# CS112- Section H
# Assignment-1
# Group size: Max. 1 student
# Deadline: 6th February 2024

**Statement**

Develop a console-based car racing game in C++. The game should feature two cars moving on a racing track, and each car's position and points should be stored in a structure. The player can control each car through the keyboard, and the game loop should continuously update the display based on user input. The game should include a scoring system where each car accumulates points during the race. Your code should provide a way for the player to quit.

**Requirements (These are just broad guidelines, feel free to use your own logic):**

- Define a structure named Car that includes the following members:
  - position: an integer representing the car's position on the track.
  - points: an integer representing the accumulated points for the car.
- Use a nested structure named RacingTrack that contains the following members:
  - trackLength: an integer representing the length of the racing track.
- Two instances of the Car structure to represent Car 1 and Car 2.
- Display a racing track with a specified length (e.g., 30 characters).
- Allow the user to control each car's movement using specific keys (e.g., 'a' and 'd' for Car 1, 'j' and 'l' for Car 2).
- Ensure that cars cannot move beyond the track boundaries.
- Implement a scoring system where each car accumulates points during the race.
- Display the current position and points of each car during the game.
- Implement a quit functionality (e.g., pressing 'q') to exit the game.
- Use a game loop to continuously update and display the game state.

**Submission Guidelines:**

- Implement the game logic using the provided structures and nested structures.
- Include comments in the code to explain the logic and functionalities.
- Provide a brief README file explaining how to compile and run the program.
- Feel free to consider additional features or improvements to enhance the gaming experience.

A sample visual representation environment is shown as follows; you may use your own representation.

```
**Visual Representation:**

+------------------------------+
| Track: |---------------------|
|        | C1             C2   |
|        |-----Track-----|     |
+------------------------------+
| Controls:                    |
| - Car 1: 'a' (left), 'd' (right)|
| - Car 2: 'j' (left), 'l' (right)|
| - Quit: 'q'                  |
+------------------------------+

**Example Display:**
+---------------------+
| ------------------- |
|          C1         |
|             C2      |
| ------------------- |
+---------------------+
Points: Car 1 - 10 | Car 2 - 8
Press 'a', 'd', 'j', 'l' to move, 'q' to quit.
```