P01: ArRESTed Development
Team Name: 2018Lebron
Roster: Lucas Zheng, Emily Mai, Mycroft Lee, Shafin Kazi
TARGET SHIP DATE: 2025-12-22

App Overview: We will be building a versus showdown website in which users can pick teams of 3 different characters from Pokémon, Digimon, or Yu-Gi-Oh and simulate hypothetical battles. Users will need to be logged in to access the website. Users can create accounts if necessary. Upon logging in, users can view the list of all available characters or start a battle.

Tasks + Assignments

Project Manager: Lucas Zheng
- Maintain Devlog and README.md
- Maintain requirements.txt
- Update team on changes to deliverables and goals
- Manage and contribute to work done by teammates
- Make sure final delivery is fulfilled

Frontend: Shafin Kazi
- Create and maintain site map
- Create navigation links between pages
- Work with middleware to display data
- Tailwind CSS styling
- Create html templates

Middleware: Mycroft Lee
- Initialize flask app (__init__.py)
    - Implement login and registration
    - Allow user access to site databases
    - Creating/displaying/editing decks
    - Displaying entities
- Create and maintain component map
- Edit API data into an understandable format for user
- Set up and test routes for:
    - Profile
    - Matches
    - Deck Creation

Database: Emily Mai
- Create tables and initialize database
- Add test data
- Write SQL queries to:
    - Add accounts

- Write functions to select from and insert into table
- Test all SQLite queries/functions
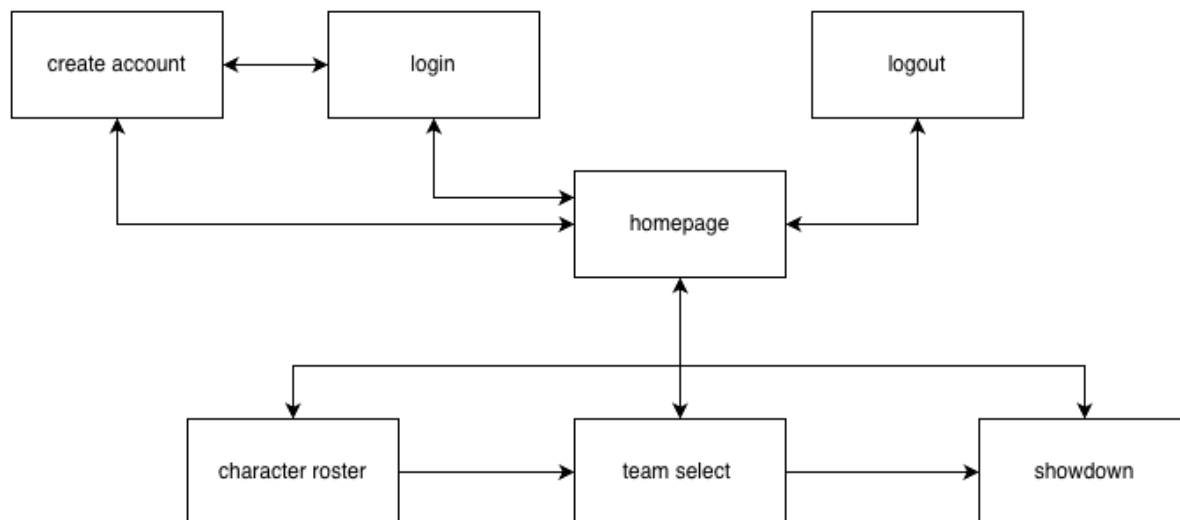- Connect database with flask routes

APIs:
- https://pokeapi.co/ — quota: no official limit, but probably around ~100 per minute
- https://www.dnd5eapi.co/ — quota: no official limit
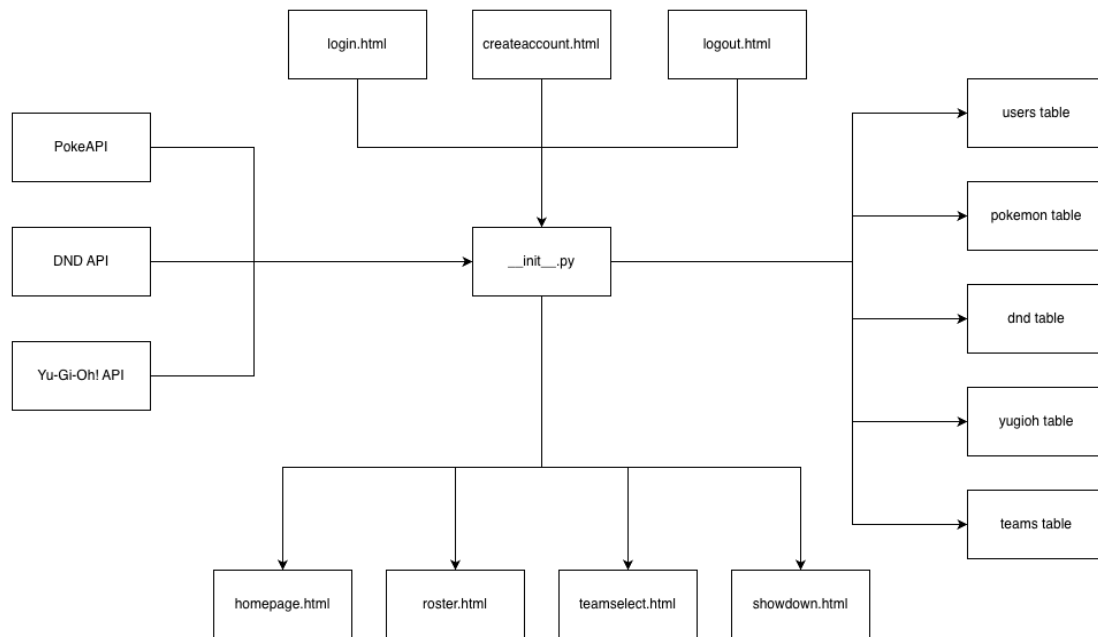- https://ygoprodeck.com/api-guide/ — quota: 20 req/s

FEF: Tailwind
- Compared to other frameworks, Tailwind has dynamic styling that doesn't require the usage of javascript or custom CSS classes like Bootstrap, which is very useful when the combat requires real time updates.

Site Map:

TEAM

teamuser	TEXT FK (to username)
teamslots (1-3)	INTEGER FK (to pokemon, digimon, or yugioh id's)

USERS

username	TEXT UNIQUE PK
password	TEXT

POKÉMON

name	TEXT
image	TEXT
id	INTEGER PK
type	TEXT
atk	INTEGER
hp	INTEGER

DIGIMON

name	TEXT
image	TEXT
id	INTEGER PK
type	TEXT
atk	INTEGER
hp	INTEGER

YUGIOH

name	TEXT
image	TEXT
id	INTEGER PK
type	TEXT
atk	INTEGER
hp	INTEGER