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Target ship date: May 22

Project Description

This project is a web app that:
   - Compiles and displays statistics from various League of Legends matches

Dataset
https://www.kaggle.com/datasets/vokainodra/league-of-legends-high-elo-match-data-patch-139

Program components

__init__.py: Flask app, renders templates

db.py: functions for creating, adding, modifying, and retrieving items from DB.

api.py: functions to gather riot api data and parse it into a json

index.html: starting page with search bar to find all the champions and also a button to find a random match

match.html: displays random league match from our database so you can explore stuff of the match, can look at individual players

champ.html: displays average info about the data and has graphs, compiled using db

Component Map
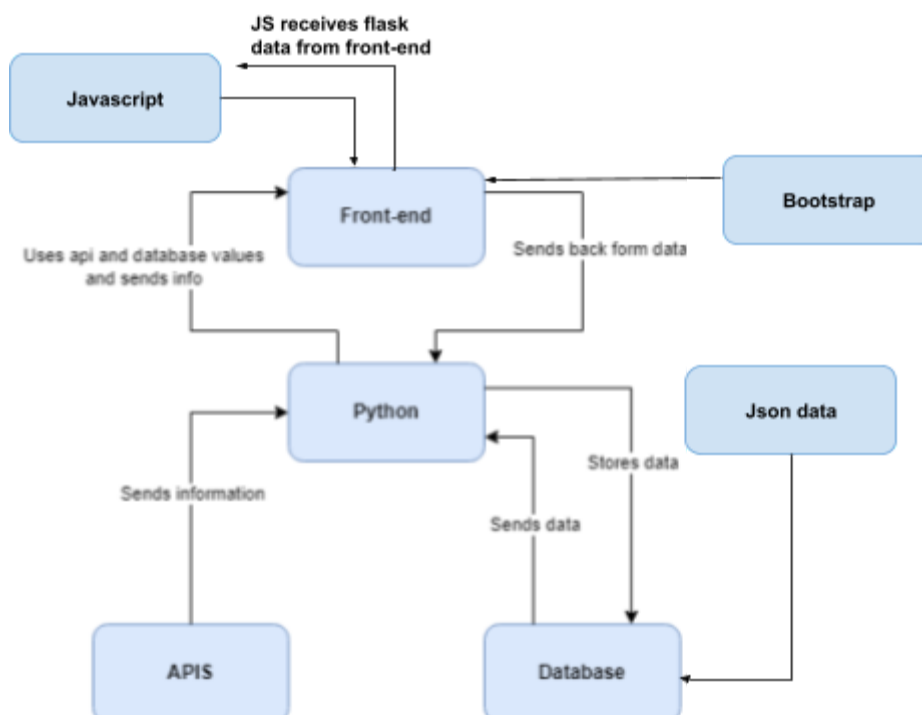
Database organization
Matches table: a table containing the general info of all the matches:
matchId TEXT, GAME_DURATION INTEGER, WIN INTEGER, BLUE_CHAMP_KILLS INTEGER,
BLUE_BARON_KILLS INTEGER, BLUE_DRAGON_KILLS INTEGER, BLUE_INHIB_KILLS
INTEGER, BLUE_HERALD_KILLS INTEGER, BLUE_TOWER_KILLS INTEGER,
RED_CHAMP_KILLS, RED_BARON_KILLS INTEGER, RED_DRAGON_KILLS INTEGER,
RED_INHIB_KILLS INTEGER, RED_HERALD_KILLS INTEGER, RED_TOWER_KILLS INTEGER

Participants table: a table containing all the info of each participant in
each match, columns are:
matchId TEXT,allInPings INT,assistMePings INT,assists INT,baitPings INT,baronKills
INT,basicPings INT,bountyLevel INT,challenges TEXT, champExperience INT,champLevel
INT,championId INT,championName TEXT,championTransform INT,commandPings
INT,consumablesPurchased INT, damageDealtToBuildings INT,damageDealtToObjectives
INT,damageDealtToTurrets INT,damageSelfMitigated INT,dangerPings INT,deaths
INT,detectorWardsPlaced INT,doubleKills INT,dragonKills INT,eligibleForProgression
INT,enemyMissingPings INT,enemyVisionPings INT,firstBloodAssist INT,firstBloodKill
INT,firstTowerAssist INT,firstTowerKill INT,gameEndedInEarlySurrender
INT,gameEndedInSurrender INT,getBackPings INT,goldEarned INT,goldSpent INT,holdPings
INT,individualPosition TEXT,inhibitorKills INT,inhibitorTakedowns INT,inhibitorsLost
INT,item0 INT,item1 INT,item2 INT,item3 INT,item4 INT,item5 INT,item6
INT,itemsPurchased INT,killingSprees INT,kills INT,lane TEXT,largestCriticalStrike
INT,largestKillingSpree INT,largestMultiKill INT,longestTimeSpentLiving
INT,magicDamageDealt INT,magicDamageDealtToChampions INT,magicDamageTaken
INT,needVisionPings INT,neutralMinionsKilled INT,nexusKills INT,nexusLost
INT,nexusTakedowns INT,objectivesStolen INT,objectivesStolenAssists INT,onMyWayPings
INT,participantId INT,pentaKills INT,perks BLOB,physicalDamageDealt
INT,physicalDamageDealtToChampions INT,physicalDamageTaken INT,profileIcon
INT,pushPings INT,puuid TEXT,quadraKills INT,riotIdName TEXT,riotIdTagline TEXT,role
TEXT,sightWardsBoughtInGame INT,spell1Casts INT,spell2Casts INT,spell3Casts
INT,spell4Casts INT,summoner1Casts INT,summoner1Id INT,summoner2Casts INT,summoner2Id
INT,summonerId TEXT,summonerLevel INT,summonerName TEXT,teamEarlySurrendered
INT,teamId INT,teamPosition TEXT,timeCCingOthers INT,timePlayed
INT,totalAllyJungleMinionsKilled INT,totalDamageDealt INT,totalDamageDealtToChampions
INT,totalDamageShieldedOnTeammates INT,totalDamageTaken
INT,totalEnemyJungleMinionsKilled INT,totalHeal INT,totalHealsOnTeammates
INT,totalMinionsKilled INT,totalTimeCCDealt INT,totalTimeSpentDead
INT,totalUnitsHealed INT,tripleKills INT,trueDamageDealt
INT,trueDamageDealtToChampions INT,trueDamageTaken INT,turretKills
INT,turretTakedowns INT,turretsLost INT,unrealKills INT,visionClearedPings
INT,visionScore INT,visionWardsBoughtInGame INT,wardsKilled INT,wardsPlaced INT,win
INT

Champions table: a table containing all the average information of each
champion, got this data from gathering from participants table:
championName TEXT, role TEXT, winRate INT, kills INT, deaths INT, assists
INT, commonSpell1 INT, commonSpell2 INT, item0 INT,item1 INT, item2 INT,
item3 INT, item4 INT, item5 INT, item6 INT, gameDuration INT, cs INT,
dmgTaken INT, dmgDealt INT, runes BLOB

Site map
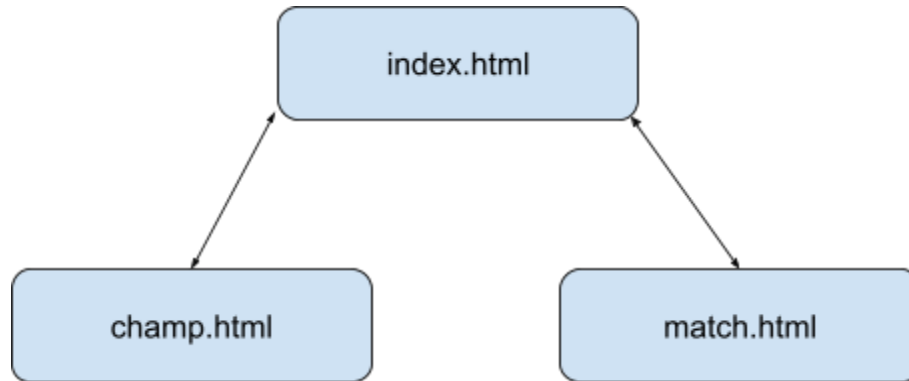
Task distribution

Donald Bi - make the database
David Deng - html + bootstrap
Jacob Guo - css + js
Yat Long Chan - flask application

APIs
RIOT api to gather our own most recent data to ensure the utmost accuracy in
our analysis

FEF
Bootstrap because several of our group members have yet to experience
Bootstrap before, so we will try to incorporate it into our project to learn
it.