CPSC 490: Abstract

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*Building a Versatile, Abstract API for Creating Digital Board Games*

Board games have been a popular form of entertainment for generations. However, as the world becomes increasingly technology-oriented, so too become games. From game systems to computers, entertainment is moving increasingly on screens and online. This does not mean that board games are becoming obsolete; rather, there has been a surge of digital versions of board games that are available online or as applications. Most popular card games, and even some of the favorite board games such as Settlers of Catan, have been digitized and made into websites and apps. But there are thousands of beloved board games that are still waiting to be programmed and playable on the computer. However, programming board games from the ground up can be a daunting task. There are so many game components that must be written and given functionality before any of the actual game logic can be written at all. Programmers have to first build the logic behind boards, pieces, players, and everything else before they can even begin to think about the specifics of the game.

My project aims to help streamline this endeavor by providing an API for developers of board games to use. Many board games have similar or the same components: a board, players, and game pieces, for example. If these components can be abstracted away, while still being flexible enough for various types of usage, then developers can focus on writing game logic instead of writing the same code over and over again for the same core components. This means that in the end, it will be easier and faster for developers to bring more board games to our fit our new technology.