

Programming Project / C++ -- Game: Who Wants to Be a Millionaire

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I. Task Description

Student 1 is responsible for the main UI and game:

- loading the questions and the answers (*function loadQuestions*)
- clearing the terminal (*clearScreen*)
- the direct choices made by the user (through *function startGame*)

Student 2 is responsible for statistics:

- displaying the leaderboard (via *function displayLeaderboard*)
- viewing the game history (*function viewGameHistory*)
- saving the score (*function saveScore*)

II. Data Structures used by the Team

The following classes will be used:

- Question: char question[256], char answers[answers_nr][100], int correct_index;
- Player: name[name_length], float score;

where

answers_nr is defined as `#define answers_nr 4`

name_length is defined as `#define name_length 50`

III. File Structure

The following file will be used:

'score.txt' – a file in which the score and name will be stored

`#!/$ <name_1> <score_1>`

`#!/$ <name_2> <score_2>`

...

where # - pending and \$ - validated

IV. Interacting with Executables

Application 1 will offer the following options:

`./ui.exe startGame`

To begin the game – can you become a millionaire?

Application 2 will offer the following options:

`./stats.exe displayLeaderboard`

To take the score.txt and generate the leaderboard

`./stats.exe viewGameHistory`

Through this function, you can choose a name and show the game history for the corresponding player

secret option 4 which provides access to validating scores

You can save the score after playing the game