Project Proposal

Name: Lucas Yu

Project Name: Analyze the behavior of churned online players

Link to GitHub repository:

https://github.com/Lucaszhuokaiyu/Sql_Project_Senior_Data_Engineer

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

The problem I aim to solve is: "What behavioral signals or gameplay patterns can help predict whether a player is likely to churn?" This problem is highly relevant to the role of a data engineer because we need to utilize SQL, analyze match fairness, latency, and quality to improve player experience, one of Riot's key goals.

Data Sources

1. Riot Games API link: https://developer.riotgames.com/, Use Python to access endpoint, and structured match data ideal for identifying player behaviors
2. Web Scraping Source: https://www.op.gg/, Use Python with BeautifulSoup to extract player match stats, make comparisons of individual player choices.

Solution

Identify players who stopped playing and analyze traits like session frequency, 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.