

CSE 410 (Computer Graphics Sessional)

Problem Statement:

In this assignment, you are required to implement a simple 2D Pong game using OpenGL.

Requirements:

- Two paddles controlled via keyboard.
- A bouncing ball that interacts with paddles and screen boundaries.
- Game over detection when the ball goes out of bounds.
- Game reset functionality.

Controls:

Key	Action
e	Move left paddle up
b	Move left paddle down
p	Move right paddle up
n	Move right paddle down
t	Toggle pause/play
r	Reset the game

Helper Code:

You may use this function to draw a **text string** on the OpenGL window at a specified 2D position using bitmap fonts.

```
void drawText(const string& text, float x, float y)

{

    glRasterPos2f(x,y);

    for (char c: text)

        glutBitmapCharacter (GLUT_BITMAP_HELVETICA_18, c);

}
```

Parameters:

- text: The string to display.
- x: X-coordinate of the text position in OpenGL's 2D coordinate space.
- y: Y-coordinate of the text position in OpenGL's 2D coordinate space.