Roll number: 4
```

```
Do you want to view the quiz analytics?
(Enter Y for yes and N for no)
```

```
Your choice :Y_
```

```
Username   : nobita
Roll number: 4
```

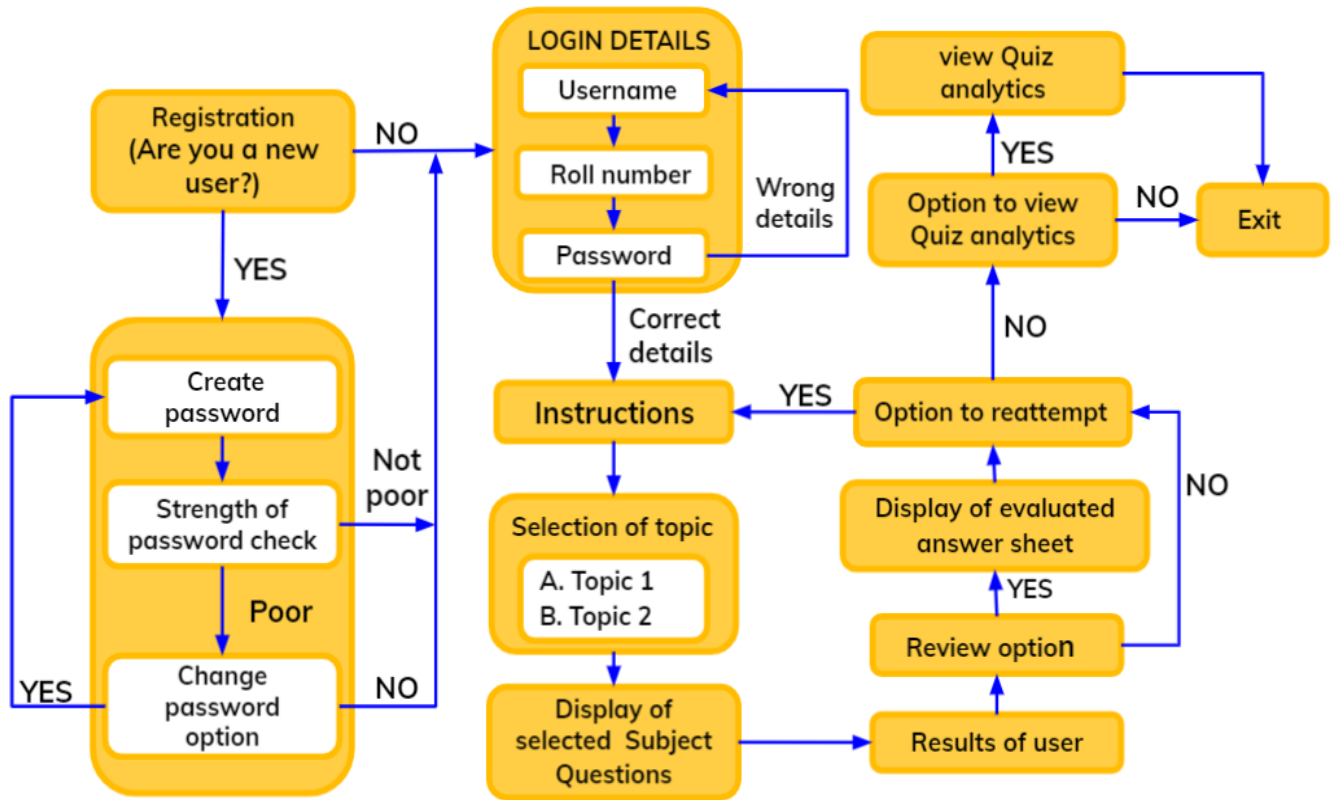
QUIZ ANALYTICS

```
*****
```

	Topic	Marks	Percentage
--	-------	-------	------------

Attempt 1	B	6	60%
-----------	---	---	-----

FLOW CHART



*****XXXXXXXX*****