PS0 Hello World with SFML

Assignment Summary:

The objective of this assignment is to get set up and running with the build environment. Make sure GCC and Make works on the machine that is being used. After a successful install use the SFML library to draw and image to the screen and control it using keystrokes or make a function for it to move.

What I accomplished :

Created a moving sprite of a smiley face, if none of the directions buttons are being pressed it will move to the lower right corner of the screen. If a directional button is pressed the image will go in the direction the button is being pressed.

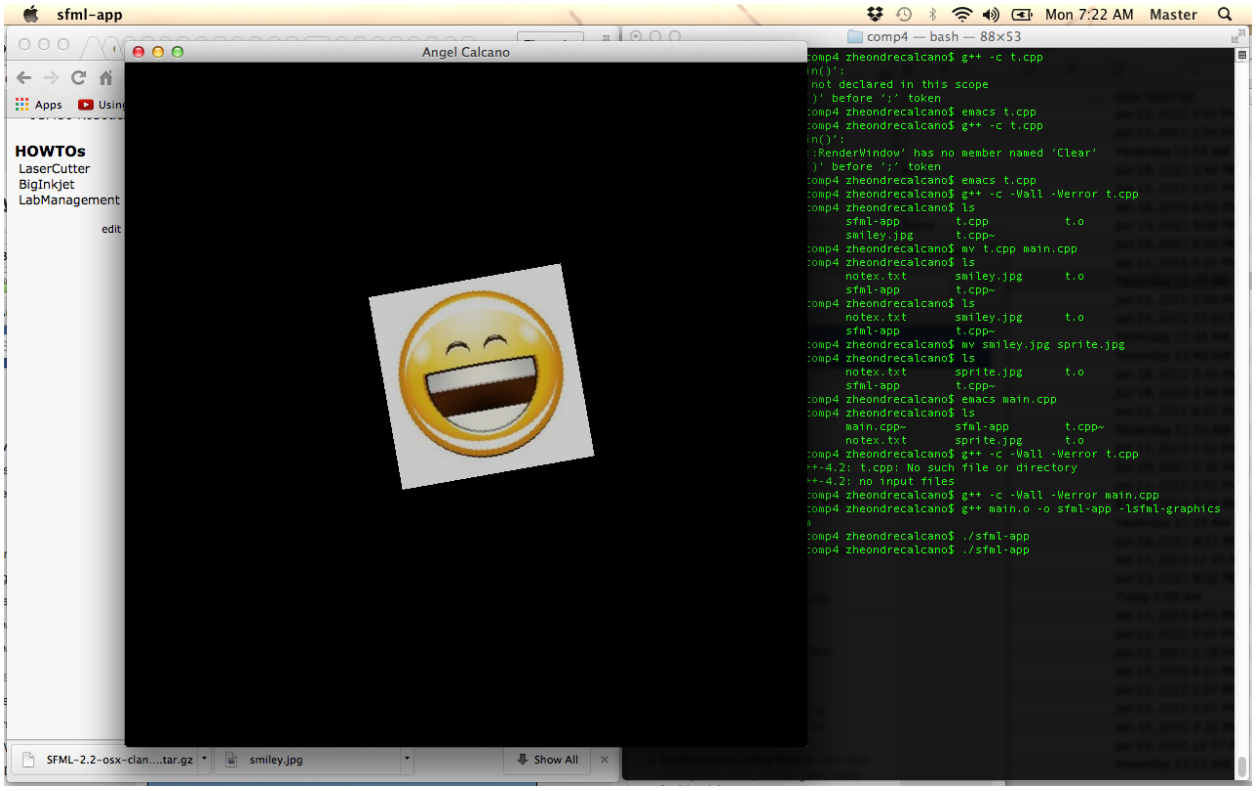
Design :

Used a lot of objects from the SFML library to enable manipulation of the image.

What I learned:

How to print images to the screen, how to control them, and how to implement the SFML library in c++.

Output:



Source Code:

```
// Angel Zheondre Calcano ps0 Hello World with SFML
// Makefile

all: ps0

ps0: main.o
	g++ main.o -o ps0 -lsfml-graphics -lsfml-window -lsfml-system

main.o: main.cpp
	g++ -c main.cpp -Wall -Werror -ansi -pedantic

clean:
	rm *.o ps0 *~ *#
```

Source Code:

```
// Angel Zheondre Calcano ps0 Hello World with SFML
// main.cpp

#include <SFML/Graphics.hpp>

int main(int argc, char *argv[]) {
  sf::RenderWindow window(sf::VideoMode(700, 700), "Angel Calcano");
  sf::Texture texture;
  texture.loadFromFile("sprite.png");
  sf::Sprite sprite;
  sprite.setTexture(texture);
  sprite.setColor(sf::Color(255, 255, 255, 200));
  sprite.setPosition(100, 25);
  while (window.isOpen()) {
    if(sf::Mouse::isButtonPressed(sf::Mouse::Left))
      sprite.rotate(10);
    if(sf::Keyboard::isKeyPressed(sf::Keyboard::Left))
      sprite.move(-5,0);
    if(sf::Keyboard::isKeyPressed(sf::Keyboard::Up))
      sprite.move(0,-5);
    if(sf::Keyboard::isKeyPressed(sf::Keyboard::Down))
      sprite.move(0,5);
    if(sf::Keyboard::isKeyPressed(sf::Keyboard::Right))
      sprite.move(5,0);
    else
      sprite.move(0.5,0.5);
    sf::Event event;
    while (window.pollEvent(event)) {
      if (event.type == sf::Event::Closed)
      window.close();
    }
    window.clear();
    window.draw(sprite);
    /* window.draw(shape); */
    window.display();
  }
  return 0;
}
```