**Distributed Systems Assignment – Darren Coutts 51227666**

In order to run the assignment, you must first start the rmiregistry running on a port specific to your machine. For example 50012.

> rmiregistry <portnumber>

You should then startup the server mainline. This exists in cs3524.solutions.mud.MUDServerMainline and requires two arguments <regport> and <serverport> – the regport should be the same as the port number specified to rmiregistry. This sets up two demo MUDS - “demo” and “demo2”

> java cs3524.solutions.mud.MUDServerMainline 50012 50014

You should then start a client. To do this you need to run the cs3524.solutions.mud.MUDClient class. This requires two arguments <host> and <port>. The hostname is the name of the machine which is running the server. The port is the same port number given to rmiregistry.

> java cs3524.solutions.mud.MUDClient darren-Ubuntu 50012

The Client

When a new client connects, they are given a list of the MUD's which are currently running. By default this is “demo” and “demo2”. The user enters the name of the MUD that they wish to enter.

This then connects them to the MUD and asks for them to enter in a username for their session. The game then starts. Maximum of 10 users.

The following commands are avalible to the user throughout the game:

* quit Ends the game
* whoami? Returns the users username
* move <direction> Moves the player in a given direction arround the MUD. This can be north, south, east, or west. Actual moves avalible depends on location.
* Who lists the users who are also in this area in the MUD
* take <object> Pickup the object with the name <object>

The Server

One the server mainlines gives the output, “Starting Admin Mode” you can then use admin commands.

The only command is;

create <name> <edgesfile> <messagesfile> <thingsfile>

This will create a new MUD on the server with the name of <name>. The final three arguments are the files used to create the mud. These can be the same for multiple MUDS or different. There are a maximum of 5 at a time.

The new server will only become assessable to new clients.

The Assignment

CAS D – Complete.

CAS C – Users can move arround in the world: complete.

Users can see other users in the world: complete.

Users can take things in the world: comeplete.

CAS B- Generate more than one MUD: complete.

Users can find out which muds are running: complete.

CAS A- Create muds at runtime: complete.

Restrict number of muds: complete.

Restrict number of users: complete.