UNITY MULTIPLAYER DEVELOPER 4-DAY ASSESSMENT

Goal:

Create a small multiplayer game using Photon Fusion in Unity. The game should allow multiple players to connect, move around, collect items, and keep score. At the end of the game, the final results should be saved to a server or a file.

WHAT YOU NEED TO BUILD:

1- Multiplayer Connection

- A Host can create a game.
- Other players (Clients) can join.
- Players enter a name before joining.

2- Player Movement

- Each player spawns with a unique color and their name showing.
- Players can move around.
- Movement is synced across all players using Photon Fusion.

3- Item Collection and Scoring

- Items (like coins) appear randomly in the scene.
- When a player collects an item:
 - The item disappears for everyone.
 - The player's score goes up.
 - All players see the updated scores.

4- Scoreboard UI

A simple UI showing all players' names and current scores in real time.

5- Game Over

- The game ends when one player reaches a set score (e.g., 5 points).
- Show a final scoreboard with scores and the winner.

6- Saving Game Results

- When the game ends, save this data:
 - Match ID (a unique code or timestamp)
 - Player names and scores
 - Who won
 - How long the match lasted
- Save it by:
 - Sending it to a simple online server (via HTTP request), or
 - Writing to a local file (simulating a backend)

WHAT YOU MUST SUBMIT

• Upload the full project to GitHub or send it as a ZIP file.

1- README File

- Mention:
 - Unity version and tools you used
 - Which Photon Fusion mode you used (Host or Shared) and why
 - How to run the project
 - How and where the match results are saved
 - Any bugs or areas for improvement

2- Demo Video (1 to 3 minutes)

- Record and share a video showing:
 - Players joining the game
 - Collecting items and scoring
 - Game ending
 - Match results being saved (with a log or message shown)

TIME LIMIT

You have 4 days (96 hours) to complete and submit everything.