

Documentation

How to Create a Server

Navigate to the folder containing the 'bin' and 'src' folders in LCPU. Once there, type 'javac -d bin -cp src src/dod/*.java' to compile the files. Then navigate into the 'bin' folder, and type 'java dod/Server <portNumber> <mapName>'. The server should then start.

How to Connect to a Server

First, make sure a server has been created. After launching the HumanClient file, you will be greeted with the GUI. Enter the address and port of the server into the relevant fields and press the connect button. Once the server user accepts your connection, you are connected to the server.

How to Add My Own Maps

Ensure the map is in the correct format, and then place the file in the 'bin' folder.

How Do I Play the Game?

Once the server user starts the game, a message will be printed in the chat box and your look view will update. If it is your turn, use the panel of 6 buttons to control the game. You populate the middle square in the view, and can make 6 moves a turn.

What Does the Torch Do?

The torch increases the distance you can see in the dungeon to a 7x7 instead of a 5x5. However, it also limits your moves per turn to 5.

What Do the Heart Containers Do?

The heart containers increase your current health by one, and end your turn immediately. Although there are currently no features that use health, they may be added in the future.

What Do the Buttons on the Panel Do?

The pickup button will attempt to pickup any item from the tile you are currently standing on. If there is nothing there, or you already have the item it will fail.

The arrow buttons control the movement of your character. Pressing them will move you in the direction they are pointing.

The end turn button will end your turn immediately, allowing the next player to take his turn.

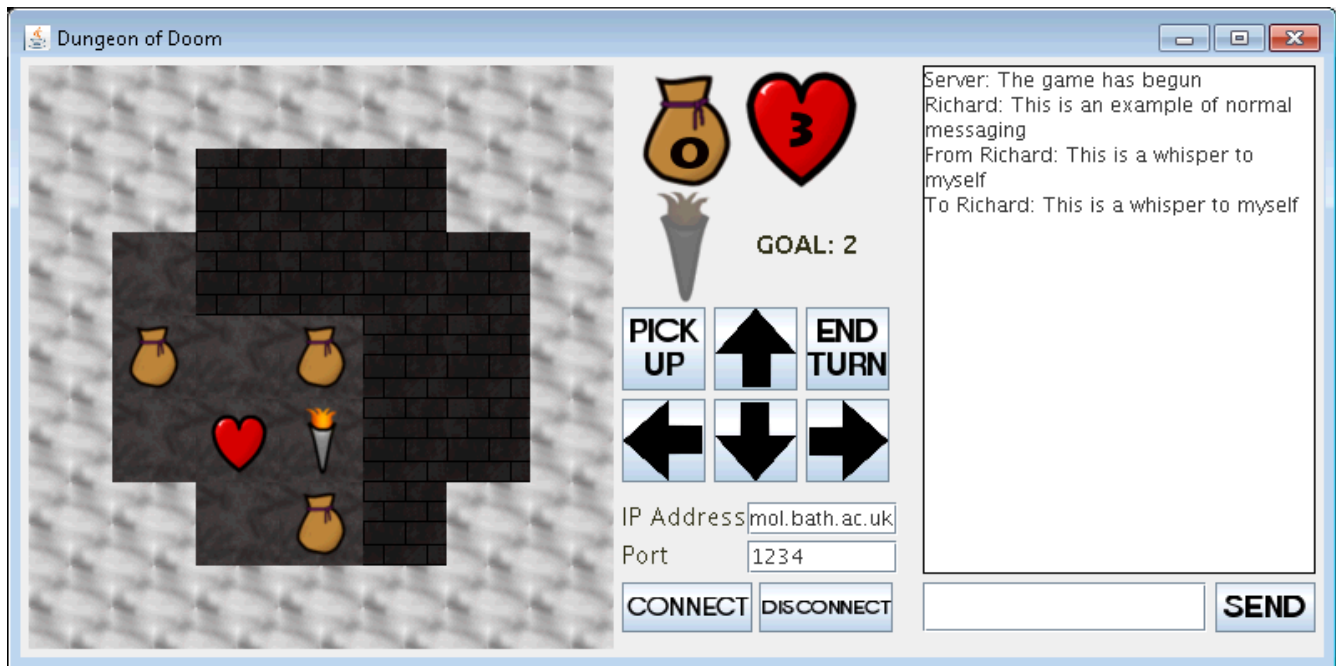
How Do I Use the Chat Box?

The chat box is simple to use. Type in the message you want to send and then hit the button. This will send the message to all players. If you want to whisper a player, type '/w <theirName> <yourMessage>', for example, if I wanted to whisper the player Simon, I would type '/w Simon Hello Simon!' and that would send the message to only Simon.

How Do I Leave the Game?

To leave the game, hit the disconnect button and then close the application.

Analysis



Here is the final version of the GUI. Once I started adding the button panel I realised I had not left enough space above for a chat box, and reworked the layout slightly. The chat box is now to the right and takes up the entire height of the application. The other difference is the addition of a disconnect button. I realised that players needed to be able to disconnect from the server and connect to a different one if they wanted. I also resized the GUI from the original plans, as they were far too large for a standard monitor. All buttons except the connection buttons, along with the chat box are disabled until a connection is made. The look panel shows just fog until the game begins, however the chat box is enabled.

The GUI is still constructed in a single class, and that class contains other methods to change parts of the GUI. The listener thread that is created upon a connection to a server accesses these methods to update the GUI in response to the game.

One thing I feel I did wrong was failing to add any indication as to which tile the player is standing on. If I were to do the application again, I would make sure that there was an indication to this, like an outline to the middle tile. I would also make the chat box have coloured messages for server messages and whispers, to make distinction between the three kinds of messages easy. I'd also like to implement a feature to use the health system, as it currently serves no purpose in this version.

Final GUI Test Plan

Name of Test	Description of Test	Expected Result	Fail Result	Actual Result
Graphic Pane	Run the application	GUI appears	Nothing appears	GUI appears
Connection Test	IP and port are entered, Connect button pressed.	Popup appears notifying of a connection and asks for the name of the player.	Nothing visible happens.	Popup appears notifying of a connection and asks for the player's name.
Button Panel Test	Move towards nearest gold, pickup, end turn	The view panel will update after every move, the player will move towards the nearest gold, the gold will disappear and the counter count up, and then a popup will dedare the turn over.	Player does not move. Player moves incorrectly. Gold is not removed. Count does not increase. Turn does not end. Not notified of turn ending.	Expected result is achieved.
Chat Box Test	Send a normal message, followed by a whisper to a second player.	First message printed to all clients, second message printed to sending client and whispered client.	First message not printed to all clients. Second message printed to more than two desired clients.	Expected result is achieved for both messages.
Disconnect Test	'Disconnect' button pressed	View pane becomes fog as before, counters are reset, buttons and chat box disabled.	View pane still displays a map. Counters don't reset. Buttons/chat box still enabled.	Expected result is achieved.
Start Turn Test	First client ends turn.	Second client receives a pop up notifying them it is their turn.	Second client received no message.	Expected result is achieved.