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Assignment #2: Overview

Compared to my UML diagram in assignment 1, many things have changed. From changing the names of fields/methods, to deleting/adding fields and methods and changing the relationship between specific classes. Instead of what I had originally put on my first diagram, I changed the relationship between Player and Game from an association to an aggregation. The reason for this is because Players can exist without the game existing. Next, the Driver only has a dependency to the Game and Player classes, rather than all of them. Compared to before, most of the methods belong in my Board class, which has a 2D array of Positions. The Board class can create a new board, allow the player to take a turn, make a move, convert pieces, update/print the board and even check all directions in separate methods to see if a player can place a piece. None of this was included in my original project, but once actually beginning to code it I added many methods and fields to the program. As for the player class, instead of having play(), save(), quit() etc... I have added all of this to the Game class, the Player class simply sets the names and the colors of the pieces. While the Game and Board class do most of the work, I decided to put the array of positions in the Board class rather than the player class in assignment 1. The relationships go as followed: The game and player have an aggregation relationship, the Game has a Board (association), the Board has a Position, and the abstract Position class is the parent of both UnplayablePosition and PlayablePosition classes. Compared to assignment 1, I had an association to almost every class, but as listed above it has now changed. The Position class has a piece, and a few fields for the colors/empty pieces. As well as the abstract canPlay method and getters and setters for the pieces. The UnplayablePosition and PlayablePosition remain similar to assignment 1 with their own canPlay methods returning true or false.

Overall, I have changed many things in my UML diagram compared to assignment 1. The relationships between classes, the field names and method names and the addition of methods and field.