Top Down Side-to-Side Straight Shooter
Prefab ReadMe

Tutorial Video: https://youtu.be/z2dFwjNHZ_4

Definition:

This Unity prefab consists of a square player object that moves between two set points on the game scene. It holds a circular weapon that can swivel between angles to fire bullets – all customizable to your game. This prefab is meant for top-down Unity games.

Scripts:

FinalBossMovement.cs: Controls to move shooter player (aka: FinalBoss) between two points

FBWeapon.cs: "FinalBoss" weapon script with parent FBWeapon class to fire bullets from a firepoint

AutomaticWeapon.cs: Subclass of FBWeapon with automatic firing override function, specifically destroying bullets after a lifetime

BulletCollisionHandler.cs: Attached to bullets, destroy upon collision

SwivelHead.cs: Attached to FBWeapon and can rotate between certain angles

Game Objects:

topPoint: Placed on screen as movement boundary

bottomPoint: Placed on screen as movement boundary

FBWeapon: Circle sprite used to attach AutomaticWeapon script or SwivelHead script fo customization

FinalBoss: Square sprite used for shooter player, can be customized

firePoint: Attach to FBWeapon script, point from which bullets fire

bulletPrefab: Attach to FBWeapon script, customize how bullets look

Unity Store Download:

1. Open your Unity project
2. Go to Window > Asset Store
3. Search for "Top Down Side-to-Side Straight Shooter Prefab" in the search bar
4. Download it and all its assets
5. Import into your Unity game
6. (Note: this prefab is publicly available to download from a Google Drive folder here)
   a. In your Unity game, right click inside the Assets folder > Import Package > Custom > Select prefab download
   b. Uncheck "Tests" folder, you only need "Scripts" folder checked

Implementation:

1. Drag your shooter to where you'd like it to be in the game
2. In the "FinalBoss" folder, adjust the x,y-coordinates for the topPoint and bottomPoint game objects
   a. X coordinates should be the same as the shooter's
   b. Y coordinates are inverses of each other (e.g. 7 and -7)
   c. Z should be set to 0

K Atkinson CS 383 Prefab Assignment / Oral Exam

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Customization:

1. The following can all be customized on the following in the Hierarchy:
   a. "TopDownSideotSideStraightShooter"
      i. Player sprite, player speed, top point prefab, bottom point prefab, bottom point Y (for boundary checking in scripts)
   b. "FBWeapon"
      i. Weapon sprite, bullet sprite, fire speed, rounds per minute, bullet velocity, fire point, bullet lifespan, swivel angles