Intro to Game Dev

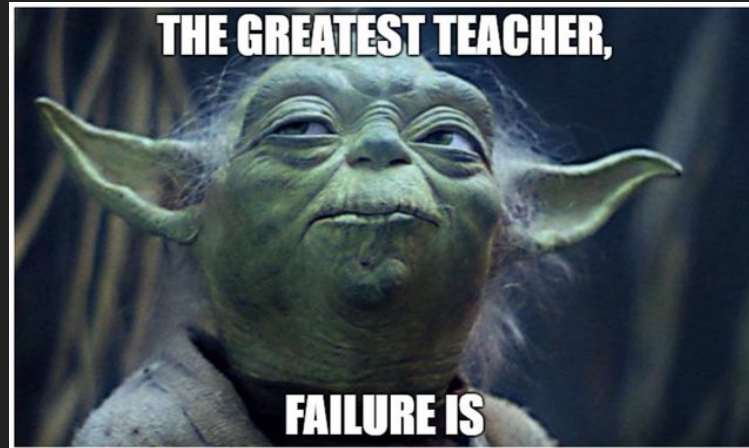## With Construct 3

So, you wanna be a Game Developer?

"Making games is hard!"

Katijah Wellings Thomas, Game Designer

THE GREATEST TEACHER,

FAILURE IS

Game Design Example

Player Experience

Twitchy action, skillful.

Theme

Futuristic space, like Star Wars.

Action!

1. You are going to build a twitchy, top-down shooter (shmup) game. Think of a **theme** for your game.

2. Think of a **name** for your shooter game.
   (You might change the theme and name later.)

3. Open a new Construct 3 project, name and *save* the project with the game's name.

4. Share your idea! Tell one other game developer about your game.

Game Dev in Construct
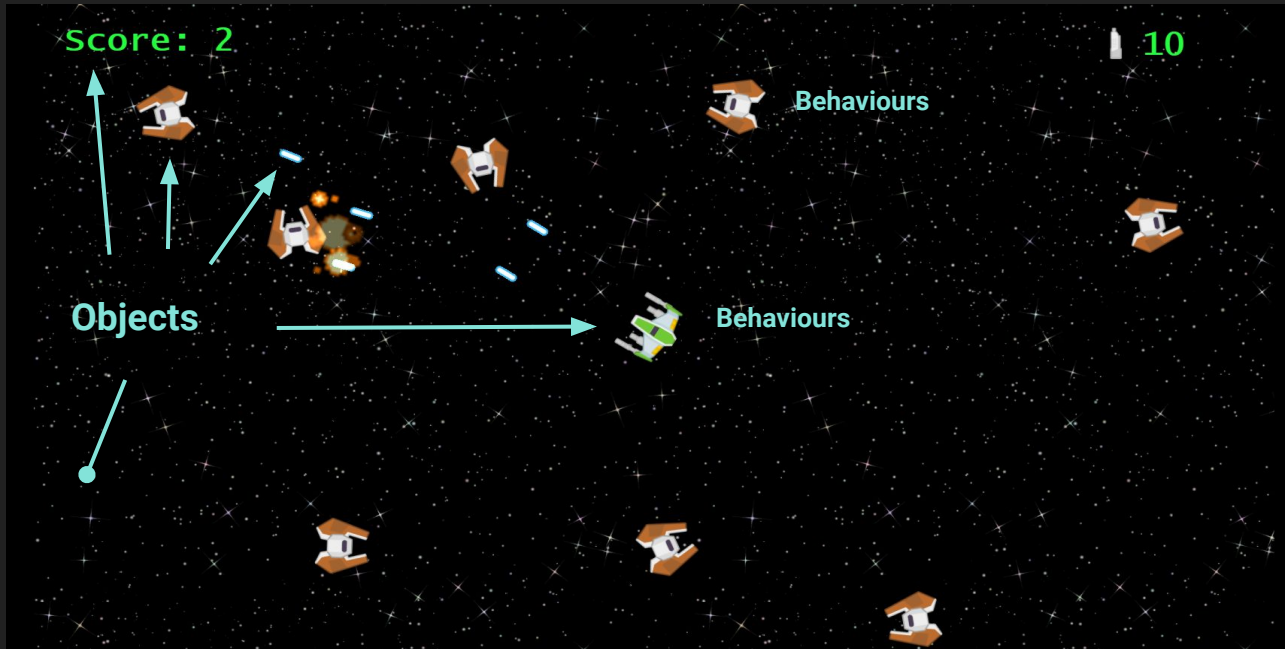
Action!

1. Find a seamless background image online.
2. Right-click, Insert new object to add a Tiled Background using the image.
3. Resize it and move it to the top-left of the canvas.
4. Lock the background in place.
5. Press Play to see it in game.

Sprites

2D images used in games.

Most objects in the scene will be a sprite.
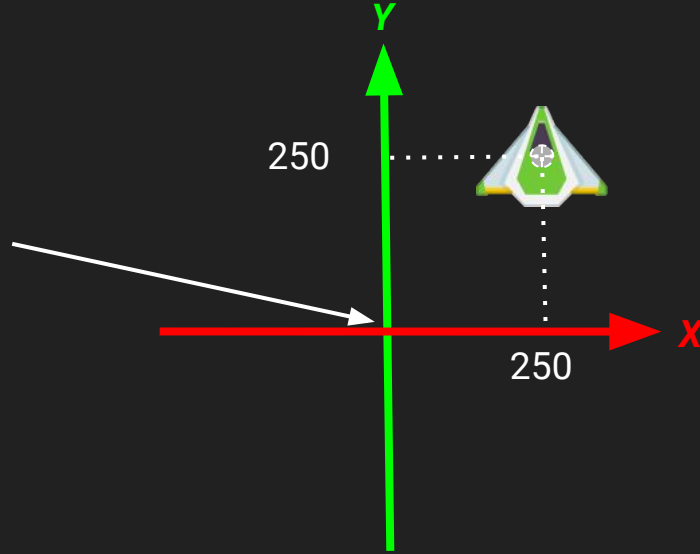
Sprites usually have transparent backgrounds.

Position and Coordinates

X and Y coordinates (x, y) represent numbers of pixels along axes (like a ruler)
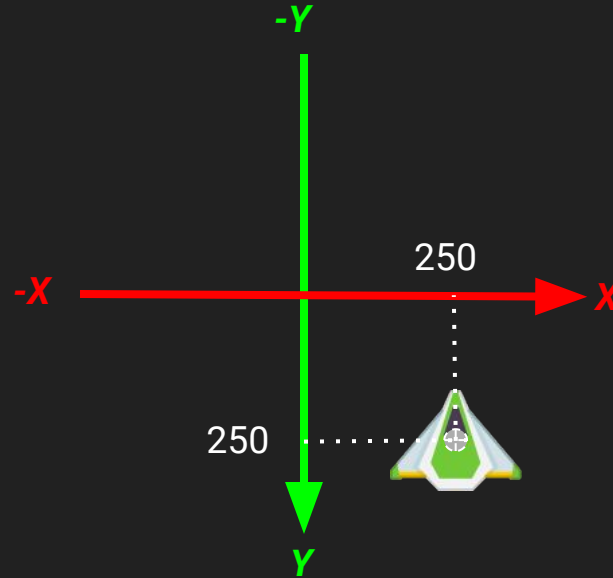
eg; Position (250, 250)

Centre of the axes is called *world origin* (0, 0).

Axes in Construct

The Y axis points down, not up.

So (250, 250) means:

Action!

1. Find a sprite for your player online.
   (To extract sprites from a spritesheet or add transparency, see this [video](#).)
2. Add the player sprite to the layout and rename the **Object Type** "Player".
3. Repeat steps 1 and 2 for an enemy sprite. Name the **Object Type** Enemy.
4. Add more enemies to the layout.

Behaviours

Behaviours are actions that objects can take, eg: moving when a key is pressed.

Some real world examples;

A basketball player can guard, shoot, dunk, and steal.

A cat can hunt, sleep, defend territory and attack.

Action!

1. Add two more objects to the layout;
   a. Mouse
   b. Keyboard
2. Add these behaviours to the Player object;
   a. 8 Direction
   b. Scroll To (camera follows)
   c. Bound to Layout
3. Play-test your game and rotate the Player sprite if necessary.
4. Adjust some of the 8Direction settings to your liking.

Stretch Action - Obstacles

1. Think of an obstacle that fits with your theme, eg: asteroids, dead cells.
2. Find a sprite for the obstacle online.
3. Add the obstacle sprite to your game and rename the **ObjectType**.
4. Add the **Solid Behaviour** to obstacles that you want to be impassable.
5. Drag the new **ObjectType** into your Layout to create more obstacles.
6. Play-test and don't forget to save!

Stretch Action - Orbits

1. Add the **Orbit Behaviour** to one of your obstacles.
2. Play-test and notice how the obstacle moves and how other objects interact with it.
3. Change some of the Orbit Behaviour Properties, like speed and radius.
4. Remember if you change properties on the **ObjectType**, all of the obstacles will behave the same way. You can also change properties for each object separately in the Layout.
5. Don't forget to save!