

Project: Jarl
Design document
Group Number: 18

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1 Graphical User Interface

1.1 Lobby overview

The lobby interface allows interaction with other users. It's main purpose is allowing a user to create games and to join games created by other users. See Figure 1 to see how the different parts of the GUI are related.

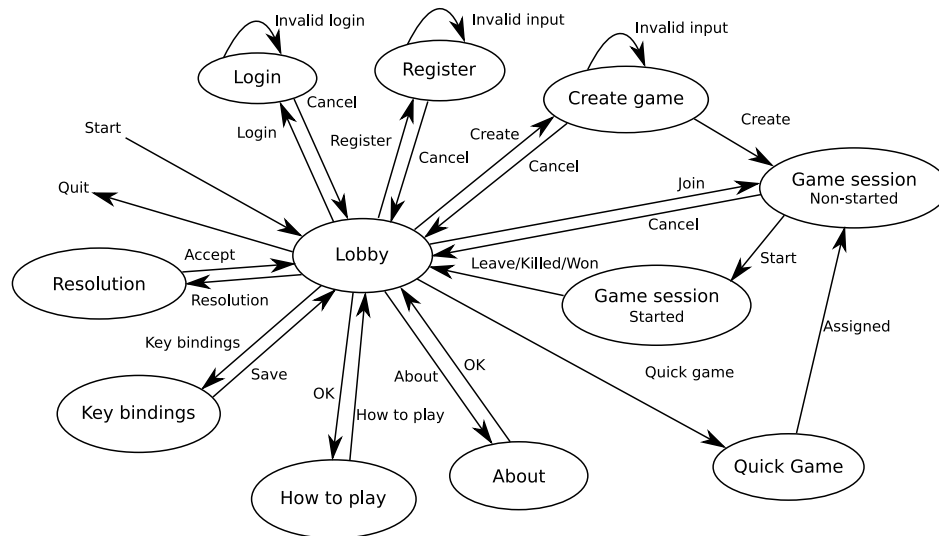


Figure 1: A picture displaying the displaying how the different states in the GUI are related

1.2 Ingame Interface

The in game GUI (Graphical User Interface) will consist of four major components, the canvas, the minimap, the building selection menu and the distribution menu.

The canvas is the part of the GUI that displays the game world. Using the canvas the user can interact with buildings, units and the hero. See Figure 2 for a description of the ingame GUI.

1.3 Requirement correspondance and functional description

1. **Construction menu (reqs. 20, 21)** The construction menu displays the set of buildings that the user can construct. The user can use the construction menu to initiate the construction of a building.
2. **Upgrading menu (req. 24)** Using the upgrading menu the user can upgrade a building that already has been built.
3. **Production building (req. 20)** A production building produces AI controlled units at a fixed rate.

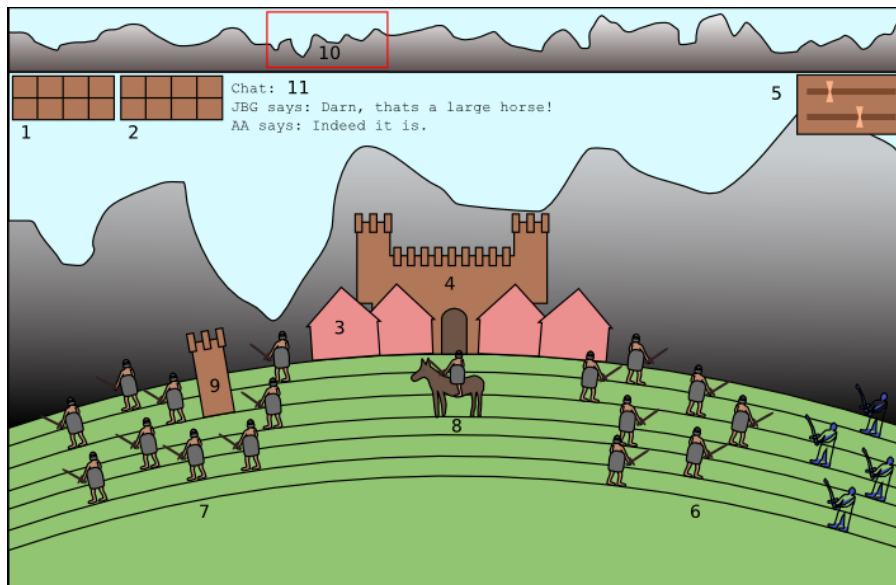


Figure 2: A picture displaying the ingame view

4. **Castle (req. 19)** The castle allows the user to continue playing and resurrects a dead hero after a fixed amount of time.
5. **Distribution control (req. 31)** The distribution controls consists of a set of sliders, the sliders indicate the ratio of attacking and defending units for the corresponding unit type.
6. **Attacking units (reqs. 24)** AI controlled units that are on their way to attack the player to the left.
7. **Defending units (reqs. 24)** AI controlled units defending against the player to the right.
8. **Hero (req. 23)** The hero will react to user input and the changes will be visible in the canvas.
9. **Defensive tower (req. 21)** The defensive tower attacks hostile units that are within range.
10. **Minimap (req. 26)** The minimap displays a miniturized version of the world and is located at the top of the screen. The rectangular area in the minimap displays what part of the world that is drawn in the canvas.
11. **Chat (req. 22)** The chat displays messages from other users and can also be used to send messages

1.4 Lobby Interface

Lobby (usual)

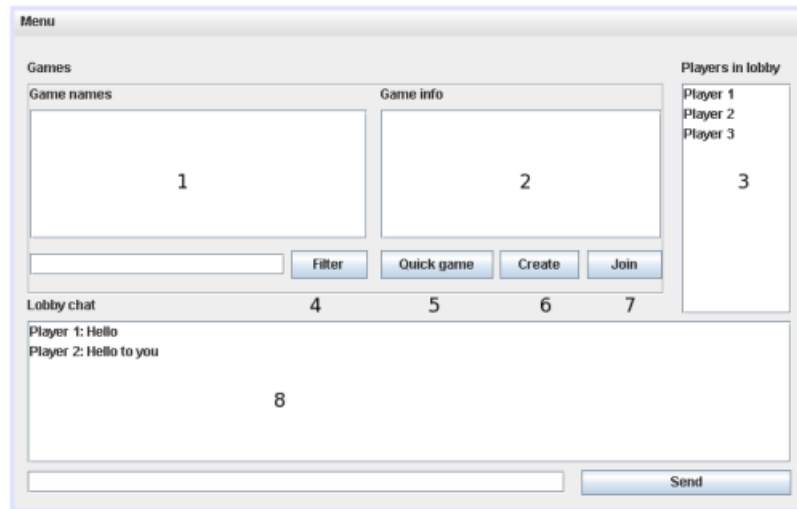


Figure 3: A picture displaying the lobby.

The usual lobby, i.e. the first window the user will see when he starts the application can be seen in Figure 3.

1. **Current games (req. 12)** Lists the games that matches the current filter settings.
2. **Game info (req. 12)** Game information for the game selected in the current games list.
3. **Players in lobby (req. 7)** A list of all current players in the lobby.
4. **Filter (req. 12)** Passes filter settings to the game session filter and upon pressing the filter button the current filter settings from the filter field are applied to the game available.
5. **Quick game (req. 13)** Pressing the quick game button tells the game server to attempt to assign the player to a game session according to the formulas specified in the requirements document.
6. **Create (req. 8)** Sends the user to the create game form.
7. **Join (req. 11)** Joins the game selected in the current games list.
8. **Chat (req. 14)** Allows the user to communicate with other users in the lobby.

Lobby (joined game session)

When a user has joined a game session the lobby will be displayed as in Figure 4.

1. **Hero type (req. 23)** By clicking in one of the radio buttons the user can choose between the three hero types.

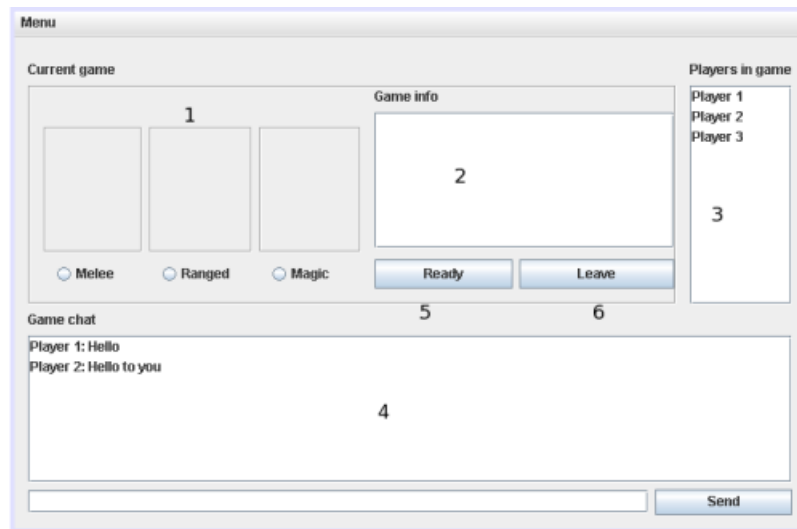


Figure 4: A picture displaying the GUI when a user has joined a game session.

2. **Game info (req. 12)** The current game settings are displayed to the users.
3. **Chat (req. 14)** The chat allows communication with other users in the game by entering a chat message in the textfield and pressing the send button.
4. **Players in lobby (req. 14)** Displays the players that are currently in the game.
5. **Ready (req. 11)** The user signals to the others that he is ready to begin a game by pressing this button.
6. **Leave (req. 29)** Allows the user to leave a game session and return to the lobby.

Lobby (created game session)

The Lobby from the perspective of a user who has created a game session is displayed in Figure 5. The only difference from the joined game session is displayed below.

1. **Number of players (req. 2)** Using this button the creator of the game kicks the selected player from the game. A player is selected by right clicking players name in the Players in the game list. A kicked player is returned to the lobby.

Create game dialog

The create game dialog is shown when the user wants to create a game and is described in Figure 6.

1. **Game name (reqs. 8, 12)** Specifies the game name.

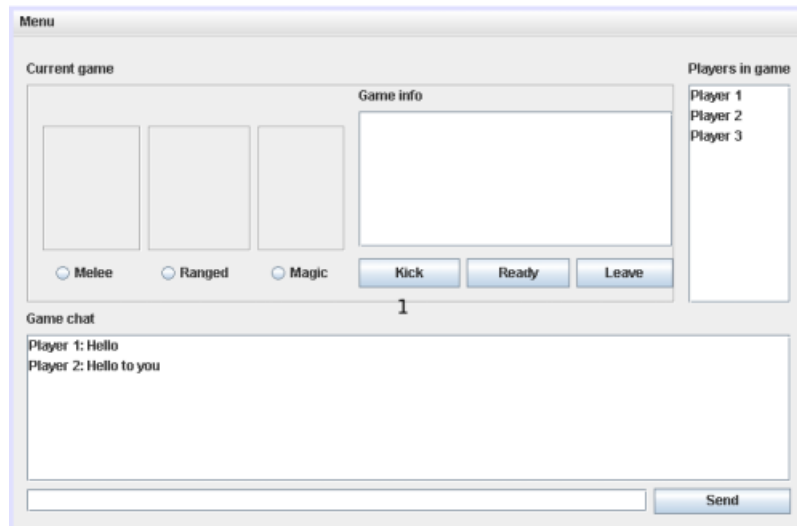


Figure 5: A picture displaying the GUI in a game session from the perspective of a user has created a game session.

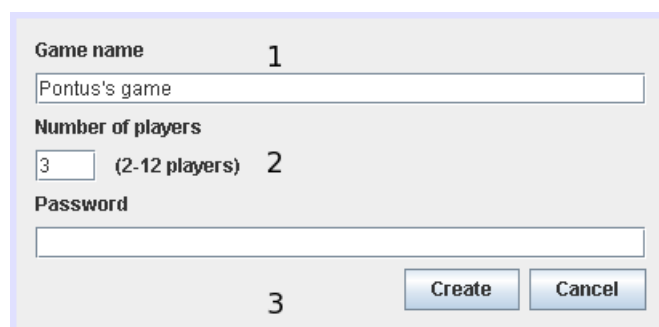


Figure 6: A picture displaying the create game dialog.

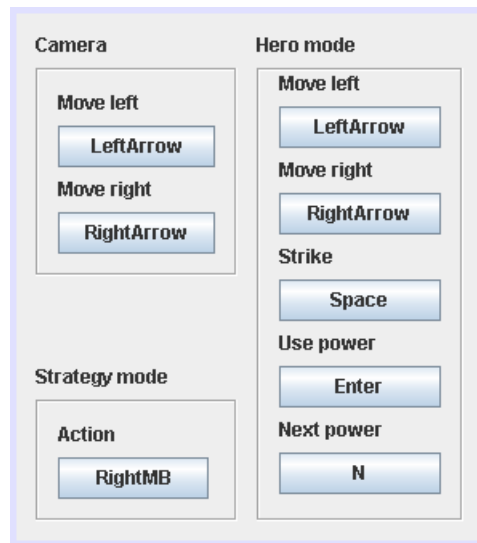


Figure 7: A picture displaying the key bindings dialog.

2. **Number of players (reqs. 2, 9)** the player can set the amount of players for the game session within the given range using this text field.
3. **Password (req. 10)** the game session password will be the passphrase entered into this field. If left empty the game session will not require any passphrase.

Key bindings dialog

In the key bindings dialog the user can alter his input settings to the game, Figure 7 shows how the dialog is structured.

1. **Key bindings (req. 3)** using this dialogue the user can change the key bindings. A binding is changed by clicking the respective button and pressing the key that the user wants to associate with the command.

How to play

The "How to play"-dialog displays information about how to play the game, the dialog is shown in Figure 8, notice however that the text in the figure is irrelevant. Describes how to play the game.

Login

The login dialog is shown when a user wants to look at his statistics (see Figure 9).

1. **Login name (req. 16)** In this field the user shall provide his username in order to log on to the game network.
2. **Password (req. 16)** The password corresponding to the username provided in the above form.

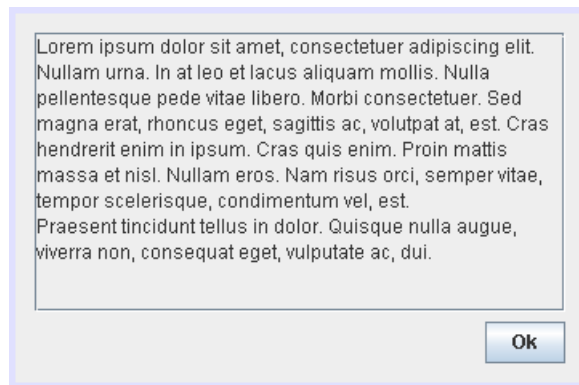


Figure 8: A picture displaying the how to play dialog.

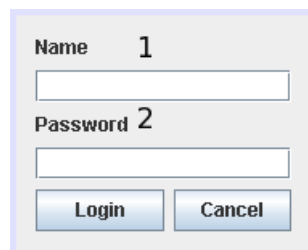


Figure 9: A picture displaying the login dialog.

Register

The register dialog allows a user to keep track of his statistics (see Figure 10).

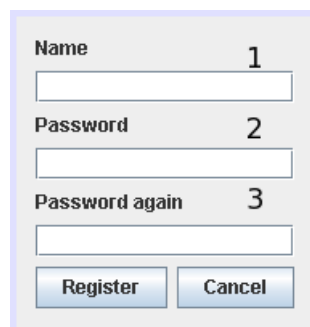


Figure 10: A picture displaying the register dialog.

1. **Username (req. 15)** In this form the user can provide his username.
2. **Password (req. 15)** In this form the user can provide his password.
3. **Password again (req. 15)** The user will have to supply his password two times in order to avoid misspelled passwords.

Resolution

The user will be shown a list of game resolutions that he can choose between (see Figure 11). The game resolution will come into effect when a game session is started.

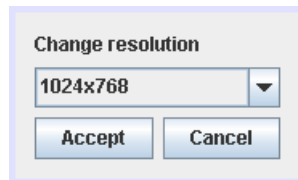


Figure 11: A picture displaying the resolution dialog.

Statistics

The user will be presented with the statistics of his user in a dialog window (see Figure 12).

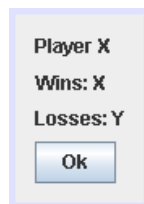


Figure 12: A picture displaying the statistics dialog.

Menu system

The menu system will be structured as shown in Figure 13.

Game	Options	Help
Quick game	Key bindings	How to play
Create game	Resolution	About
Log in		
Register		
Statistics		
Quit		

Figure 13: A picture displaying the menu system.