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Project 3 Proposal

League of Legends is a popular online multiplayer game where two teams of five players face off to destroy an object each other's base (called the nexus). After choosing their team composition from the available 140 plus champions, individual players focus on collecting in game gold and experience to buy in game items and level up, both of which provide various character improvements to assist in eliminating the opposing teams' players and structures. While eliminating enemy players is important to game success, just as collecting gold and leveling up is important, the objective of the game requires the destruction of multiple inanimate objects (called towers) followed by the ultimate destruction of the nexus.

The goal of this project is to use team performance data collected from the first 10 minutes of a game to predict which team (red or blue) will destroy their opponent's nexus first and be victorious. I will also be using the results to provide an analysis which metrics matter most in the first few minutes of the game and how a player should prioritize early game objectives.

The dataset I will be using contains the records of approximately 9,800 matches from highly skilled players in the diamond one to master rank (for context these players are likely more skilled than the players on the Marist esports team). Each record has 19 metrics for each team providing a summary of performance over the first 10 minutes as well as a record of whether or not that team ended up winning or losing. The dataset can be found at https://www.kaggle.com/bobbyscience/league-of-legends-diamond-ranked-games-10-min.