

Endpoint Writeup for current functional endpoints

Events.py

- GET /events/{eventid}: This endpoint returns a JSON response object back to the user queried by the eventID. `CREATE INDEX idx_event_id ON events (event_id);` adding an index on the eventID will improve performance by a simple lookup of an event by its actual ID. This results in improved query performance on local machines when filled with local entries.
- GET /events/: This endpoint returns all fights in an event that is queried by its event name. `CREATE INDEX idx_event_name ON events (event_name);` This will improve performance of the query by allowing faster lookup of events by names.
- Post event: Endpoint takes an event data type, formats into correct format to be inserted into the DB. Because this is an insert statement, there does not seem to be any specific indexes that would impact the performance of the post endpoint.

Fighters.py

- GET /fighters/{id} : This endpoint returns the corresponding fighter by scanning the fighters db ids. `CREATE INDEX idx_fighters ON users (fighter_id);` Adding this index will allow for more efficient lookup of rows that match the given fighter id.
- GET /fighters/: This endpoint returns a list of fighters filtered on the desired input of the user. Because the win and losses column is calculated through a series of joins of fighters and events, it would be optimal to insert an INDEX statement on these columns to help with the ordering and filtering and results; however this is all included within the body of the GET request.
- POST /fighters/: Similar to the POST call in Events.py, there does not seem to be any specific indexing we can do to enhance the performance of the endpoint.

Fights.py

- GET /fights/{fight_id}: This endpoint returns the desired fight and relevant information that is associated with the queried fight_id provided from the front end. `CREATE INDEX idx_fight ON users (fight_id);` This index statement could help optimize lookup via the fight_id index.
- POST /fights: This endpoint inserts a new fight entry into the fights DB, there are no indexing statements that can make a significant difference in performance of the request.