First Test

In one of Mr. Moses's Computer Programming (CSC201) classes, he stressed the importance of conducting the first test, noting that they were beyond the seventh week. He highlighted the challenge of managing an increased number of students and expressed concerns about timely grading. In response to this issue, some students suggested leveraging the Computer-Based Testing (CBT) service on the PAU E-learning portal.

However, Mr. Moses raised concerns about the difficulty of creating a question bank, emphasizing the manual input required for each question and its options. He also pointed out that the test-taking process would be hindered without internet access.

After careful consideration and deliberation, they concluded that the optimal solution would be the development of a standalone Computer-Based Testing (CBT) Application specifically tailored for the course. He requires that the system meets the following criteria:

- The application must be equipped with features allowing the bulk upload of questions.
- The application must have features facilitating the bulk upload of user login details.
- In case of incorrect login information, the application should prompt the user with a notification of wrong login details and request them to re-login.
- The application should enable users to input character options via the keyboard.
- Users should be able to input either lowercase or uppercase characters for each option.
- If an incorrect choice character is entered, the application should display an error message, prompting the user to re-enter a valid choice or option.
- The application should retain the option entered by the user for each question.
- Users should be provided with an option to skip a question.
- Users should have the option to return to skipped questions.
- Upon completing the test, the application should present the user's score.
- The application should offer users the option to view their test script.

Using the various concepts (functions, arrays, pointers, strings, data types, control, vectors, map, file handling, structures, etc) you were introduced to in class, Mr. Moses has tasked you to help build the standalone Computer-Based Testing (CBT) Application.

Programming Language Choice: C++

Due Date: 7th January 2024 Time: 11:59pm

Caution

- You will be penalized for late submission.
- You will be penalized if you copy or allow someone to copy your source code.

The project is worth 10% of the overall mark for the course.