Lab 2 Vertical Scrolling

Deadline Thursday 8th Feb @ 3 p.m.

Lab Exam Tuesday 13th Feb @ 11 a.m.

**Updated:**

**Draw Terrain**

From a 1D array of integers create a level for a vertical scroller.

Example ( Don’t use this exact example , your level will require more data)

int levelData[] =

{ 1,1,1,1,0,0,0,1,1,1,

1,1,1,1,0,0,0,1,1,1,

1,1,1,1,0,0,0,1,1,1,

1,1,1,1,0,0,0,1,1,1,

1,1,1,1,1,0,0,0,1,1,

1,1,1,1,0,0,0,1,1,1,

1,1,1,1,0,0,0,1,1,1,

1,1,1,1,0,0,1,1,1,1,

1,1,0,0,0,0,0,1,1,1 };

Create an array of rectangle shapes that coincide with the data in the array.

Draw the terrain, move it down each frame.

Add a player that can move left and right.

Add collision detection for the walls of the terrain.

Game is completed when the terrain goes off screen.

Add player firing multiple projectiles. Projectiles can destroy enemies.

Add Enemies firing projectiles. Add enemies to the levelData[].

Add collectables (add to levelData[]). Example -increase score, add player ability

When player dies “Game Over” screen and press space to restart.

When player winds “Win“ screen and press space to restart.

**70 %** for implementing the above:

**20%** for extra feature:

Marked on the coding difficulty.

Examples :

Add Gaming feature

Add more efficient collision detection.

**10%** 40 to 50 seconds of challenging fun gameplay.