

CSE6242 PROJECT PROPOSAL

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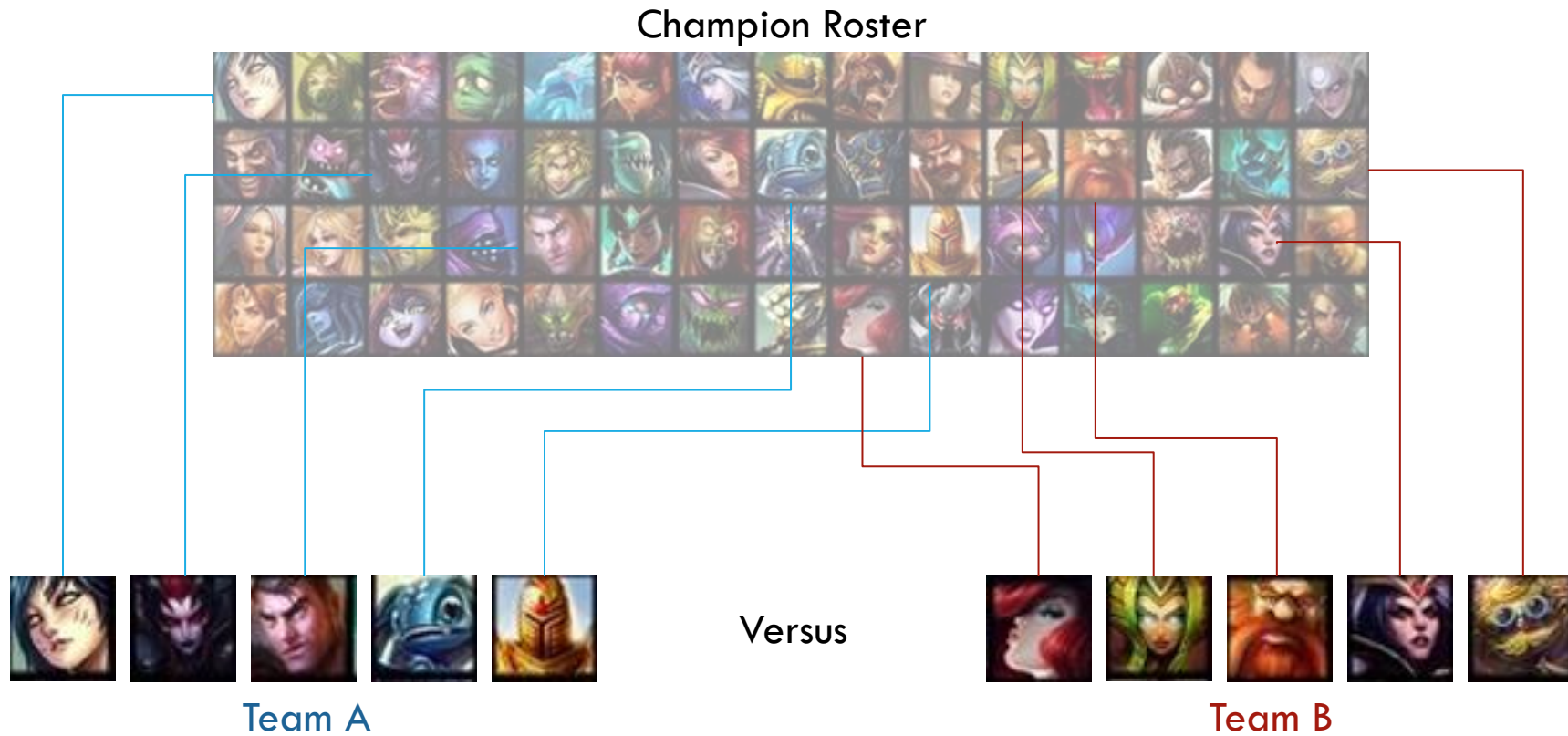
**TEAM
TEEMO**



LEAGUE OF LEGENDS



League of Legends is an online game where two teams of 5 players pick champions and fight



OBJECTIVES, CURRENT PRACTICE & INNOVATION



We create a tool that helps the general audience to improve their team composition

Approach

- Gather match data from Riot Games to calculate win rates and occurrences
- Calculate conditional probabilities of champion occurrence [Kim et al. 2012]
- Extract communities of successful champion combinations [Raeder and Chawla 2010]
- Make this accessible to the general audience with an easy-to-use interactive tool

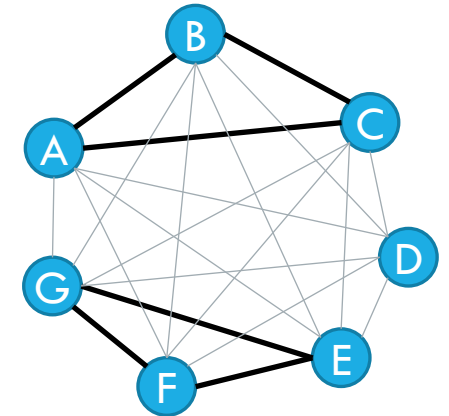
Current practice

- Strong focus on professional matches [Hong et al. 2020] [Summerville et al. 2021]
- Team tactical awareness is more important than operational skill [Xia et al 2017]
- Users are forced to select specific champions [Hanke and Chaimowicz 2021]

Innovation

- Focus on general audience rather than professional matches
- Focus on team analytics rather than individual operational skill
- Flexibility in champion recommendation

Community extraction



Nodes are champions

Line thickness indicates
win rate for the
combination of champions

(ABC) and (EFG) form
clusters of winning teams

TARGET AUDIENCE AND IMPACT



There are over 100 million players worldwide. Their game can be improved.



TECH

This esports giant draws in more viewers than the Super Bowl, and it's expected to get even bigger

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SHARE    



how to fight league of legends

 All  Videos  Images  New

About 3,640,000,000 results (0.70 seconds)



how to draft league of legends

 All  Images  Videos 

About 10,800,000 results (0.61 seconds)

RISKS, BENEFITS & COSTS

Main risk is the absence of data or patterns. The payoff is improved team composition for all.

Risks

- Data gathering is limited due to restrictions on Riot's API
- Graphs are complex objects that have to be communicated clearly and intuitively to users
- Improper data processing in python

Payoff

- Accessible tool to help the general audience in their drafting choices

Cost

- None

PLAN OF ACTIVITIES & CHECKS FOR SUCCESS



The plan of activities lists all key activities and how to measure success

Week	42	43	44	45	46	47	48
End date	Oct 23 rd	Oct 30 th	Nov 6 th	Nov 13 th	Nov 20 th	Nov 27 th	Dec 3 rd
	Data collection using API						
			Data processing python				
				Visualization in D3			
						Final report and poster	

All team members will contribute equally to the different activities for maximum symbiosis

Activity	Checkpoint for success
Data collection using API	Knowledge of Riot API and 500,000 rows of clean data
Data processing python	Validated graph data
Visualization in D3	Intelligible graph and user functionalities
Final report and poster	Delivered final report and poster

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