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Project #2

Main Flow

Main function:

1. Import necessary modules and classes.
3. Create an instance of the API Class
4. Call the get_team_statistics() method from API
5. Iterate through the list of team_stats fetched from the API call.
 - a. Print team statistics (name, code, score).
6. Loop through team numbers (1 to 32).
 - a. Load JSON data from corresponding files.
 - b. Print team number.
 - c. Check if matchUpStats exists in the JSON data.
 - i. If it exists:
 - Iterate through each match_stats.
 - Extract and print visitor and home team stats.
 - ii. If it doesn't exist:
 - Print a message indicating no data found.
7. Run the main() function

API Class (api.py):

1. Import necessary modules.
3. Initialize class attributes (base_url, file_type, stat_type, season, http_client).
4. Define the get_team_statistics() method:
 - a. Initialize an empty team_stats_list list.
 - b. Loop through team numbers (1 to 32).
 - i. Construct the URL for API request.
 - ii. Make an HTTP GET request to the API.
 - iii. Save JSON response to a file.
 - iv. Process matchUpStats from the response JSON:
 - Extract visitor and home team stats.
 - Create and append TeamStatistics instances to the team_stats_list.
 - c. Return the team_stats_list

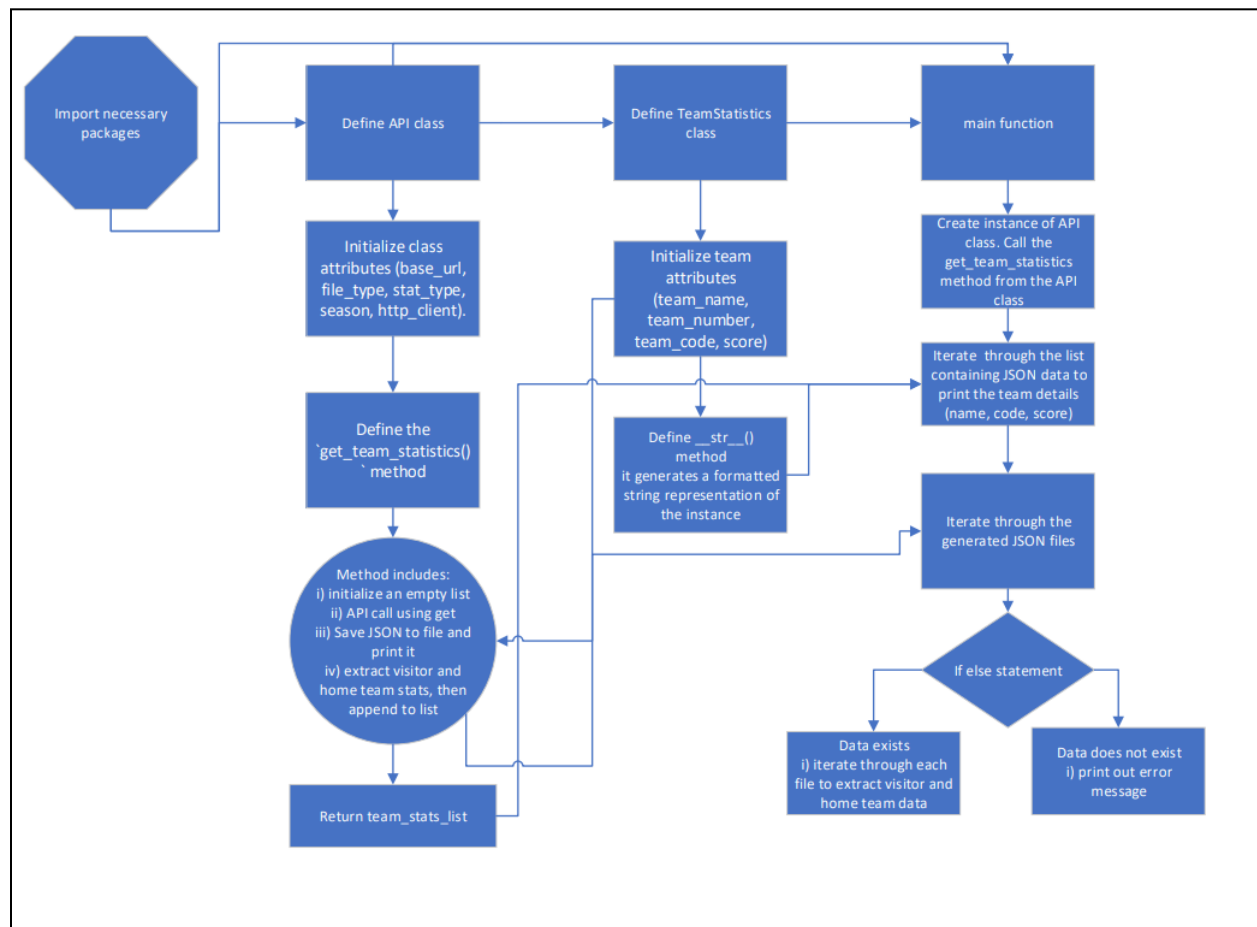
TeamStatistics Class (teamDetails.py):

2. Initialize team attributes (team_name, team_number, team_code, score).

3. Define a `__str__()` method to generate a formatted string representation of the instance.

File Structure:

- main.py
- api.py
- teamDetails.py



Network Flow

- API request using URL and for loop to iterate through 1-32
- Authorized or not
 - Not authorized
 - No, invalid API key
 - Invalid fetch request
 - Authorized
 - Send API call
- API call
 - Unsuccessful

- Missing query parameters
- Successful
 - Stores data in cache
 - Revalidates if the data has been updated or not
 - Requested items are returned
 - API request complete
- The fetched data
 - Data is outputted by printing to console or writing to a file

