Title Course code

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1 Introduction

Dota 2 is a team based strategy game that is infamous for its relative complexity compared to competing titles. In this game two teams of five players are pitted against each other in a very peculiar arena with several different minor objectives and one major objective; destroying the base of the enemy team. The first team to destroy the enemy base is crowned as the winner, but this requires that the players have a good understanding of the game and even better teamwork. A defining characteristic of the title is the usage of *heroes*. Each player must choose a hero to play as. This sums up to a total of 10 heroes that end up being played each match. Choosing your hero is a quintessential aspect of playing the game effectively, as certain heroes are generally considered better than others in certain scenarios. Therefore, picking a hero that generally underperforms in most situations is usually a bad choice. Naturally every hero has their place in the game, but some end up being more flexible than others.

2 Problem description

The authors of this project proposal enjoy playing Dota 2, but (most of them) are moderately bad at the game. Therefore, they believe that by mining data from a large dataset of games played, they perhaps might be able to get a better understanding of what heroes to pick. In particular the following topics are things they wish to study:

- Which hero is the *best*, in terms of total winrate? (Games won/Games played)

- Which hero from each attribute is the *best*, in terms of total winrate?

- Create a model which, upon inputing the chosen heroes of two teams, predicts which team is most likely to win, based upon hero choices alone.

3 Preprocessing techniques

4 Datamining techniques

5 Evalutation