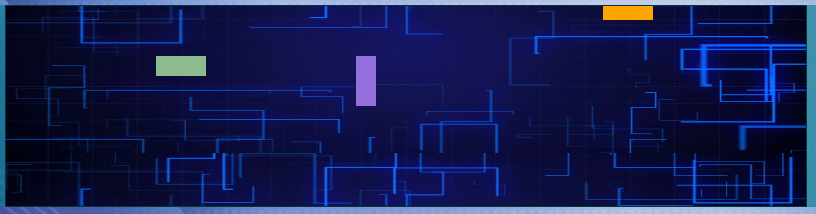
CIT 255 [Canvas Lab](https://prezi.com/view/1eYeS6LgiJxHKMrf4qK9/):



**Preparation**:

Please download the starting package from GitHub to begin. The repository can be found at

<https://github.com/pipboy2/CIT-255-Canvas-Project>.

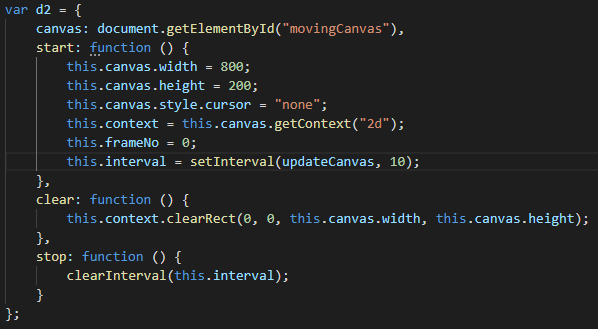
The tutorial package should contain the following folders and files:

* [insert file names once final versions are posted]

For this tutorial, you will be working with [file name of the student version]. This version is missing some sections of code that will be filled in over the course of this tutorial.

**Step 1.**  Instantiate the Canvas:

In order to use the Canvas, we first need to instantiate one to work with and store it in a variable (d2 in the example). The provided HTML page has a canvas element included with an id of “movingCanvas”, so we can use document.getElementById to specify that canvas element as the one we will be using. Then, we create an anonymous function to specify the characteristics of the canvas.



- The Width and Height characteristics are both set based on pixels. For this demonstration the size does not matter much, but it is generally recommended to choose dimensions that will look good on mobile devices since the Canvas is not responsive.

- Context is used to dictate which canvas methods are available to use. For this demonstration we will use the "2d" context.

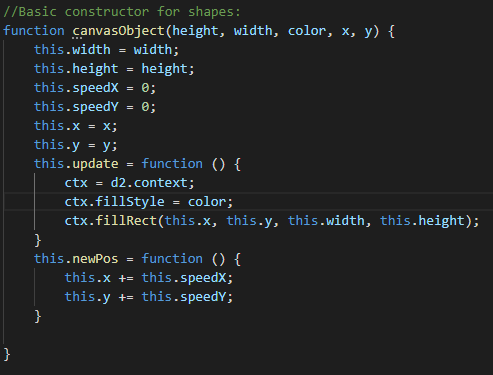
- The frameNo and interval are used to dictate how frequently the canvas will call upon the update canvas function (discussed later).

We also need to include a clear function which will be used later to update the canvas so that objects can be redrawn.

**Step 2.** Constructors

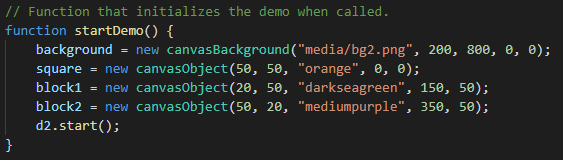
One of the main benefits of Canvas is that once it has drawn something it releases the memory used. However, this also means that objects need to be redrawn each time something changes.

We can work around this by creating a JavaScript pseudo-class to hold the properties of objects we wish to draw.

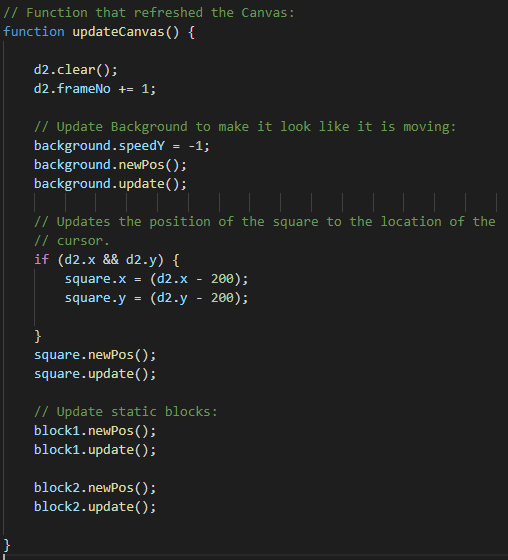


For this example, the height, width, color, x position and y position are used as arguments. These are used

**Step 3.** Instantiate Object



**Step 4.** Update the Canvas Update Function



**Step 6.** Modify Constructor to display images rather than color (tentative)