BSC – HGP – Project Go

UI Design Document & Report

# Division of Work

Student Name1: Abhishek Das Student Number1: 3092650

Student Name2: Antony Vladimir Student Number2: 3105325

Student Name3: Student Number3:

Please complete the sections below with regard to the estimate of the division of work between the two partners

If the work was split in the range of 45% to 55% per partner, then that is fine and simply say “Work was evenly divided”. If this was not the case, then state with a summary sentence. This is the important statement of this file.

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

## Code repository log (if applicable)

Paste here

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

Some areas require more work than others so this is only for reference. An average of these values will not be calculated.

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| **Filename / Task** | **Abhishek Das** | **Antony Vladimir** | **Student Name 3** |
| GoBoard | 60% | 40% | - |
| Game logic | 40% | 60% | - |
| Score Board | 50% | 50% |  |
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# UI Design

**Introduction**

The digital Go game has been developed using Python and the PyQt6 library to create an interactive, user-friendly interface for playing Go. The game simulates the traditional board game of Go, focusing on gameplay mechanics, user interaction, and efficient implementation. The objective of the project was to develop a Go game that contains the core rules of the game while considering accessibility, usability, and visual design.

**Location**

* **Main Game Board:** The game board occupies the central region of the screen to ensure the most visible and accessible area for gameplay. This placement aligns with the general conventions for board games, where the board is the primary focus.
* **Action Buttons:** The two action buttons, "Pass" and "Reset," are positioned in the top-right corner of the screen. This location is chosen because it provides quick access to key game functions while keeping them separate from the main gameplay area. It is a common convention to place action buttons in the upper right corner, as users tend to expect buttons for actions to be there.
* **Score Display:** Below the action buttons, a score display box is placed to show the current score or game status. This is located in the top-right section, just below the buttons, making it easily visible without distracting from the main gameplay. The score display provides real-time updates about the game’s progress, and its placement ensures that players can check the score quickly.
* **Timer:** The timer is displayed just above the action buttons, within the game control area. This location allows the timer to be easily visible to players, indicating the time remaining for their turn or the overall game time, without interfering with the main gameplay area. It seems to be good way as players can track both time and actions simultaneously.
* **Game Log:** The game log is placed directly below the score display box. This location allows players to view the history of moves and other important game events. By positioning the game log helps the score display, it remains easily accessible for players who want to review past moves without distracting from the main gameplay.

**Color**

* **Board Color:** The board area has a rich brown background, which creates a traditional and calming atmosphere for the game. The dark background ensures the stones (black and white) stand out clearly against the board.
* **Grid Lines:** The black grid lines contrast well against the brown board background, ensuring clear visibility of the board's intersections. The high contrast between the lines and the background improves usability by making the grid easy to follow.
* **Stone Colors:** Black and white stones are used in the game, with sufficient contrast to make them easy to distinguish from one another and from the board.
* **Button Colors:** The "Pass" and "Reset" buttons have a grey background with white text. The grey color is used to match with the dark theme.

* **Score Display, Timer and Game log: All the three sections have given same color theme as button which helps to distinguish that these all are the area for game display.**

**Size**

* **Game Board:** The board adjusts based on the screen resolution, ensuring it is displayed at an appropriate size for easy interaction without becoming too large or small.
* **Buttons:** The "Pass" and "Reset" buttons are sized large enough for easy clicking on any device.
* **Score Display Box:** The score display box is given same size as Game Controls to display the score and any game status updates clearly.
* **Timer:** The timer is sized to ensure it is readable without taking up too much screen space. Its size ensures it catches the player’s attention but doesn’t interfere with the gameplay.
* **Game Log:** The game log is sized to accommodate recent game actions, and the text is large enough to be legible without overcrowding the interface.

**Style**

The user interface is kept both visually pleasant and useful by the minimalistic and clarity-focused approach.

* **Typography:** The interface uses a default font for all text which is **Segeo UI.**
* **Button Style:** The "Pass" and "Reset" buttons feature rounded corners, flat styling, giving them a clean look while ensuring they stand out from the rest of the interface.
* **Board Style:** The brown background with black grid lines gives the board a traditional and calming appearance, while ensuring that the gameplay area is clearly defined. The stones are distinct against this backdrop, and the grid lines are easy to follow.
* **Score Display Style:** The score display box is simple and clean, with sufficient contrast to ensure the score is clearly visible without distracting from the board area.
* **Consistency:** The design of the board, buttons, score display, timer, and game log is consistent, providing a cohesive and intuitive user experience.

**Additional features**

**KO Rule:** KO rule which doesn’t permit to repeat same play which will lead the play to infinity. The rule is applied in the project to be fair play. KO description (Association, n.d.)

# Screen Shots of Working/Not Working Features

**N.B. Be sure to comment what is working and not working for each of the tasks. The boxes should be expanded to contain the content.**

All code should be testable where possible and error message should be displayed to show where code has failed.

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| **Task 1 (1 image with description + what is working/not working)** |
| This is the go-board in which players will play the game. |

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| **Task 2 (6 images of working Menus/buttons/Labels including description + what is working/not working)** |
| The picture is of the action buttons which are pass and reset and also timer is given in the same box. |

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| **Task 3 (2 images + what is working/not working)** |
| It contains scores which basically gives the captured stones and territory captured. Also, the turn of the current player is shown. |

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| **Task 4 (2 images + what is working/not working)** |
| The game log is displayed in which the point is shown in which the player put the stone and also the player’s turn and the captured stone is shown. |

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| **Task 5 (2 images + what is working/not working)** |
| The KO rule has been applied which stops the player to put the stone in the area where the same position will not come across. |

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| **Task 6 (2 images + what is working/not working)** |
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| **Task 7 (2 images + what is working/not working)** |
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| **Task 8 (2 images + what is working/not working)** |
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| **Task 9 (2 images + what is working/not working)** |
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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)** |
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| **Task 12 (2 images + what is working/not working)** |
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