***COMP7039 CI Project Brief***

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Runners like to compete with each other in an attempt to improve their times.

A series of races takes place in different venues around Cork County.

Records are kept of the runners and the races.

*Races.txt* holds the venues for the races and target-times (minutes) for race-course completion. Content format: *Race\_venu, Race\_course\_target\_completrion\_time*

e.g. Currabinny, 30

*Runners.txt* holds the name and the identification code for each runner registered. Content format: *Runner name, ID\_code*

e.g. Anna Fox,CK-24

When a race takes place, a file is created for that race which holds the identification code of each runner and his/her completion-time (seconds). Content format: *ID\_code, time*

e.g. CK-24,3040

*currabinny.txt* holds the ids and times (seconds) for each runner at Currabinny:

*glengarriff.txt* holds the ids and times (seconds) for each runner at Glengarriff:

*Adrigole.txt* holds the ids and times (seconds) for each runner at Adrigole:

*Conna.txt* holds the ids and times (seconds) for each runner at Conna:

*Dunmanway.txt* holds the ids and times (seconds) for each runner at Dunmanway:

Your group/team has been asked to complete a partially-completed application to help the organisers maintain, view and edit these records.

The application should offer the following menu of options repeatedly until the user chooses to quit the application:

1. Show the results for a race
2. Add results for a race
3. Show all competitors by county
4. Display the podium-places of each race
5. Display all the race times for one competitor
6. Show all competitors who have won a race
7. Show all competitors who have not taken a podium-position in any race.
8. Quit

1 – Show the results for a race

Show the user the list of races; request the user to select a race from the list (using a number); system display the runners' ID codes together with their times in minutes and seconds.

Display the identification codes for the podium-places of the race.

2 – Add results for a race

Ask the user for the race's venue and add it to the races file. Display a list comprising competitors’ names from the runners file; ask the user for the race-time for each competitor, (0 if they did not run the race). Store the results (ID code and time ) in a newly created file e.g. fota.txt if the venue was Fota.

3 – Show all competitors by county

List all the competitors but organise them alphabetically, by county, counties alphabetically .

4 – Show the podium-places for each race

List the races along with the ids of the podium-places runners of each race. Ensure that you employ a nicely formatted table for displaying output.

5 - Show ***all*** the race times and finishing-positions for one competitor

Display a list of runners to choose from. Once the user chooses a runner, display runner’s name and ID code. For each race that he/she ran in show competitor’s time and finishing-position in the race. The time is shown in minutes and seconds.

6 – Show all competitors who have won a race

List the ID codes and names of those runners who have won at least one race.

7 – Show all competitors who have not taken a podium-position in any race.

List the ID codes and names of those runners who have not achieved a 1st, 2nd, or 3rd place finish in any race.

8 - Quit The application quits.

**Note:** For this project**,** *podium-places* refers to 1st, 2nd, & 3rd places.

***Brief End!***