

# CSE-411L: INTRO TO GAME DEVELOPMENT LAB

## Lab 7: Unity API (QOL API, Timescale, Vector3 Methods, Unity UI)

### Objective:

In this lab we further explored the Unity API.

### Tasks:

1. **Open or create a Unity scene.**
2. **Create a player cube.**
  - Implement movement controls for the player cube using the axis input. This should allow the player to move forward, backward, left, and right.
3. **Set up the camera.**
  - Configure the camera to a top-down view, providing a bird's-eye perspective of the scene.
4. **Instantiate enemy cubes.**
  - After a 3-second interval, randomly instantiate enemy cubes on the plane.
  - Ensure that the instantiation process is confined to the plane's boundaries.
5. **Initialize game objects.**
  - At the start of the game:
    - Set the player cube's color to blue.
    - Set the enemy cubes' color to red.
    - Initiate enemy movement towards the player.
6. **Implement game over condition.**
  - When an enemy collides with the player:
    - Pause the game.
    - Display a "Game Over" message on the screen.
7. **Handle enemy interaction.**
  - When an enemy is clicked:
    - Stop the enemy's movement.
    - Destroy the enemy after a 1-second delay.
8. **Implement a score system.**
  - Display the current score on the screen.
  - Increment the score each time an enemy is destroyed.