**Specification**

I plan to make alongside the basic GUI client, A Graphics Pane to display the map of the Dungeon that is retrieved by the look command. It would also be useful for the GUI/Graphics Pane to show the users AP, Current Gold ect.

Also I would like to add the Automatic display update. Working by Sending a new Protocol element from the server to client to inform the GUI, that the map has changed since the last time it was looked at , This increases the "Quality of Life" of the users using the program, as they no longer need to manually look after each Turn/Action.

The Final Extra part i would add is the program is the Chat capability , letting the players of the program, talk to each other via text output through a JTextArea. It will be using the Modified SHOUT method which will be have to be changed in the Server side of the Coursework.

**Features Table**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Intended Features** | **Points** | **Works?(self Evaluation)** | **Works? &marks(checker evaluation)** | **Special instructions** |
| Basic Client GUI | 15 | yes |  | N/A |
| Graphic Pane | 10 | Yes |  | N/A |
| GUI Display Update | 10 | yes |  | N/A |
| Chat | 15 | Yes |  | N/A |
| Total paints: | 50 |  |  |  |

**Test Plan**

|  |
| --- |
| What to Test |
| Program works on LCPU |
| Added Protocol/Server elements work |
| Graphics Pane contains/Shows all elements when wanted |
| Chat message are sent to all players |

**GUI Mark-up Design**

The GUI Will be a JFrame with 3 main Elements Graphics Pane(Explained Below), Information/Chat box made of the ScrollPane and TextArea, And the Element of the JFrame that include the IP/Port Text fields and All the Buttons to control the GUI

Port text field

Connect Button

IP text field

Information and Chat Box

Buttons

Graphics Pane

**Graphics Pane**

The Graphics pane will be JPanel, Filled with JLabel that will have the Image of the LOOK element they represent, there will need to be 47 JLabels in total to match the number of Elements in the Look reply when you have a Lantern.

Map Tile (1,7)

Map Tile (1,1)

Map Tile (7,7)

Map Tile (1,7)

**Class Diagram**

The PlayerGUI will be the main Class of this coursework which will Extend JFrame and implement ActionListener , This class could be split up into separate classes for each major element of the Jframe, but I believe it will be easier to keep it all in one place for now.

The PlayerGui will make an object of a slightly modified Client of the client i made for coursework 2 which will connect via Sockets to the Server and make a thread to listen to all the output from the server.

Thread

networking

Client Server Listener

Client

Server

(CW2)

PlayerGUI