Vida Saffari
Professor Bennett
Creative Coding
11/27/19

**Final Project Scheduler and Task Manager**

**Project Statement:** With my project, I am trying to educate and persuade President Trump, the federal government, and like-minded individuals on the California wildfires. I want to convince the audience that these wildfires are a result of climate change, drought, and global warming, which human beings have all contributed to. Most importantly, I want to prove that global climate change is real. President Trump refuses to accept that global warming exists and wants to sign the United States out of the Paris Agreement in order to "protect" the economy. I want to persuade the viewers that economic profit is not the priority here and that soon global warming will be destructive and irreversible. Ultimately, I will demonstrate that our earth is at risk due to climate change and that money must be raised by the federal government to prevent the further downfall of our universe.The solution isn't to cut federal funding towards our environment, earth, and home.

**Specific Goals:**

- Create a "movie-like" program that a viewer can watch
- Utilize the millis() function to make changes over time
- Integrate images and strings from the news on the California Wildfires
- Import videos of interviews with Trump to demonstrate his quotes
- Import images of populated areas lacking in vegetation
- Import images of the California drought
- Demonstrate high pressure winds using vectors with velocity and acceleration
    - Create an array of tree objects to demonstrate the power of the wind
- Use data and statistics on climate change and global warming
- Play with noise and color of pixels to create smoke/fire imagery
- Create fire and earth destruction imagery using Perlin Noise (I will learn this on my own using Learning Processing and Shiffman as resources to help)
- Use Strings to ask viewer rhetorical question

**Resources/References:**

Textbooks:

1. Generative Design: for inspiration on creativity, design, color, and text
2. Learning Processing: for knowledge and background information on Processing code
3. Shiffman Youtube: for coding examples and tutorials, specifically on Perlin Noise (a concept I will be learning outside of class)

Outside References:

1. Various news articles (from CNN, BBC, etc).
2. Twitter (to obtain images of Trump's tweets and other responses)
3. Youtube (for visual representation of California wildfires as well as effects of climate change)

**Tasks (updated based on milestone requirements):**

Week 1: Due November 27th

a. Gather all resources, videos, images, websites, and statistics and place into folder
b. Watch videos and take notes on perlin noise to learn how it is done

Week 2: Due December 4th

a. Upload images of populated areas lacking vegetation and California drought
b. Import tweet images into code
c. Import all strings and data into code
d. Create first fire/smoke imagery
e. Creating array of tree object using OOP
f. Create vectors for velocity and acceleration of wind on trees
g. Import earth image
h. Use perlin noise code to create fire and destruction of earth image
i. Create final scene with string that asks user rhetorical question and leaves viewer with a changed perspective
j. Make sure time elements are working (changes in code are being made over time to tell a story)
k. Begin fixing any bugs

Week 3: Due December 11th and 15th

a. Make sure the program runs! Complete any bug fixes!
b. Review code and make sure that everything is incorporated
c. Make sure code is organized and has comments

**Pseudo Code:**

Display Trump Tweet Pictures (3 pictures-reiterate this process 3 times):

Step 1: Set white background
Step 2: Declare image variable
Step 3: Load image in void setup

Step 4: Display image in void draw

Display Trump Interview Video:

Step 1: Declare Movie object
Step 2: Initialize Movie object
Step 3: Start playing movie--use play() or loop()
Step 4: Read movie's frame in void draw()
Step 5: Display movie with location parameters

"This is Not a Natural Disaster" String Text:

Step 1: Create font variable (Times New Roman)--outside of void draw()
Step 2: Declare string (all in void draw())
Step 3: Determine fill(), textFont(), textSize(), textAlign()
Step 4: Declare text() with parameters

Import Image of Lacked Vegetation: set image as background

Step 1: Set white background
Step 2: Declare image variable
Step 3: Load image in void setup
Step 4: Display image in void draw

Import Image of California drought: set image as background

Step 1: Set white background
Step 2: Declare image variable
Step 3: Load image in void setup
Step 4: Display image in void draw

Display data and statistics as Strings: (repeat for each set of data/statistics)

Step 1: Create font variable (Times New Roman)--outside of void draw()
Step 2: Declare string (all in void draw())
Step 3: Determine fill(), textFont(), textSize(), textAlign()
Step 4: Declare text() with parameters
Step 5: play around with different colors, font sizes, and make it pop onto screen creatively

Create array of Trees using OOP:

Step 1: Create class tree
Step 2: import and display image in Class Tree
Step 3: Declare object as global variable in main code

Step 3: Initialize object in setup() of main code
Step 4: Call upon methods from Class Tree in void draw()

Create vector for acceleration of wind on trees:
Step 1: Draw tree object as class
Step 2: Create vector for wind acceleration
Step 3: apply force() to trees
Step 4: display trees

Import Image of Earth: set image as background
Step 1: Set white background
Step 2: Declare image variable
Step 3: Load image in void setup
Step 4: Display image in void draw

Perlin Noise Fire: *Researching on Steps Required*

Fire and Smoke Particles Code: (earth is destroyed, fire takes over page)
Step 1: Declare variables
Step 2: Adjust noise and colors for all variables
Step 3: Loop() to show smoke flowing in

Rhetorical Question/Statement String to Leave Reader With:
Step 1: Create font variable (Times New Roman)--outside of void draw()
Step 2: Declare string (all in void draw())
Step 3: Determine fill(), textFont(), textSize(), textAlign()
Step 4: Declare text() with parameters

Ideas for Final Statement:
"Don't Sign the United States Out of the Paris Agreement"
"Climate Change is Real"
"This is not about making economic profits...the safety of our earth is the profit"
"Will you do the right thing to protect our home?"