

**15-112 Term Project Proposal**  
**Di Wang**  
**November 22, 2015**

My term project is a game based on “A Druid’s Duel” on Steam, which is a turn-based strategy game where players use their druids to occupy land, which in turn provides mana each turn for druid recruitment and a variety of spells. The game is not as simple as it may look, as there are nearly infinite ways to win a game, and very often one single move decides victory or defeat.

I intend to work on my term project based solely on Python and its built-in Tkinter. Eventually what is in display to the user would be very similar to the original game. The UI includes a number of buttons which are the available spells, and they would be shaded differently if they are no longer available (when the mana is not enough to cast this spell) or if they are already selected. The game board would display all the druids (which I called creatures in the code) and lands, whether occupied or not occupied, and the user can click on his/her creatures, which would be shaded when selected, and all the possible moves would also be highlighted. When a creature has finished moving, it would also be shaded, but differently from when it is selected. In total, the game would be very user-friendly.

As for the bigger picture, I would really want to allow for at least two modes of playing: player v.s. player on the same computer, and player v.s. AI, whose difficulty can range from very easy to very hard. A basic step-by-step tutorial would be given on the commands and details of the gameplay, and the users will be able to go back any time they want. If I have time in the end, I would like to also implement web-based player v.s. player gaming, a campaign (a series of player v.s. AI games with an overarching druid

story), a mode where the user can create a customized starting board and creatures to play against either the AI or other users, a save-and-load feature, etc. All of these modes will be displayed on the splash screen, before the user gets into the game itself.

The AI would be the most important feature in the game. As I do not have access to how the original game AI is programmed, I need to come up with an AI from scratch on my own. For the easier AI's, I would make the user slightly advantaged in terms of the starting position, where the user can control more land and creatures than the AI. The AI would also make flawed moves, for example, summoning a creature next to a user's creature, so it can be easily captured next turn. For the harder AI's, not only would the starting position be in favor of the AI, but the AI is also remarkably smarter. It will decide on whether to transform a creature or summon a creature based on factors such as the surrounding forces, the overall mana distribution, etc.

The graphics for this game would be appealing, but not splendid due to technology limitations. I would like to implement some basic animations, for example, to make an attacking animation when a creature captures another.