Final Project Report

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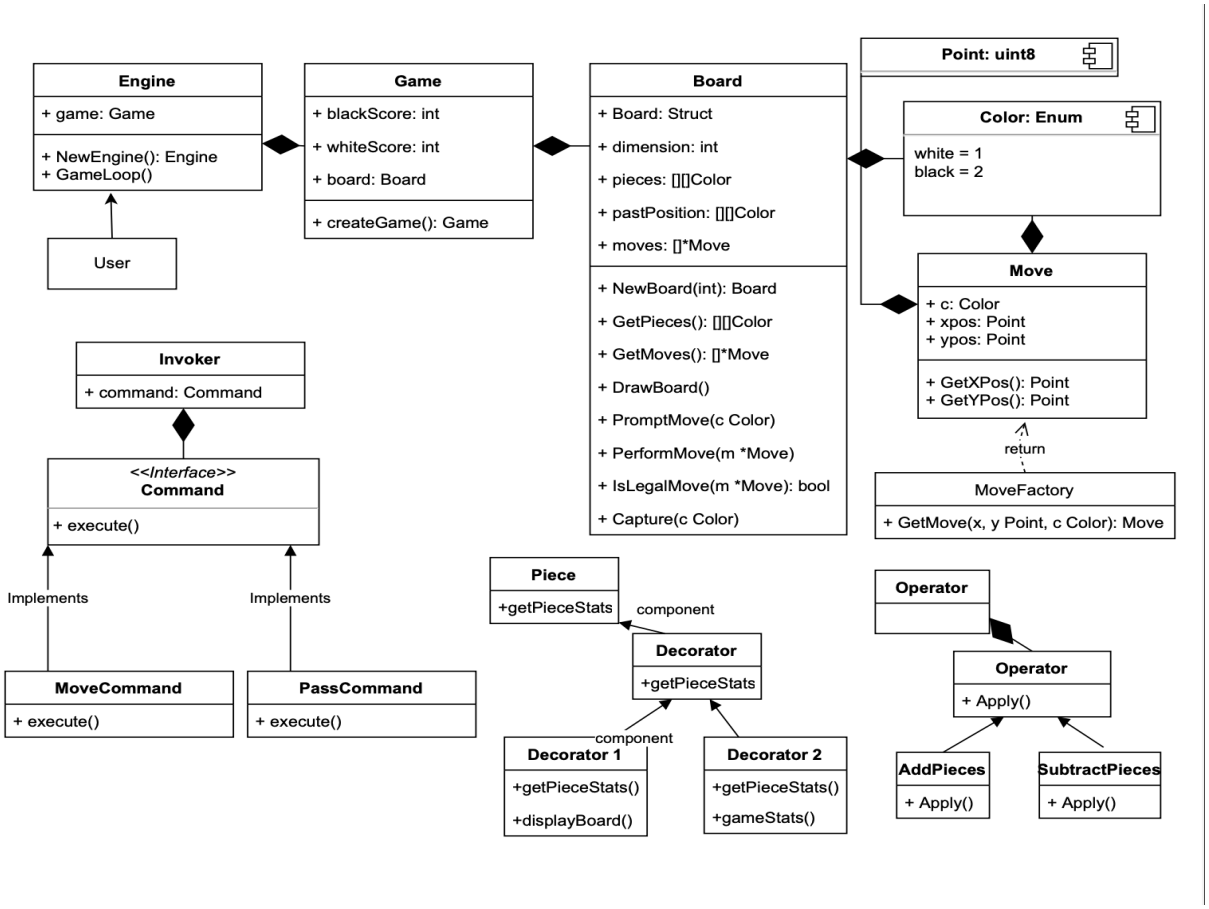
Final State of System:

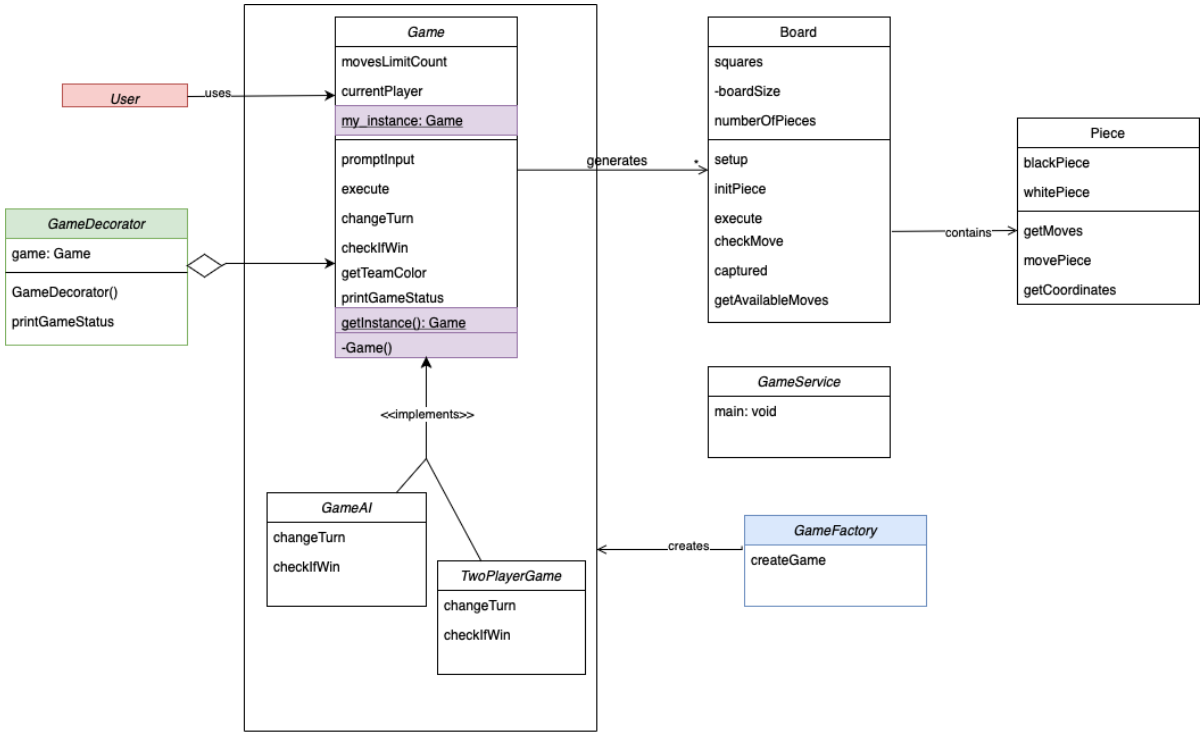
- Features implemented: players taking turns and updating board after iteration, display of the board and the state as well as player moves, patterns
- Not implemented: We had issues fully implementing game logic and scoring due to the nature of the game and the number of ways the game could be played, GUI and database were changed to command line interface in project 6 so we could focus on writing code

3. Final Class Diagram and Comparison Statement

- Updated UML class diagram



- Old UML class diagram



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- Patterns we implemented: Strategy, Command, Factory, and Decorator
- Key changes: As you can see the current UML diagram has different implementations of decorator, command, strategy, and factory patterns and the file structure ended up being different.

4. Third-Party code vs. Original code Statement
    - We used Refactoring Guru for reference when implementing the patterns in Golang, the structure of the patterns is the same as in the documentation and we changed it for our own purposes, aside from the patterns we implemented the rest of the code is original
    - Links:
        i. https://refactoring.guru/design-patterns/go
        ii. https://medium.com/@sonasingh46/strategy-pattern-in-golang-cc8747d4dc25

5. Statement on the OOAD process for your overall Semester Project

- We tried to use a third party GUI library called Fyne initially, but the documentation and support online were lacking. We ended up changing to a command line interface as well. One positive of the semester project was the capability of Go as a language to handle OO designs. The amount of OO you can squeeze into a non OO language was surprising, and it made for a nice development experience. However, using Go as an OO language meant that there weren't many online sources to help with some problems. The ones we found like Refactoring Guru were very helpful, though. Overall we think it was an interesting way to apply the concepts we learned throughout the semester.