BSC – HGP - Project

Go

UI Design Document & Report

# Division of Work

Student Name1: Aynur Hasanova Student Number1: 2948530

Student Name2: Moses Oyebanji Student Number2:

Division of work: work was evenly divided \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Percentage of work completed by each partner on each class / task

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| **Filename / Task** | **Aynur Hasanova** | **Moses Oyebanji** |
| Everything | About 50% | About 50% |
|  |  |  |

# UI Design

The UI design was done by using QT Designer.

The folder structure is as follows:

Table

Description automatically generated

design\_files/main.ui is the main QT Designer file that is used to design the UI. The main app uses QtWidgets.QMainWindow widget. It uses the UI\_Main class that was auto generated by the QT Designer. It uses QtWidgets.QWidget mainly. Within that QVBoxLayout is used to separate the main board from the status/score panel. QHBoxLayouts are used in the status panel to organize status labels, logo, and timers.

The main board is subclassed from a QFrame. The application was mainly tested on MacOS. Due to a known issue on MacOS the native menubar was not used. It is checked and disabled only if the underlying OS is Darwin/MacOS as follows:

if platform.system().lower() == "darwin":  
 self.menubar.setNativeMenuBar(False)

**Student Names:** Aynur Hasanova, Moses Oyebanji

The board is a 7x7 Go board that consists of 6x6 squares of 50x50 size. The board rows are numbered; however, the columns are using letters to make it more user friendly to identify a given coordinate. All menu items are associated with a short cut key. Some of the menu items are using icons to make it more user friendly.

More than five additional features are implemented in this submission: saving a game state into a file, loading a game state from a file, using timers for the players, undo button, dialog confirmation buttons for all critical operations.

# Screen Shots of Working/Not Working Features

All the required features are working fully.

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| **Task 1 (1 image with description + what is working/not working)** |
| The board is working with all functionalities.  Table  Description automatically generated |

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| **Task 2 (6 images of working Menus/buttons/Labels including description + what is working/not working)** |
| **All functionalities for Task 2 are working. There is no need for 6 separate images in this section as one of the following pictures show 5 of the subtasks.**  The following image demonstrates print screen for 5 subtasks of Task2: 2b, 2c, 2b, 2d, 2e, 2f. It shows the number of prisoners (points) each player taken, shows how much territory is controlled by each player, shows whose turn it is, shows the pass and reset buttons.  See “Next Player: White”, “Coordinates: E5”, “Points: Black: 1, White: 0”, “Black Territories: Black: 4, White: 2”, and “Total Moves: 7”.  Chart, bubble chart  Description automatically generated  **Task 2a, help menu that includes the game overview, movement, and rules.**  Graphical user interface, text  Description automatically generated  **The following picture shows print screen after the Pass button clicked. It asks confirmation before resetting the game.**  Diagram  Description automatically generated  **The following picture shows the print screen after the Reset button is clicked. It asks confirmation before resetting.**  Diagram  Description automatically generated  **The following picture is a print screen of the file/exit menu.**  Diagram  Description automatically generated |

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| **Task 3 (2 images + what is working/not working)** |
| **Placement of stones for Task3 is working fully.**  Chart, scatter chart  Description automatically generated |

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| **Task 4 (2 images + what is working/not working)** |
| **Task 4 is fully functional.**  Diagram  Description automatically generated |

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| **Task 5 (2 images + what is working/not working)** |
| **Task 5 is fully functional.**  Diagram  Description automatically generated |

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| **Task 6 (2 images + what is working/not working)** |
| **Task 6 is fully functional.**  Chart, bubble chart  Description automatically generated |

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| **Task 7 (2 images + what is working/not working)** |
| **Task 7 is fully functional**  Chart, bubble chart  Description automatically generated |

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| **Task 8 (2 images + what is working/not working)** |
| **Task 8 is fully functional; the winner is automatically detected if a player passes twice**  A picture containing diagram  Description automatically generated |

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| **Task 9 (2 images + what is working/not working)** |
| **Extra features: timers, save and load game states, and undo button in Task11.**  These extra features are fully working. There are two timers, one for each player. Each player should make a move within 2min. The first player’s timer starts counting down when the game starts, the second players counter starts when the first player finishes his/her move, and so on. If the timer of a player expires that player loses the game when the counter goes down from 120 seconds to 1, and the players get a notification about this, and then the game resets after the OK button is clicked.  Graphical user interface, application  Description automatically generated  **Save game state, and load/open a game state from a file**  Graphical user interface, text, application, email, website  Description automatically generated  Chart, scatter chart  Description automatically generated |

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| **Task 10 (2 images + what is working/not working)** |
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| **Task 11 (2 images + what is working/not working)** |
| **This is an extra feature that allows a player to under his/her last move after a confirmation:**  Graphical user interface  Description automatically generated |

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| **Task 12 (2 images + what is working/not working)** |
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