Project 6 - First Development Pass, Interim Report

GithubRepository: https://github.com/isaacj1sim/CSCI-4448---Project-6

Status Summary:

<u>Jason Nguyen:</u> Added additional code features & classes to the code base. Try to guide development towards more modularity/delegation with a Scrum methodology. Status Summary and Plan for Next Iteration.

<u>Isaac Sim:</u> Created most of the original code base for the Stratego Game. Implemented Singleton and Factory pattern to the game. Strategized future development ideas for the project.

<u>Varunjit Srinivas:</u> Helped Jason with the Status Summary and Plan for Next Iteration. Came up with the idea of Stratego project and drafted an initial class diagram for what we planned the project would look like, as well as making the interim class diagram. Will be working on adding piece subclasses.
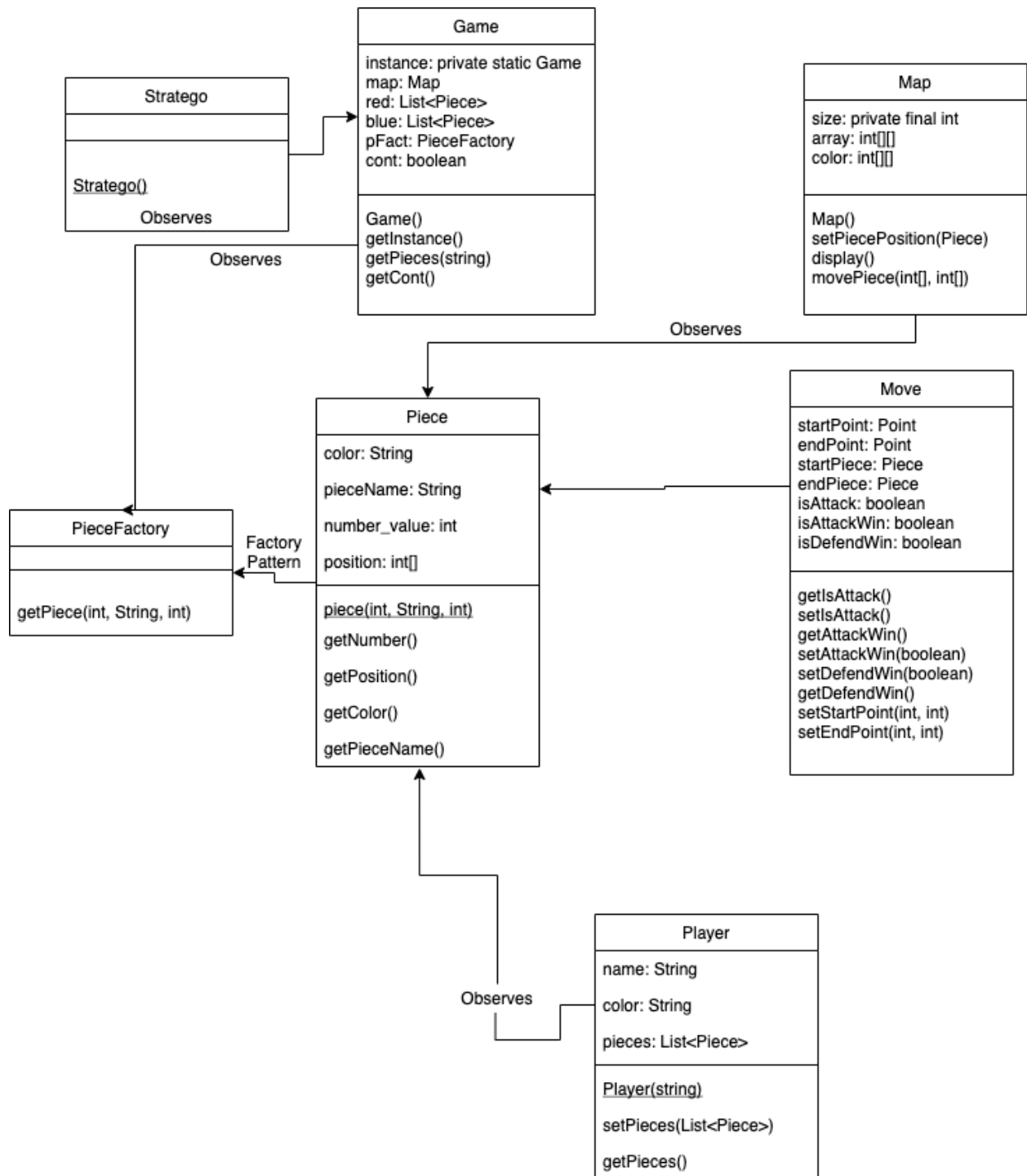
Changes or Issues Encountered:
-I started my own code for the game in the middle of the night not knowing that Isaac had also been working on his own code. Isaac was further along so I accepted his work as the codebase.
-Reading another person's code and figuring out their design isn't always easy. I pushed for more delegation & modularity of code for future ease of expandability and readability.
-The path that development took deviated a little from the original class diagram design plan.

Patterns:
Singleton Pattern
Factory Pattern

Class Diagram:

Stratego

Stratego()

Observes

Game

instance: private static Game
map: Map
red: List<Piece>
blue: List<Piece>
pFact: PieceFactory
cont: boolean

Game()
getInstance()
getPieces(string)
getCont()

Map

size: private final int
array: int[][]
color: int[][]

Map()
setPiecePosition(Piece)
display()
movePiece(int[], int[])

Observes

Observes

PieceFactory

getPiece(int, String, int)

Factory
Pattern

Piece

color: String

pieceName: String

number_value: int

position: int[]

piece(int, String, int)
getNumber()
getPosition()
getColor()
getPieceName()

Move

startPoint: Point
endPoint: Point
startPiece: Piece
endPiece: Piece
isAttack: boolean
isAttackWin: boolean
isDefendWin: boolean

getIsAttack()
setIsAttack()
getAttackWin()
setAttackWin(boolean)
setDefendWin(boolean)
getDefendWin()
setStartPoint(int, int)
setEndPoint(int, int)

Observes

Player

name: String

color: String

pieces: List<Piece>

Player(string)

setPieces(List<Piece>)

getPieces()

Plan for Next Iteration:
-We need to establish an updated design plan for where we want to take development of this project.
-We need to reorganize/refactor our code to make it more cohesive and loosely coupled.
-Implement a Scrum style methodology for delegating tasks to team members.
-More delegation of tasks to specific classes
-Front End Code (GUI)
-Back End support (Database)
-Integration of project