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397 Assignment 7: Codebase Swap

We decided to move forward with the team 14 codebase. This codebase is easier to follow which will allow Vinay to quickly familiarize himself with the new code. The team 8 codebase is tested, workable, and even slightly ahead in its implementation of the game, but it is cluttered with unnecessary data members and functions, and often violates proper encapsulation practices. Reorganizing the codebase would demand a significant amount of effort, undercutting any other advantages, whereas the team 14 codebase is on a shorter path to a final product.

We discussed abstraction issues in a few places in the team 8 codebase. First, the use of a DirectionUtils class created a lot of confusion. Moving players along the board required conversions from positions to ints to vectors back to positions. Each player had a separate board coordinate, tile position, and location variable. The team 14 implementation using switch statements and position triples is much simpler. Second, the task of managing the game was being handled by the board, but the server would be better suited to play that top-level role. Third, the dragon tile implementation was occurring in the deck class which meant the deck was keeping track of players' hands. While this could all be fixed, it would not be worth the effort when team 14's codebase already avoided these issues.

The team 14 codebase also implemented some tasks in more useful ways. The dragon tile is managed by a queue in the server which means the logic was not spread throughout classes. Additionally, each type of machine player is a child class of the machine player class. This will make it easier for us to introduce our own machine players in future assignments.

Our goal in choosing a codebase was to make things easier for ourselves moving forward, and we believe the team 14 codebase will do that.