## Assignment 1 - Animation

TCSS 491 - Computational Worlds

## Introduction

In this assignment you will work alone to create an animation on an HTML canvas element. You may use the code supplied in class but you must animate a sprite sheet of your own choosing.

## Assignment

To carry out this assignment follow these steps:

- 1. **Find a Spritesheet** Use Google to find a spritesheet to animate (good queries are "sprite sheet", "free sprite sheet", or "sprite sheet <topic>"). Your sprite sheet should have at least one complete set of frames for an animation. I expect different sprite sheets from each student so take efforts to find a unique sprite sheet. Note the best sprite sheets tend to be PNGs (with transparency) and not JPGs (no transparency).
- 2. Create a Webpage Create an HTML file and a JS file to create a canvas element and manage the images in your animation. You may use the AssetManager and GameEngine as provided, modified, or roll your own, but you should make use of these design patterns:
  - Pre-loading resources before executing animation code.
  - o Making use of an update-render loop tied to the browser.
- 3. **Animate the Sprite Sheet** Use the method presented in class to animate your sprite sheet. To do this create:
  - An object for the animated entity with draw() and update() methods.
  - An animation object with a drawFrame() method to select and draw the appropriate frame of the animation.

## Grading

- 2 points original sprite sheet.
- 2 points proper design patterns used.
- 2 points sprite sheet animated.
- 2 points extra motion (for walking or jumping etc.)
- 2 points additional animations (walking AND jumping, walking both directions, etc).