BSC – HGP - Project
Go
UI Design Document & Report

1. Division of Work

Student Name1: Katell GOURLET
Student Number1: 3011302
Student Name2: Morgane SENEJKO
Student Number2: 3011089

Division of work: work was evenly divided

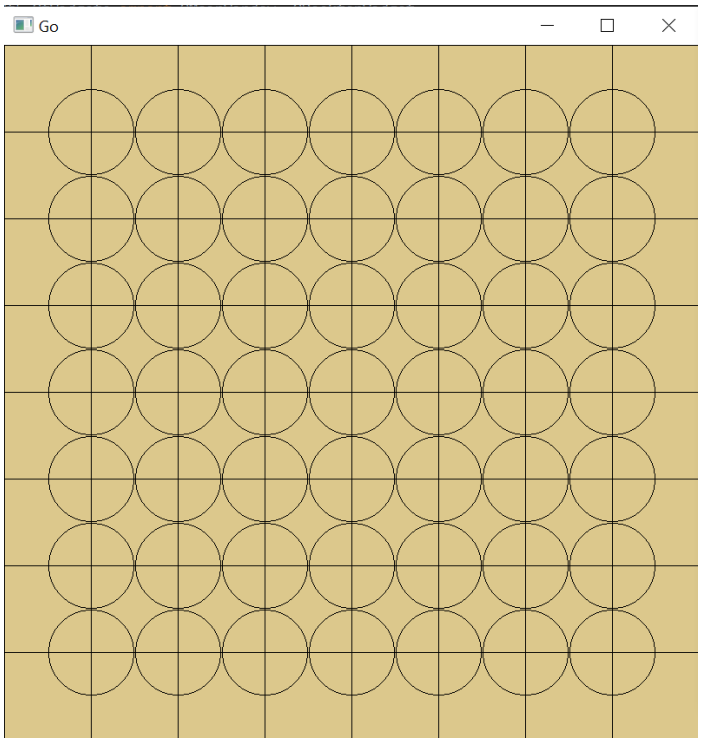
Percentage of work completed by each partner on each class / task

Filename / Task	Katell GOURLET	Morgane SENEJKO
GoBoard	50%	50%
Filename 2	50%	50%
System design	50%	50%
Git hub repository	50%	50%
Learning rules of go game	50%	50%
Score Board	40%	60%
Placement and capture	60%	40%

2. UI Design

Students Names: Katell GOURLET and Morgane SENEJKO

The board:



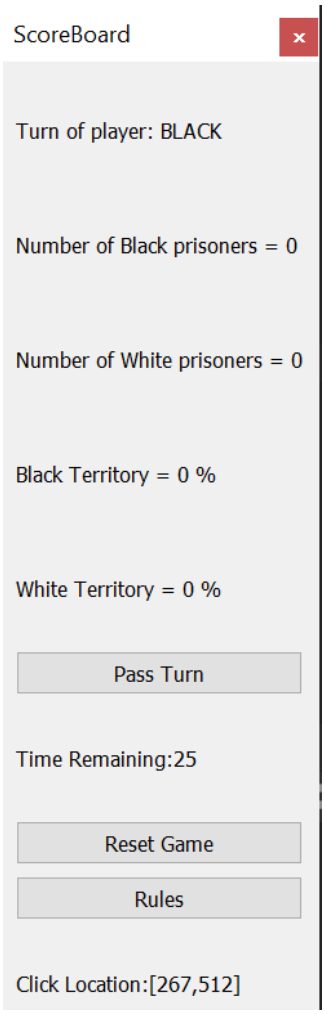
Location: The Board is placed in the main window and occupies all the main window

Colour: The colour of the background was chosen to avoid the main form of colour blindness. It is a colour often used for a game board. We used black lines to produce high contrast for the visually impaired.

The pieces: There are 49 different positions for the placement of pieces. Each position is delimited thanks to an invisible circle, with black contours. The purpose is to help the user to know where he should click to place his piece on the good position. Even if he clicks out of the circles, a piece will be placed but maybe not in the position the user expected.

Size: 7 by 7, as it is easier to begin with a small board. This size could be easily increased for more complexed game.

Style: Neutral and conventional



The Score Board:

Location: The Score Board is placed on the right of the main window.

Colour: Grey to take it as backseat (and put forward the board)

Style: Neutral and conventional

Labels/Buttons of the game:

Location: On the Score Board, as it is the main purpose of the Score board

Colour: We chose to write every label in black, to stay in an idea of an "erased" score board, comparing to the board game. In fact, there are no really essential information for the players. The game takes care of everything (suicide and KO rules, end of the game). It is just an informative window. The players should use the score board only for pass turns.

Size: Default Size, as it doesn't have to be too small or too big

Style: Neutral and conventional

We chose to put the labels and buttons in a specific order:

1. **Turn of player** in first as it is the most important and most useful information during the game.

2. **Number of Black and White prisoners** as it is a great indicator to know if we are winning or not.

3. **Territory** occupied by each player as it is a great indicator to know if we are winning or not.

These two indicators are the most important elements to know how "dominate" the game.

4. **Pass Turn** button as it is also related to player. However, the player may not use it often as two pass turn will make the other player win.

5. We put the **Time Remaining** after as it is an indicator to the player, but it won't be considered by the computer. It is to the player to be fair-play.

6. **Reset Game** button follows as it is a less used button than the rest but could be useful.

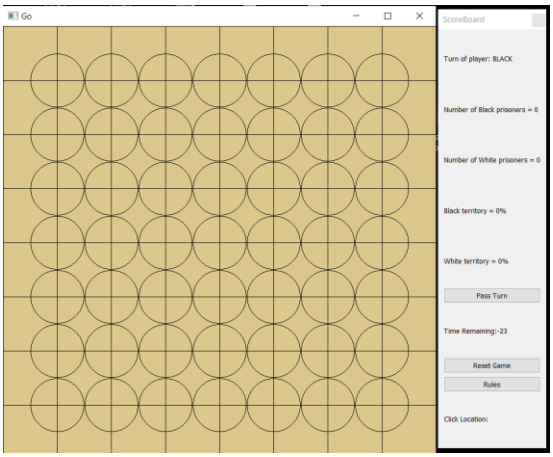
7. The **Rules** button is at the end because is usually not used, unless the player is new. However, when the player has learned the rules, it won't be useful anymore.

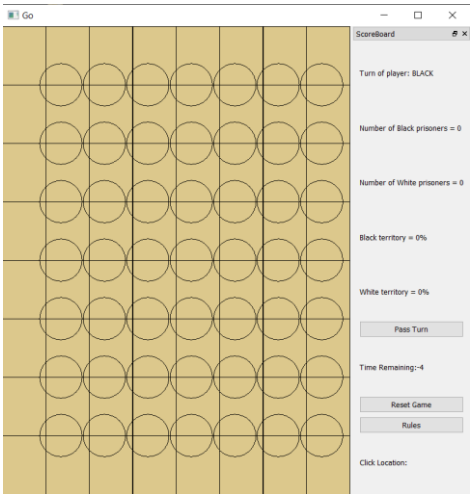
8. The **Click Location** is at the end because this doesn't mean anything to the player.

3. Screen Shots of Working/Not Working Features

Task 1 (1 image with description + what is working/not working)

The generation of the basic go board is working perfectly. Here is a picture of the display of the full Go board of side size 7:





The only negative point is that the players need to put the Score Board aside to have square and correct "transparent" round placement. If we let the score board on the window of the board, the circles overlap on each other so there are problems for the placement of pieces.

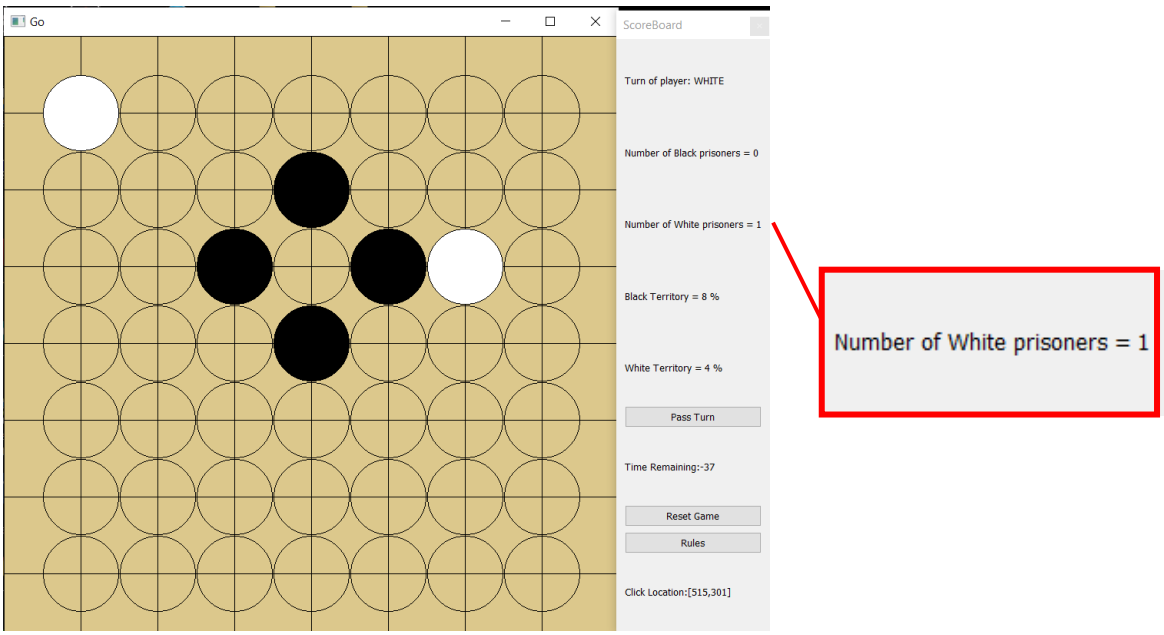
Task 2 (6 images of working Menus/buttons/Labels including description + what is working/not working)

We added on the score board several menus/buttons/labels to help the players.

a. To help the players to play, we have created a button on the score board named "Rules". If the player needs some information about how to play, he only needs to click on that button and a window will be display, as following:

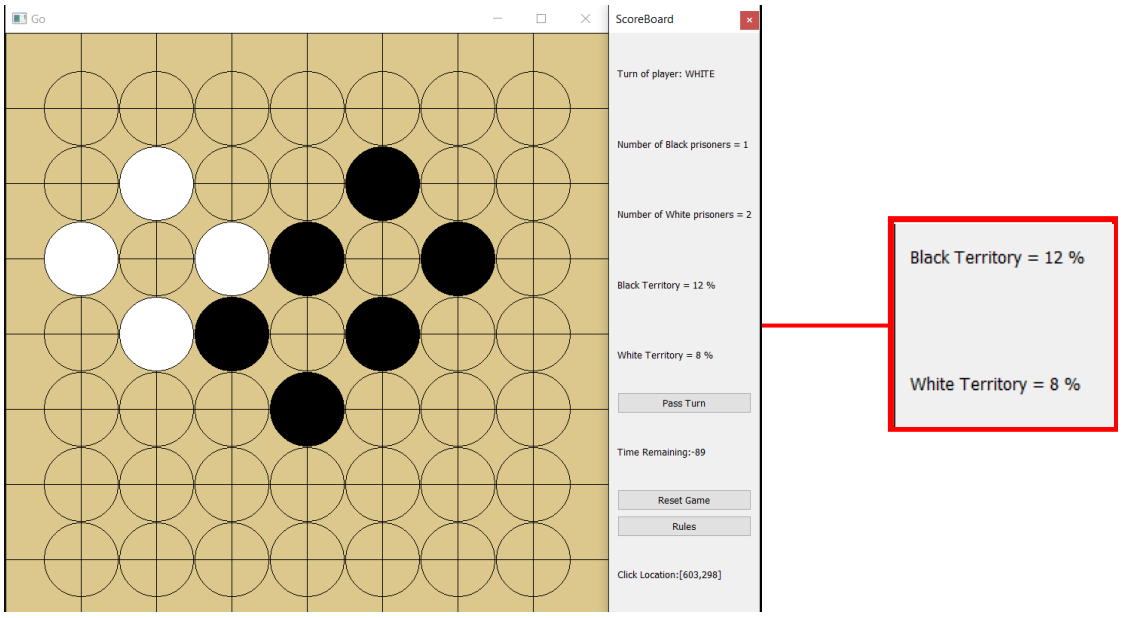
This window is an informative window. When the player gets the information he was searching, he can press the "OK" button to close the window and continues to play. This task is perfectly working.

b. To help each player to know how many prisoners they have taken, we have created two labels on the score board named “Number of Black prisoners =” and “Number of White prisoners =”. You can see in the example below that the black has catch one white piece, that’s why, the number of white prisoners is equals to 1.



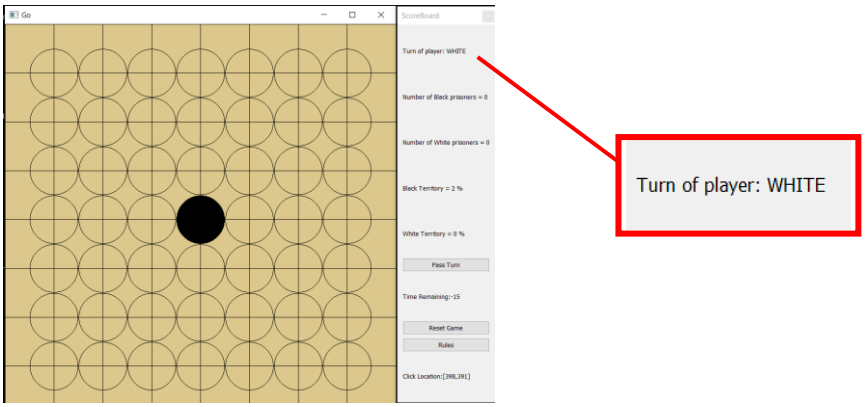
This task is perfectly working.

c. To help each player to know if they dominate the game, we have created two labels on the score board named “Black Territory =” and “White Territory =”. They are labels which indicate the percentage of territory that is occupied by each colour.



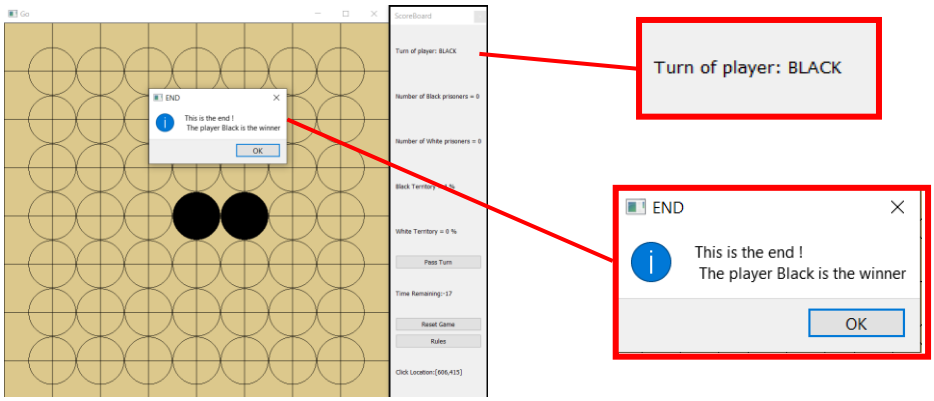
As there are 49 positions of pieces on the board, each piece occupies approximately 2% of the territory. You can see that there are 6 black pieces on the board and 4 white pieces which corresponds to 12 % (6*2%) and 8 % (4*2%). You can see on the picture above that the territories occupied by the pieces are correct. Even when pieces are catch, the territory is updated. So finally, this task is perfectly working.

d. As there is no undo in this game, it is very important to know which player's turn it is. That's why we have created one label on the score board named "Turn of player:" which indicate if it is "BLACK" or "WHITE" turn. Here is a picture to illustrate it:



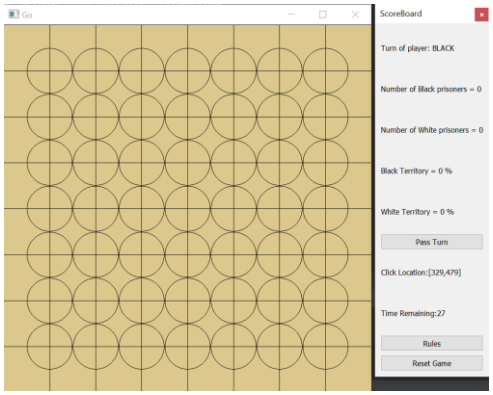
As you can see, the black has just play, and so it is white's turn, as it is written in the label. This task is perfectly working.

e. We have created a button "Pass Turn" which can be used two times maximum per the same player. If a player uses the button 2 times, this is the end of the game and a little window appears to announce the winner.



As you can see, there are 2 Black pieces on the board. It means that the Black player started, then the White player passed his turn, so the Black player placed another piece. Then the White player passed his turn again (we can see that it is still the turn of the Black player) so a window has appeared to announce the winner.
This task is perfectly working.

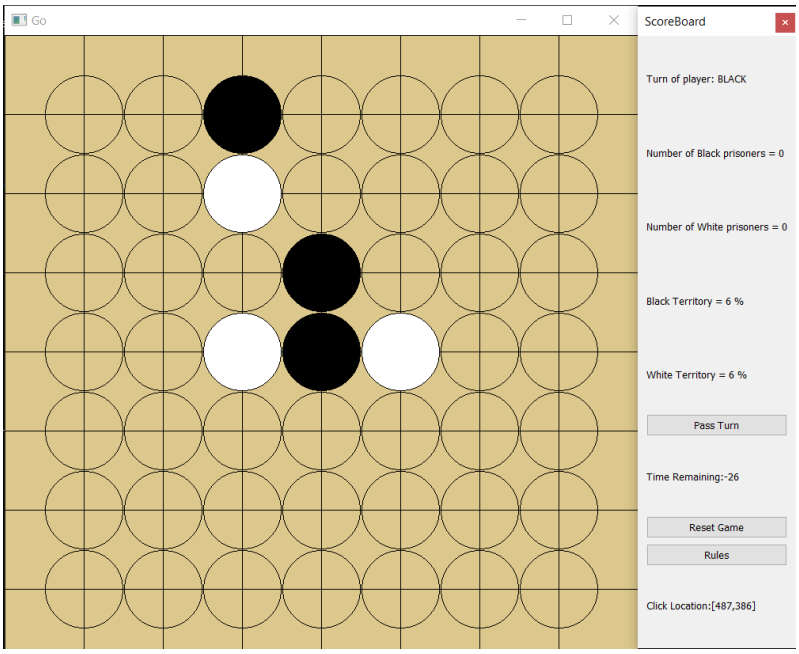
f. This function is working perfectly. You just need to click on the reset button on the score board and the board and all the parameter will be reset, as below:



Task 3 (2 images + what is working/not working)

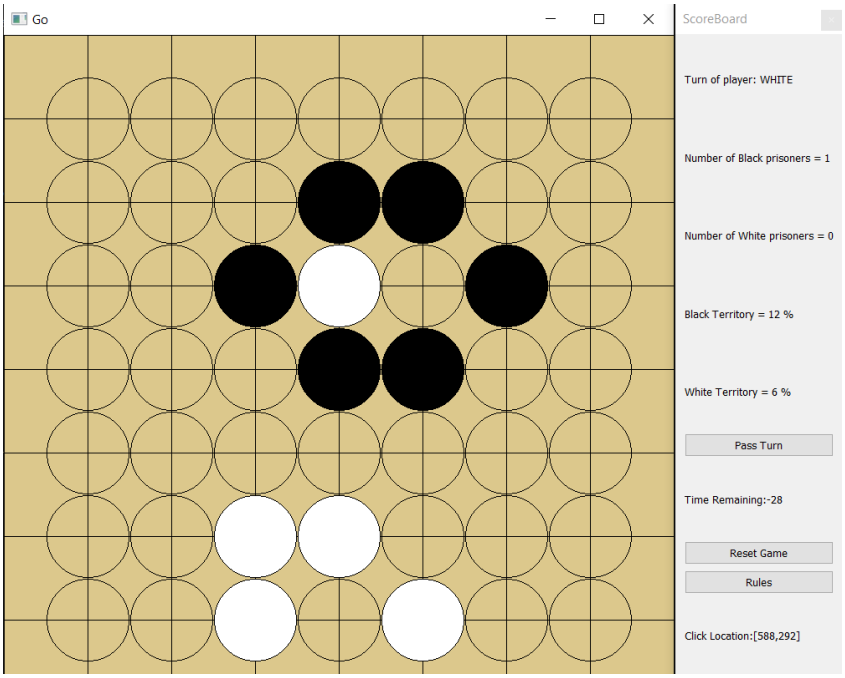
The placement of stones using mouse clicks is perfectly working as the stone always appear at the correct place. Moreover, when a black stone is placed, the colour of the next stone change to white, and inversely, to let the player play each in turn.

As you can see it on the picture below, this task is working perfectly:



Task 4 (2 images + what is working/not working)

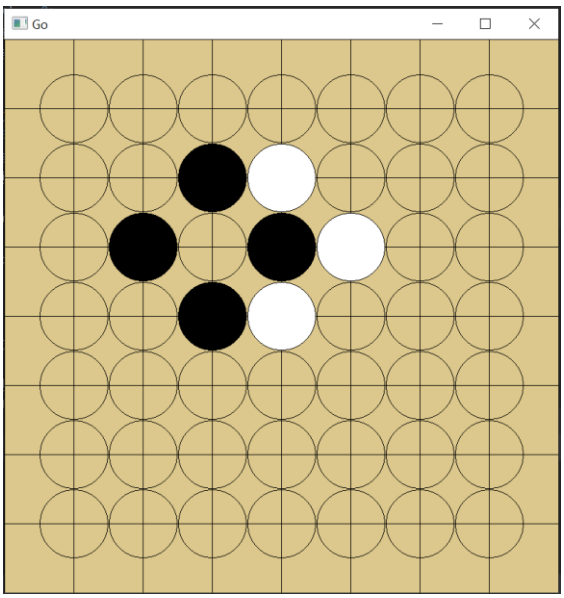
The suicide rule is perfectly working, as you can see it below:

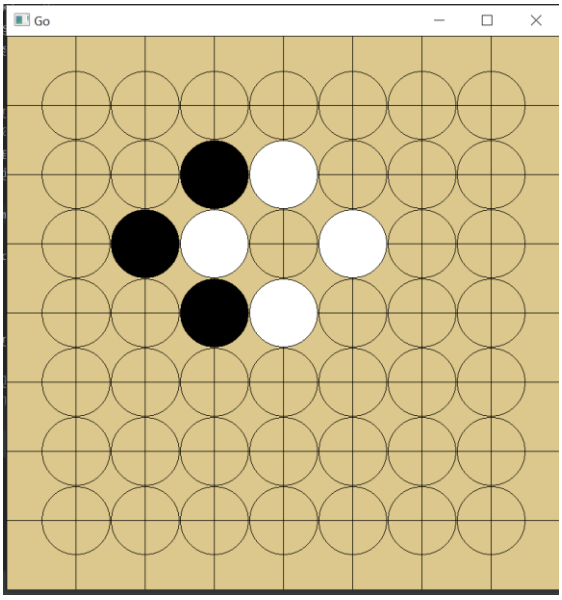


In the first case, the white player can't play in the surrounded black space, even if he clicks in the space. In the second case, the black can't play, in the same idea.

Task 5 (2 images + what is working/not working)

The KO rule is perfectly working.

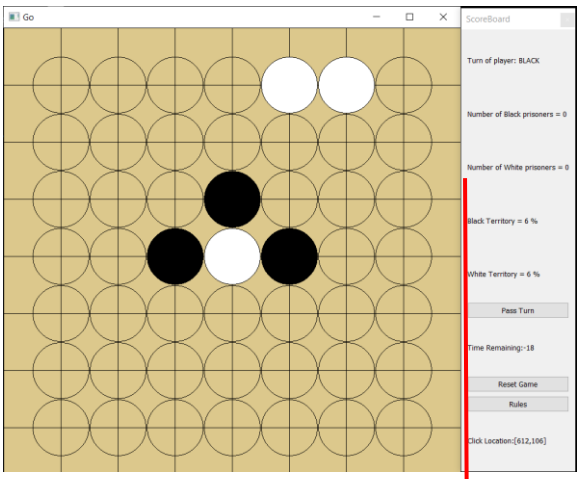


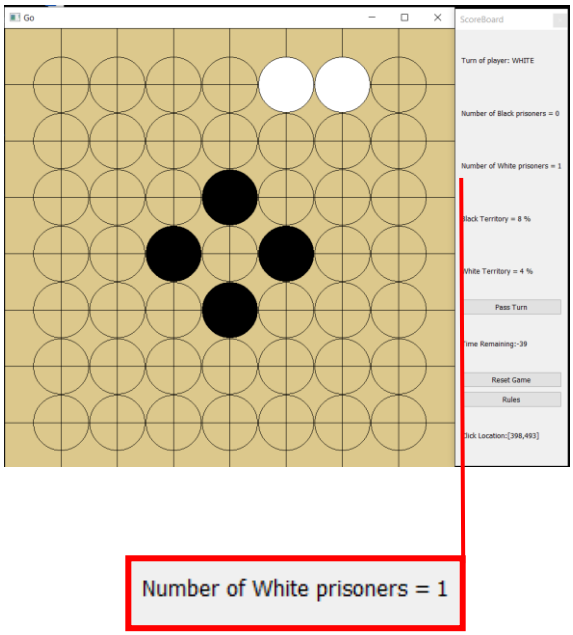


As you can see, in the first picture the white can take a black piece by “allowed suicide” as it cash a piece. It is what you can see in the second picture.
The second picture is the inverse case of the first picture. However, the black can’t take back his place, by cashing the white, as it is a KO rule. Our function blocks the player, even if he clicks.

Task 6 (2 images + what is working/not working)

The task of capturing a single stone is perfectly working.
On the first image, we see that it’s black turn and there is no prisoner. On the second image, you can see that we have placed a black piece who surround the white piece, so the white piece has disappeared. And you can see that the number of White prisoners is 1.





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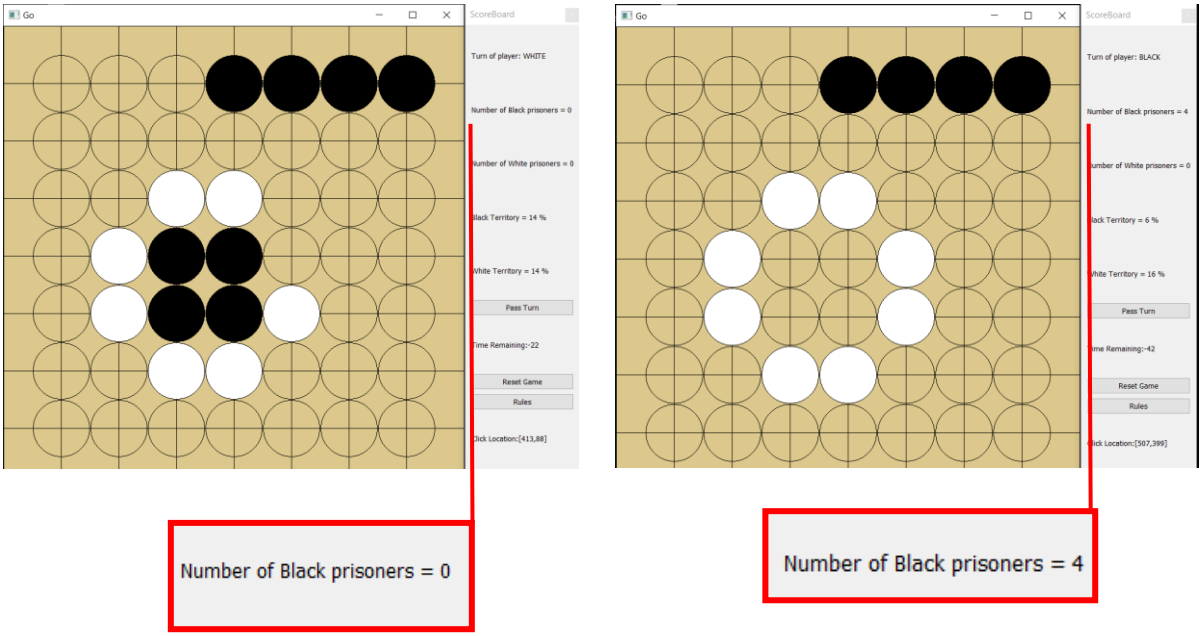
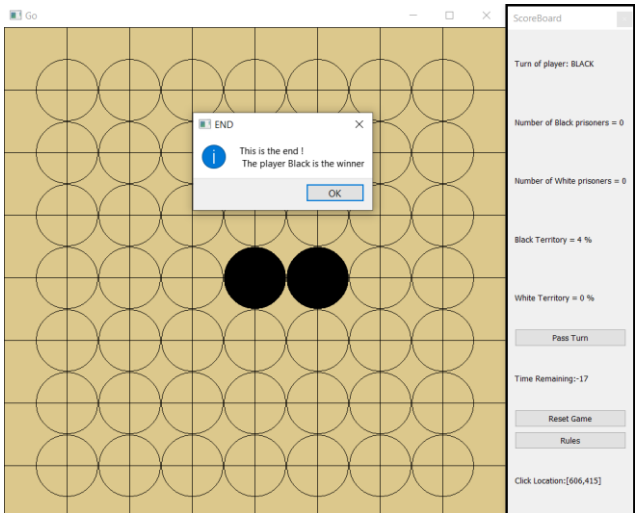
Task 7 (2 images + what is working/not working)

The task of capturing multiple stone is perfectly working.
On the first image, you can see that it's white turn. So the White player placed one piece to surround the black pieces. So the black pieces has disappeared and the number of Black prisoners is 4.



Task 8 (2 images + what is working/not working)

Here is the explication of the winner detection task.



This task is perfectly working. When a same player passes his turn two times, the game ends. The winner is the one who has the biggest number of prisoners. If the players have the same number of prisoners, the winner is the one who have the biggest territory. And if they have the same percentage of territory, the winner is the one who passed his turn two times.
On this picture, the black player is the winner because nobody has a prisoner, so the winner is the player who has the bigger number of pieces on the board: 2 pieces for the black player and 0 for the white player.