FootyBettor

Sports Betting Platform (SBP)

Test Plan v2- Sprint 2

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Executive Summary

Sports Betting Platform (SBP) is a unique form of entertainment that combines the excitement of sports with the thrill of gambling. SBP is intended to exist in similar markets as other sports betting websites, but provides more data-backed informed odd calculations, and uncluttered, understandable, and easy-to-use operation pages. SBP softwares will be distributed as standalone applications for use on end-user hardware without network connectivity.

This document discusses processes for testing/verification of SBP.

Document Versioning

Date	Owner	Comment
03/02/2023	Zahra Cheeseman, Shamdeed Kabir, Esa Chen, Junhao Qu	Executive Summary, Project Description, User Acceptance Testing Matrix, Feature Matrix, and Test Steps
03/12/2023	Zahra Cheeseman and Esa Chen	Updated Test Steps
03/15/2023	Zahra Cheeseman and Shamdeed Kabir	Sprint 2 adjustments
03/21/2023	Zahra Cheeseman and Shamdeed Kabir	Sprint 2, v2 adjustments

Project Description

FootyBettor is looking to enter the sports gambling market. This market is saturated with platforms with clunky and complex operation pages, limited data availability and implicit probability distribution. Sports Betting Platform (SBP) is FootyBettor's creation which provides a solution to these problems which traditional betting platforms present which create difficulty in users being able to make informed decisions, place winning bets and succeed in the highly competitive sports betting industry. SBP allows for impressive data visualisation of previous season team statistics and a smooth user experience for easy betting on the result of matches between sports teams. Users can create an account in which they navigate through the program, and view a balance which they can add to and which gets updated in relation to the return on their bets. SBP generates precise odds which are informed by a multitude of statistics used in calculations which optimise accuracy.

SBP is highly extendable and thus would have potential to be able to support different applications such as a variation in the sport selected and type of bet available.

Additionally, SBP supports a graphical user interface. The GUI allows SBP to provide a sleek user interface, which gives the user a fun and accessible user experience.

User Acceptance Testing Matrix

The test matrix enumerates tests to be conducted that verify the delivered system meets the requirements from the BRD. Following the matrix, the testing steps for each test are provided. Tests should be able to be completed without understanding of the internal technologies being used.

Feature Matrix

ID	Test Name	Comment	BRD ID
1	Windows Startup		s.1 , s.3 , e.2 , e.3 , e.9
2	Apple Startup		s.1 , s.3 , e.2 , e.3, e.9
3	Linux Startup		s.1 , s.3 , e.2 , e.3, e.9
4	Sign Up and Log into Account		e.4
5	Cash In/Cash Out Balance		e.10
6	View Team Stats		e.6
7	Bet on a Team		e.7 , e.8
8	Interface		ux.1
9	Error Message		ux.2 , e.1

Test Steps

1 - Windows Startup

Process

1. Refer to the user documentation of a Windows command prompt to clone a repository and compile Java files. Clone all the Java files and other required files into a local folder from the FootyBettor repository on GitHub.
2. Ensure that MAMP is downloaded and the server is turned on, and add required dependency based on the environment the code is being run.
3. Setup mySQL connection on the environment (command prompt or any relevant IDE) the code is being run.

4. For the first ever execution, the program will set up relevant SQL tables in the local mySQL database, so correctly setting up MAMP and mySQL is essential for the successful execution of the program.
5. Compile all the Java files in the command prompt and make sure everything is compiled without any error.
6. Start the program by running the Main.java file.
7. Verify that the initial sign up/login dashboard is displayed via the GUI.
8. Verify that a menu of options on the sign up/login dashboard is displayed.
9. Select the quit option.

Success

- The program runs without errors.
- The sign up/login dashboard displays accordingly.
- A menu of options for the user is displayed on the sign up/login dashboard.
- Verify that the tables teamstat, useraccount, gametrack and fixture have been made in the mySQL database by using the command prompt.
- Program exits without error.

2 - Apple Startup

Process

1. Refer to the user documentation of Apple terminal to clone a repository and compile Java files. Clone all the Java files and other required files into a local folder from the FootyBettor repository on GitHub.
2. Ensure that MAMP is downloaded and the server is turned on, and add required dependency based on the environment the code is being run.
3. Setup mySQL connection on the environment (terminal or any relevant IDE) the code is being run.
4. For the first ever execution, the program will set up relevant SQL tables in the local mySQL database, so correctly setting up MAMP and mySQL is essential for the successful execution of the program.
5. Compile all the Java files in the terminal and make sure everything is compiled without any error.
6. Start the program by running the Main.java file.
7. Verify that the initial sign up/login dashboard is displayed via the GUI.
8. Verify that a menu of options on the sign up/login dashboard is displayed.
9. Select the quit option.

Success

- The program runs without errors.
- The sign up/login dashboard displays accordingly.
- A menu of options for the user is displayed on the sign up/login dashboard.

- Verify that the tables teamstat, useraccount, gametrack and fixture have been made in the mySQL database by using the terminal.
- Program exits without error.

3 - Linux Startup

Process

1. Refer to the user documentation of Linux terminal to clone a repository and compile Java files. Clone all the Java files and other required files into a local folder from the FootyBettor repository on GitHub.
2. Ensure that MAMP is downloaded and the server is turned on, and add required dependency based on the environment the code is being run.
3. Setup mySQL connection on the environment (terminal or any relevant IDE) the code is being run.
4. For the first ever execution, the program will set up relevant SQL tables in the local mySQL database, so correctly setting up MAMP and mySQL is essential for the successful execution of the program.
5. Compile all the Java files in the terminal and make sure everything is compiled without any error.
6. Start the program by running the Main.java file.
7. Verify that the initial sign up/login dashboard is displayed via the GUI.
8. Verify that a menu of options on the sign up/login dashboard is displayed.
9. Select the quit option.

Success

- The program runs without errors.
- The sign up/login dashboard displays accordingly.
- A menu of options for the user is displayed on the sign up/login dashboard.
- Verify that the tables teamstat, useraccount, gametrack and fixture have been made in the mySQL database by using the terminal.
- Program exits without error.

4 - Sign Up and Log into Account

Process

1. Start SBP using all required Java documents.
2. Verify that SBP is running.
3. Click the sign up button.
4. Verify that the sign up window is open.
5. Verify that the user can type in username and password in the sign up window.
6. Sign up and quit the platform.
7. Start SBP using all required Java documents.

8. Verify that the user can type in username and password in the login window.
9. Verify that the user can log in SBP with the correct username and password.
10. Quit SBP.

Success

- The program runs without errors.
- SBP does not allow a blank account to be created.
- SBP allows the user to go back to the login page after choosing the sign-up option.
- SBP can store the new account information, username, and password in a database.
- SBP can verify old accounts with the correct username and password.
- SBP gives useful error messages to the user and can distinguish between an account not existing and a wrong password.
- The program exits without errors.

5 - Cash In/Cash Out Balance

Process

1. Start SBP using all required Java documents.
2. Verify that SBP is running.
3. Log into the account with the correct username and password.
4. Go to the main dashboard and click on the cash in/cash out button.
5. Verify that a new window for entering the amount of money pops up.
6. Verify that the user can enter the amount of money to both cash in and cash out the balance.
7. Quit SBP.

Success

- The program runs without errors.
- SBP can display the correct user's balance.
- SBP can store and save the amount of money as per the user enters in the user database.
- The balance in the user account can not be negative.
- SBP allows the user to input a decimal number or a large number to add money to the balance.
- SBP does not allow the negative number input for adding money to the balance.
- SBP displays an error message and does not allow recharging the balance with an incorrect input.
- SBP can update the balance.
- SBP correctly tracks and adjusts the user's balance in the database.
- The program exits without errors.

6 - View Team Stats

Process

1. Login to SBP and go to the main dashboard.
2. Click on the view team stats button.
3. Verify that the team stats display the correct data.
4. Quit SBP.

Success

- SBP displays the team stats dashboard without errors.
- The display is easy to read for the user.
- The team displayed stats data that is consistent with the database.
- The program exits or tracks back to the dashboard without errors.

7 - Bet on a Team

Process

1. Start SBP using all required Java documents.
2. Verify that SBP is running.
3. Sign in SBP with the correct username and password.
4. Click the start to bet with game number or start to bet with team names button in the dashboard window.
5. Verify that the corresponding pick-a-game window is open.
6. Choose one game to bet on.
7. Choose a type of odds.
8. Verify that the odds window is open.
9. Verify that the odds information is correctly calculated.
10. Verify that the user can select their predicted outcome of a game, by pressing the 1,2 or 3 button.
11. Verify that the user can input a wager with the correct amount of money.
12. Verify that if the user inputs a wager that is larger than their current balance, SBP asks for recharge.
13. Verify that the add donation or add insurance to bet window opens.
14. Choose to 1)Add insurance, 2) donate, 3) both or 4) none.
15. Verify that SBP gives the correct result, displays the user's winnings or losses and changes the current balance.
16. Click OK.
17. Verify that the user goes back to the dashboard window.
18. Quit SBP.

Success

- The program runs without errors.
- SBP provides useful information so that the users understand how to use the program.

- SBP can open the odds window.
- SBP is not case sensitive with user input when choosing a game via the start to bet with team names window
- SBP selects the correct game from the inputted game number from the start to bet with game number window
- SBP allows users to wager with up to all of the money in their balance.
- SBP does not allow users to wager with $0
- SBP does not allow users to add an insurance to their bet if there is insufficient funds in their balance to add 5% extra on top of their wager.
- SBP can open the recharge window if users do not have enough money in their balance to wager.
- SBP can calculate the correct decimal and american odds based on the previous data and the user's wager.
- SBP correctly allows users to add insurance, donate, both or neither.
- SBP can give a correct result and change the balance.
- SBP can let users return to the dashboard window.
- SBP displays option buttons in a clear and easy to use orientation.
- The program exits without errors.

8 - Interface

Process

1. Install SBP using the process in the user documentation.
2. Start the program using the process in the user documentation..
3. Verify that the program is displayed in a window that appears after running the code and that a user can sign in/ create an account and then navigate through the program.

Success

- Program opens without errors.
- The program runs using GUI interfaces.
- SBP allows flexible and friendly user input which is not case specific in suitable situations.
- Program exits without errors.

9 - Error Message

Process

1. Install SBP.
2. Start SBP.
3. Observe the human-readable error message.
4. Select the technical error report.
5. Observe a technician readable error report is produced.
6. Check that the program is no longer running.

Success

- Game produces a non-technical message.
- Game produces a more detailed technical error report.
- Game exits after the error message and report are produced.

Appendix

GitHub repository

https://github.com/cp274-b6-2023/footybettor

Windows user documentation

https://learn.microsoft.com/en-us/windows-server/administration/windows-commands/cmd

Apple user documentation

https://support.apple.com/guide/terminal/welcome/mac

Linux user documentation

https://ubuntu.com/tutorials/command-line-for-beginners#1-overview