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CS 172 Final Project Requirements Specifications

**Problem Definition:** 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.

**System Requirements:** The system will have to handle a lot of input and output. This will both be from files and then from the user. It will also be required to have errors so that the user knows what went wrong when the program is not working correctly. The system also requires algorithms to simulate the draft picks. There will have to be two different algorithms because there are two different types of draft picks. The system also has to have a database of sorts for all 121 champions that are in League of Legends. This will be done by having a class that stores all of the data from one champion. Then we will have a vector of 121 champion objects. This will give us that database that we will be using. To populate this database, we will be using file I/O to input the data from 121 different champion files that already contain their data. That data will be used to figure out what champions go with what champions. There will also need to be a nice interface with the user so that the program looks presentable.

**What It Must Accomplish:** The program needs to iterate at least once through a draft simulation. We might ask the user if they want to run it again, however, that is a decision for a later time. The program must successfully read in data from 122 different files into two main database type vectors. These will be used throughout the whole of the program. The program then needs successfully simulate a draft pick from League of Legends. And then compute the winner based on an algorithm. The program should be right at least 75% of the time. However, this does not take into account the skill level of the actual players.

**Assumptions**: We are assuming that anyone using our program already has a basic understanding of League of Legends. This program can be used as a reference or a tool for strengthening the draft skills of a League player.