UNITED INTERNATIONAL UNIVERSITY

CSE 1112 Structured Programming Language Laboratory

Home Assignment

Deadline: 07.05.24 (before 11:59 PM) | FULL MARKS: 20

1. Suppose You have three text files. LogIn.txt contains **name (String type)** and **Password (String type)** information. Team1.txt contains 11 players' information such as **name (String type), Age (Integer type), Runs (Integer type), Wickets (Integer type).** Team2.txt contains another team's 11 player's information like the team1.txt.

Tasks:

- A login page appears first, where you must enter the correct username and password to proceed to the next steps. If any of the information provided is incorrect, it will display "**Invalid information**".
- After successfully logging in, a menu is displayed where you must enter a specific number to proceed with your choice. When you enter '**q**' or '**Q**', you will exit from the menu with a "**Thank you**" message.

Create a structure named **Cricketer** which can store the following information: Name (a string), Age (an integer), Runs (a integer), Wickets (a integer) and Rating (a integer).

Create two global arrays of Cricketer structures (team1[] and team2[]).
In the main function, you can take input from the files (team1.txt and team2.txt) and store it into respective arrays and also calculate the Rating of that player at that time.
Use the following criteria to rate a player.

- Per wicket, Player will be rated by 8.
  (E.g., if he gets 3 wickets then 3*8 = 24 will be given to him)
- Run<20 Player will be rated by 4
- Run>=20 and Ran<=50 Player will be rated by 12
- Run>50 and Run<=75 Player will be rated by 20
- Run>75 Player will be rated by 24

Then utilize the function **updateRun**(-) to prompt the user to specify which team's player's run they wish to update. Also, update the runs of a cricketer whose name has been provided by the user. Use the **displayTeam1Info**(-) function to show the updated information of the first team. Similarly, utilize the **displayTeam2Info**() function to display the updated

information of the second team. Following this, implement a **YoungerPlayer**(-) function to prompt the user for which team's younger player's information they wish to display. Based on their choice, display the corresponding information.
Next, implement a **MostRatedPlayerTeam1**(-) function to display only the information of the player who achieved the highest rating in the first team and store it in another text file named **score.txt**. Similarly, create a **MostRatedPlayerTeam2**(-) function to display only the information of the player who achieved the highest rating in the second team and store it in the **score.txt** file. Then, write a **ManofTheMatch**(-) function that reads input from the score.txt file, compares the ratings, and displays only the player's information whose rating is the highest among the two teams.

- When user will enter 1: it will display the team1's information along with the rating score.
- When user will enter 2: it will display the team2's information along with the rating score.
- When user will enter 3: it will again ask user to enter a choice about which team's player's run s/he wish to be updated.
    1. If user enter 'a' then it will be ask to enter the player's name. After matching by the player name you can update the run via console (scanf).
    2. If user enter 'b' then it will be ask to enter the player's name. After matching by the player name you can update the run via console (scanf).
- When user will enter 4: it will again ask user to enter a choice about which team's younger player information s/he want to be displayed.
    3. If user enter 'a' then it will be displayed team1's most younger player
    4. If user enter 'b' then it will be displayed team2's most younger player

- When user enter 5: It will display the Most Rated Player among Team1.
- When user enter 6: It will display the Most Rated Player among Team2.
- When user enter 7: It will display the **Man of the Matc**h among two teams.

NB: If any instance of copying from ChatGPT or any other source is detected, the entire team will receive a penalty of -20.