Project 6

Project Members: Austin Cha
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Project Name: PyGo - The Game of Go

Github: https://github.com/reeslabree/pygo

Work Done:

All members worked on learning the PyGame library during the first week of the project sprint.

Austin:

- Update and restructured UML Class diagram
- Researched Go rules algorithms (to be implemented in next phase)
    - Get liberties function
    - Neighbor validity algorithm and function

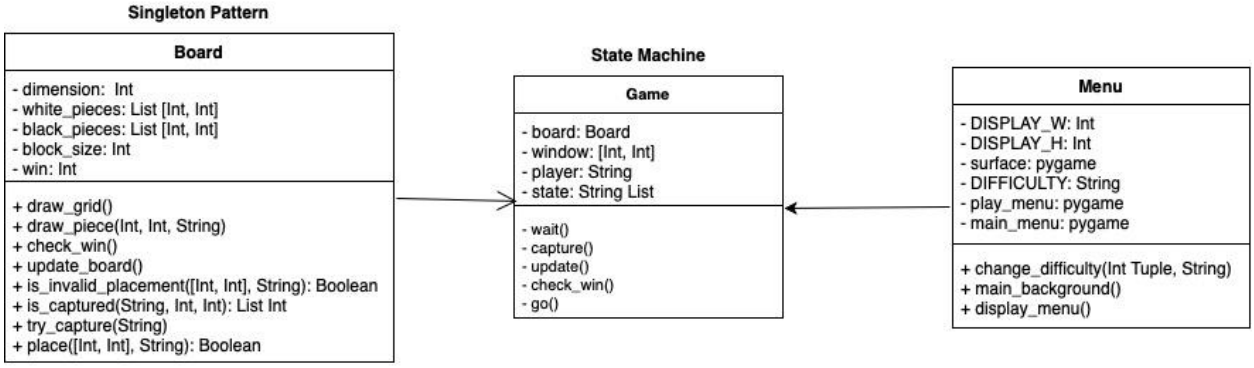
Rees:

- Built board class
    - Draw board
    - Place pieces on board
    - Algorithm for capturing pieces
    - Updating board graphics
- Built game class
    - State machine for handling state transitions. Built using a queue and a handler function that pops from the front of the queue.
    - States handlers for waiting for user input, capturing pieces, updating board graphics.
    - Pygame initialization

Jonathan:

- Built menu class (Branch Menu)
    - Start game loop
    - Select board size and game mode
    - Built with Pygame_menu library

Current UML Class Diagram:



Plan for Next Iteration:

- Keep track of score
- User Interface update to include options like ‘Save Game’, ‘Exit’, ‘Pass’ and ‘Resign’
- Refactor game class to include a simple player class to help remove code duplicity
- Potentially refactor the state machine to be its own set of classes. While the first implementation works, I am not particularly satisfied with my first implementation and would like to simplify it to both make it easier to understand and easier to update.
- Integrate menu game loop with the game loop.
- Unit testing.