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CS 172 Final Project Proposal

**Problem:** In the game League of Legends, there is a type of game where both teams take turns picking their champion lineup for their team. This is called the draft pick. There is a strategy in doing this to pick champions that are good counter picks the champions that the other team has picked so far. As novice League of Legends players, we have not played enough games to know which champions are good counter picks for what champions.

**Solution:** We are going to create a simulated draft pick. There are going to be two different things that the program will be able to do. First, the computer will be able to take an input of the champions being picked from the other team and it will generate good picks to counter that pick. Second, the computer will generate a somewhat good team composition and it will ask you to pick good counter picks for those champions. This second part is a lot like a game of sorts to test your knowledge of the champions and how you would do in an actual draft pick

**Approach:** We are planning on using File I/O to input the list of champions and their data. There are currently 121 different champions, so File I/O will be the easiest way to get the champion data into the program. It will also allow us to update the list of champions and their data easier when new champions come out.

We will also be creating algorithms to simulate the two types of draft picks and we’ll include some nice program/user interaction such as errors when you don’t spell a champion’s name right or input a champion that doesn’t exist.

**Possible Complications:** There might be some complications with using inheritance. We are planning on using inheritance to organize champions and their data. The champions’ data are all of the same type so inheritance will go well here. However, a complication could arise with this because we haven’t covered it yet.