**Project Design Document – Joseph Henry**

**Prototype 1 – (The multiplayer)**

The multiplayer will be based on a client server topology with up to 2 clients connecting together via a server based on one of the two client pcs. This server will send playerposition data between clients as well as map data such as platforms etc.



Client 1

Client 2



Server

Network

Network

**Problem decomposition**

The program can be split into smaller portions: 1) Client – server connection 2) player generation, movement and physics 3) map generation and screen scrolling

Once all of these steps are completed the program can be recombined to make one complete program and solution to the problem identified.

**Divide and conquer**

By splitting my program into these smaller chunks (from problem decomposition), it can make the process of making a solution to all of these steps much simpler. They can all later be combined together into one modular program to complete the task as a whole. This makes use of the divide and conquer problem solving method.