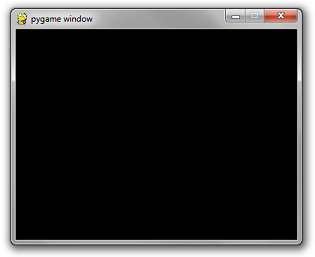
**Project Design Document – Joseph Henry**

**Prototype 1 – (The multiplayer)**

**Problem decomposition**

1. Create a client program that will act as the main game loop. This client should define and render a basic display for the game to be displayed within.
2. Create an algorithm that opens a server listening socket. This is an endpoint on a network that allows the sending and receiving of data. It will listen on the set port and when a connection arrives from the other clients it will create a child socket and establish the connection on the child socket.
3. Create a new function that will control how the client connects to the game server and how the client receives data back from the game server. This function should also be where ip address and port of the socket being connected to are stored and used to connect.
4. Create a parent class of sprite and a child class called player. This will be used to define the character each client will be playing as, initialise them onto the screen and control all the movements. The parent class will also be useful later in the generation of platforms.
5. Make the client send the current player’s position data to the switch. The switch should then forward the position data to the other client. The other client will then send back its own player position data to the switch to be sent back to the original client.

Client 2



Client 1

Switch

Network

Network

