Test Plan and Report

Product: Soccer Match Predictor
Team Name: Forecast FC
Date: 07/19/2024

System Test Scenarios

I. **Sprint 1 User Stories:**
   A. User Story 1: As a user I want to be able to select a Bundesliga club, so that I can see who they will be playing against this season.
   B. User Story 2: As a user I want to be able to view the upcoming 2024-2025 Bundesliga schedule so that I can plan my schedule accordingly.
   C. User Story 3: As a sports gambler, I want to be able to predict the outcome of matches so that I can make smarter betting decisions.

II. **Sprint 1 Test Scenarios:**
   A. User Story 1:
      - Deploy github-pages.
      - All 18 2024-2025 Bundesliga clubs should be visible.
      - Users can select any Bundesliga club to reveal further information.
   B. User Story 2:
      - Deploy github-pages.
      - Users should "View full season schedule" at the top.
      - Click it.
      - Click on "Calendar View " or "Full Schedule
      - Swipe left to advance forward when on "Calendar View".

   C. User Story 3:
      - Assuming a club has been selected.
      - Click on a match.
      - Users should now see the outcome of the prediction (W/L/D).

III. **Sprint 2 User Stories:**
   A. User Story 1: As a user, I want to be able to view the team calendar for my club of choice to see the hardest stretch of matches.
   B. User Story 2: As a user, I want to be able to view the head-to-head record of a fixture to get an idea of the competitive nature between two clubs.
   C. As an analyst, I want to be able to compare my own predictions with the predictions of a machine learning model to see how realistic it can be.

IV. **Sprint 2 Test Scenarios:**
   A. User Story 1:
      - Deploy github-pages.

- Select a Bundesliga Club.
- Users should be taken to the club's subpage.
- An "Upcoming matches" column should be visible.
- All 34 matches that the selected club will play are then listed.
- Scroll up to progress through the season.

    B. User Story 2:
- Deploy github-pages
- Users should "View full season schedule" at the top.
- Click it.
- Users should see the "Full Schedule Column".
- Head-to-head records are their own column.
- Click on the blue link for any match to reveal statistics.

    C. User Story 3:
- Assuming a club has been selected.
- Click on a match.
- Users should now see the outcome of the prediction (W/L/D).
- Users should also see predicted percentages of W/L/D.

V.   Sprint 3 User Stories:

    A. User Story 1: As a user, I want to simulate match outcomes for each fixture to experiment with different scenarios and anticipate possible results.

    B. User Story 2: As a user, I want to have highly accurate match predictions so that I can trust the predictions and use them effectively.

VI.   Sprint 3 Test Scenarios:

    A. User Story 1:
- Assuming a club has been selected.
- Click on a match.
- Users should now see the outcome of the prediction (W/L/D).
- Users should also see predicted percentages of W/L/D.

    B. User Story 2:
- Assuming a club has been selected
- Click on a match..
- Users should now see the outcome of the prediction (W/L/D).
- Users should also see predicted percentages of W/L/D.

VII.   Pass/Fail Results

    1. Sprint 1:
- User Story 1: Pass
- User Story 2: Pass
- User Story 3: Pass

    2. Sprint 2:

- User Story 1: Pass
- User Story 2: Pass
- User Story 3: Pass
3. Sprint 3:
- User Story 1: Pass
- User Story 2: Pass

VIII. **<u>Definition of Done</u>**
- Code checked into repository (Github)
- Code is reviewed for styling guidelines.
- Code passes all functionality tests.
- All tasks for user stories are done.
- Product is reviewed by the product owner at the end of each sprint.
- Github pages deploys an evolving executable product at the end of each sprint.

IX. **<u>Tests</u>**
- There is a set of functionality tests in the 2425_Calendars folder that tests the functionality of several functions that we used to scrape data from a PDF. A test PDF is also included which is the 2023-2024 Bundesliga Schedule.
- Model testing/training was done in the same file where the models were programmed.