

CS384 2020 Project 1 - Quiz Portal

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Git Requirements:

1. One of the partner needs to fork out the project, then place for merge request. I will check in the git logs.
2. q2.csv, q3.csv needs to be completed with at least 10 questions each.
3. At least 5 commits and each commit should be of 6 words.

You are required to develop a quiz portal using a input csv file.

The input file is a csv (with , delimited) in the following format: (see quiz_wise_questions \q1.csv) for reference

- ques_no: Goes serially as 1...n
- question: the exact question. Assume that the question does not have , character.
- option1: choice 1
- option2: choice 2
- option3: choice 3
- option4: choice 4
- correct_option: the correct choice among 1, 2, 3, 4. Exactly 1 option will be correct.
- marks_correct_ans: Marks to be assigned if the answer is correct.
- marks_wrong_ans: Marks to be deducted if the answer is correct.
- compulsory: If the tag is yes, then it need to be answered mandatory. If the user does not answer it, it needs to be treated like a wrong answer.
- time=20m: Is only present in line 1, the program needs to extract time time and display a ticking clock continuously. Once the timer is expired, it will auto submit the quiz. Lets say the user is attempting a question, and wrote option **C** as the choice, but did not press **Enter** key to submit and the timer expires. In such a case, it need to be treated as a non submitted question (i.e., as if the user did not attempt the question at all)

As an example: see the 2nd line of the csv

1 , What is the capital of India , Mumbai , Chennai , New Delhi , Kolkata , 3 , 5 , -1 , n ,

Here the user will be asked to answer the question:

What is the capital of India, and is provided with 4 options,

Mumbai , Chennai , New Delhi , Kolkata.

The next, number 3, represents the choice which is correct, Here the 3rd option - New Delhi is correct.

Next, the number 5 indicates the marks that needs to be assigned if the answer is correct,

Next, the number -1 indicates the marks that needs to be deducted if the answer is wrong,

n indicates that the question is **not** compulsory, so the user can skip the question and move to next if s/he does not wish to attempt.

You need to make use of sqlite3 database for the project.

Database Name: **project1_quiz_cs384**

Table 1: **project1_registration**: username, password(hashd version), name, whatsapp number

Table 2: **project1_marks**: roll, quiz_num, total_marks

1. Ask the user to register / login. The registration page should have the following: a) Name b) Roll c) Password d) Whatsapp number. Registration information needs to be stored in sqlite3 database. Password needs to be stored in a hashed manner in the database. Name this table as Table 1: **project1_registration**
2. Login: username = rollnumber and password = chosen by user in Step 1.
3. Every users final marks needs to be stored in the database. Table 2. If marks for a quiz are already present, delete that quiz marks for that particular roll number and re-insert (or update)

This is how the interface should appear on the command line window. On starting program, the user will be asked to login, if the user is not registered s/he will asked to register. Once user logs in, the user is displayed questions one by one. There should be a timer that is ticking down second by second.

Questions will be stored in the **quiz_wise_questions** folder. The quiz needs to be auto-read based on the filename. **q1, q2, q3... qn** represent the quizzes. So, when the user logs in s/he gets to choose among which quiz s/he needs to attempt. Once s/he choose a quiz number, say q1, then after submission of quiz, two tasks should happen: Task1) Final marks needs to be entered into the database with roll number, quiz number and total_marks (Table 2). Task2) The individual responses for every roll, for every quiz needs to be stored in **quiz_wise_responses** folder as **quiz_number_roll_number.csv** (E.g., q1_1701ME01.csv). The first 10 columns will be same as q1.csv and three new columns needs to be added: **marked_choice, Total, Legend**

Please refer

Projects\P1 Quiz_via_CSV\individual_responses\q1_1701ME01.csv

The file is self explanatory. **marked_choice** contains the choice marked by the user for every question. **Total** provides the total for the Legends, as you can see in the **Legend** column.

These 7 lines are displayed always on the terminal window (without the L1, L2, ..., L7), irrespective of question/quiz:

L1) Timer: Countdown (Take the minutes from the first line of the quiz_input.csv file)

L2) Roll:

L3) Name: Fetch from database

L4) Unattempted Questions: Map the following keyboard Shortcut (Ctrl+Alt+U). Once a user

presses keyboard Shortcut (Ctrl+Alt+U), this line shows the question(s) that are un-attempted till now.

L5) Goto Question: Map the following keyboard Shortcut (Ctrl+Alt+G). Once a user presses keyboard Shortcut (Ctrl+Alt+G), the user can goto any question.

L6) Final Submit: Map the following keyboard Shortcut (Ctrl+Alt+F). Once a user presses keyboard Shortcut (Ctrl+Alt+F), the final submission is done with a confirmation: Do you want to final submit? If yes is entered, the submission is done.

L7) Export Database into CSV: Map the following keyboard Shortcut (Ctrl+Alt+E). Once a user presses keyboard Shortcut (Ctrl+Alt+E), the database entries for Table 2 is exported to csv file. If n quizzes are taken, then n quiz csv are exported with quiz1.csv ... quizn.csv in the same directory. Every quizn.csv will have the records of individual students who gave that test.

Command line display

Question 1) What is the capital of India?

Option 1) Mumbai

Option 2) Chennai

Option 3) New Delhi

Option 4) Kolkata.

Credits if Correct Option: 5

Negative Marking: -1

Is compulsory: No

Enter Choice: **1, 2, 3, 4, S** : **S** is to skip question

Also after the submission is done, the user will be shown the following menu on the commandline:

Total Quiz Questions:

Total Quiz Questions Attempted:

Total Correct Question:

Total Wrong Questions:

Total Marks: obtained marks/total marks

and roll, quiz_num, total_marks needs to be entered into the Table 2 of the database.