Project Proposal

Name: Lucas Yu

Project Name: Analyze Active Players

Link to GitHub repository:

https://github.com/Lucaszhuokaiyu/data_engineer_project

Job Description

The position I am applying for is senior data engineer in Riot Games, this role involves building reliable data solutions to improve the experience for players. As a gamer, I always wonder what the possible ways are to improve gameplay experience so players would love to stay.

Problem

There's limited visibility into new player retention and engagement, The problem I aim to solve is: "What behavioral signals or gameplay patterns can be observed from active players to determine how the game is performing?" This problem is highly relevant to the role of a data engineer because we need to utilize SQL to analyze number of players, players gain/loss, to improve player experience, one of Riot's key goals.

Data Sources

1. Riot Games API link: https://developer.riotgames.com/apis#league-v4, Use Python to access endpoint, and structured match data ideal for identifying player behaviors
2. Web Scraping Source: https://activeplayer.io/league-of-legends/, Use Python with BeautifulSoup to extract player match stats, make comparisons of individual player choices.

Solution

Identify players' in-game match status, win/loss rate, see if there are any correlations. Maybe create time-to-churn distribution graphs and visualize behavior difference between churned vs retained players.