# Test Cases

**(make sure the txt file is empty before running these tests)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Test Case** | **Input data** | **Expected Output** | **Actual Output** | **Pass/**  **Fail** |
| 1 | Create Club (Normal)  **(from CLI)** | Select the option 1 from the menu  Select option 1 from the football club types  Enter the all the prompted information  Repeat this until the 2 clubs are created with the details given below  [ Club name: Southampton  Location: England  Coach Name: Mikel],  [ Club name: Juventus  Location: Italy  Coach Name: Roy] | Displays “Clubs Successfully added!” for both the club details entered | Displays “Clubs Successfully added!” for both the club details entered | Pass |
| 2 | Checking for the clubs in table currently  **(from CLI)** | Select the option 4 from the menu  Enter any season you wish, for an instance “2020-21” | Display the table with the 2 clubs created which are “Southampton” and “Juventus” | Display the table with the 2 clubs created which are “Southampton” and “Juventus” | Pass |
| 3 | Delete Club  **(from CLI)** | Select the option 2 from the menu  Enter “Juventus” as the club name to be deleted  Enter “y” to confirm the deletion of the respective club. | Display a message that the club was successfully deleted with more details of the deleted club. | Display a message that the club was successfully deleted with more details of the deleted club. | Pass |
| 4 | Checking for the clubs in table currently  **(from CLI)** | Select the option 4 from the menu  Enter any season you wish, for an instance “2020-21” | Display the table with the updated clubs which are “Southampton” only present and “Juventus” removed from the table | Display the table with the updated clubs which are “Southampton” only present and “Juventus” removed from the table | Pass |
| 5 | Create Club (Normal) **(from CLI)** | Select the option 1 from the menu  Select option 1 from the football club types  Enter the all the prompted information  Repeat this until the 3 clubs are created with the details given below  [ Club name: Chelsea  Location: London  Coach Name: Dean],  [ Club name: Liverpool  Location: England  Coach Name: Arteta],  [ Club name: Arsenal  Location: London  Coach Name: Smith] | Displays “Clubs Successfully added!” for both the club details entered | Displays “Clubs Successfully added!” for both the club details entered | Pass |
| 6 | Create Club (University) **(from CLI)** | Select the option 1 from the menu  Select option 2 from the football club types  Enter the all the prompted information given below  [ Club name: Burnley  Location: Lancashire  Coach Name: Frank  University Name: IIT] | Displays “Clubs Successfully added!” | Displays “Clubs Successfully added!” | Pass |
| 7 | Create Club (School)  **(from CLI)** | Select the option 1 from the menu  Select option 3 from the football club types  Enter the all the prompted information given below  [ Club name: Everton  Location: England  Coach Name: Sean  School Name: Royal] | Displays “Clubs Successfully added!” | Displays “Clubs Successfully added!” | Pass |
| 8 | Display club statistics  **(from CLI)** | Select the option 3 from the menu  Enter “Liverpool” as the club name to display the statistics.  (Likewise, you can enter other club names as well to view their current club statistics) | Display all the statistics of the club “Liverpool” | Display all the statistics of the club “Liverpool” | Pass |
| 9 | Display Premier League Table  **(from CLI)** | Select the option 4 from the menu  Enter any season you wish, for an instance “2020-21” | Display the table with all records of the added clubs set to 0 | Display the table with all records of the added clubs set to 0 | Pass |
| 10 | Add Played Match  **(from CLI)** | Select the option 5 from the menu  Add all the following matches by repeatedly selecting the “Add Played Match Option”   |  | | --- | | Club name 1: Southampton  Goal Scored: 6  Club name 2: Liverpool  Goal Scored: 0  Day: 14  Month: 12  Year: 2020  Select 2020-21 as the season  Enter match type as “Home”  Click ENTER key to add the match | | Club name 1: Southampton  Goal Scored: 4  Club name 2: Arsenal  Goal Scored: 2  Day: 15  Month: 12  Year: 2020  Select 2020-21 as the season  Enter match type as “Home”  Click ENTER key to add the match | | Club name 1: Southampton  Goal Scored: 2  Club name 2: Everton  Goal Scored: 1  Day: 9  Month: 11  Year: 2020  Select 2020-21 as the season  Enter match type as “Home”  Click ENTER key to add the match | | Club name 1: Liverpool  Goal Scored: 3  Club name 2: Southampton  Goal Scored: 0  Day: 10  Month: 9  Year: 2020  Select 2020-21 as the season  Enter match type as “Away”  Click ENTER key to add the match | | Club name 1: Liverpool  Goal Scored: 3  Club name 2: Arsenal  Goal Scored: 2  Day: 6  Month: 9  Year: 2020  Select 2020-21 as the season  Enter match type as “Home” | | Club name 1: Liverpool  Goal Scored: 2  Club name 2: Arsenal  Goal Scored: 2  Day: 10  Month: 10  Year: 2020  Select 2020-21 as the season  Enter match type as “Away” | | Club name 1: Liverpool  Goal Scored: 0  Club name 2: Everton  Goal Scored: 0  Day: 14  Month: 12  Year: 2020  Select 2020-21 as the season  Enter match type as “Home” | | Club name 1: Liverpool  Goal Scored: 0  Club name 2: Chelsea  Goal Scored: 0  Day: 15  Month: 11  Year: 2020  Select 2020-21 as the season  Enter match type as “Away” | | Club name 1: Chelsea  Goal Scored: 2  Club name 2: Southampton  Goal Scored: 0  Day: 14  Month: 12  Year: 2020  Select 2020-21 as the season  Enter match type as “Home” | | Club name 1: Chelsea  Goal Scored: 1  Club name 2: Arsenal  Goal Scored: 1  Day: 16  Month: 12  Year: 2020  Select 2020-21 as the season  Enter match type as “Home” | | Club name 1: Chelsea  Goal Scored: 2  Club name 2: Arsenal  Goal Scored: 2  Day: 29  Month: 10  Year: 2020  Select 2020-21 as the season  Enter match type as “Away” | | Club name 1: Chelsea  Goal Scored: 0  Club name 2: Everton  Goal Scored: 0  Day: 30  Month: 9  Year: 2020  Select 2020-21 as the season  Enter match type as “Home” | | Club name 1: Chelsea  Goal Scored: 1  Club name 2: Everton  Goal Scored: 1  Day: 15  Month: 12  Year: 2020  Select 2020-21 as the season  Enter match type as “Away” | | Club name 1: Chelsea  Goal Scored: 2  Club name 2: Burnley  Goal Scored: 2  Day: 12  Month: 12  Year: 2020  Select 2020-21 as the season  Enter match type as “Home” | | Club name 1: Chelsea  Goal Scored: 1  Club name 2: Burnley  Goal Scored: 1  Day: 12  Month: 12  Year: 2020  Select 2020-21 as the season  Enter match type as “Away” | | Club name 1: Chelsea  Goal Scored: 2  Club name 2: Liverpool  Goal Scored: 2  Day: 10  Month: 12  Year: 2020  Select 2020-21 as the season  Enter match type as “Home” | | Display the following message  “Match Successfully added!” for each of the matches added | Display the following message  “Match Successfully added!” for each of the matches added | Pass |
| 11 | Display Club Statistics  **(from CLI)** | Select the option 3 from the menu  Enter “Liverpool” as the club name to display the statistics.  Repeat this process for other clubs as well, which includes,  ‘Southampton’, ‘Chelsea’, ‘Arsenal’, ‘Everton’, ‘Burnley’ | Display all the statistics of the given club name | Display all the statistics of the given club name | Pass |
| 12 | Display Premier League Table  **(from CLI)** | Select the option 4 from the menu  Enter “2020-21” as the season | Displays the Premier League Table for the season 2020-21 records sorted in descending order of points and goals if points are equal | Displays the Premier League Table for the season 2020-21 records sorted in descending order of points and goals if points are equal | Pass |
| 13 | Add Played Match  **(from CLI)** | Select the option 5 from the menu  Add all the following matches by repeatedly selecting the “Add Played Match Option” for other seasons   |  | | --- | | Club name 1: Southampton  Goal Scored: 9  Club name 2: Liverpool  Goal Scored: 6  Day: 20  Month: 12  Year: 2019  Select 2019-20 as the season  Enter match type as “Away”  Enter “Y” to make sure that the details entered are correct and to continue | | Club name 1: Arsenal  Goal Scored: 4  Club name 2: Burnley  Goal Scored: 2  Day: 14  Month: 12  Year: 2019  Select 2019-20 as the season  Enter match type as “Away”  Enter “Y” to make sure that the details entered are correct and to continue | | Club name 1: Everton  Goal Scored: 5  Club name 2: Chelsea  Goal Scored: 7  Day: 15  Month: 2  Year: 2019  Select 2018-19 as the season  Enter match type as “Home”  Enter “Y” to make sure that the details entered are correct and to continue | | Display the following message  “Match Successfully added!” for each of the matches added | Display the following message  “Match Successfully added!” for each of the matches added | Pass |
| 14 | Display Club Statistics  **(from CLI)** | Select the option 3 from the menu  Enter “Liverpool” as the club name to display the statistics.  Repeat this process for other clubs as well, which includes,  ‘Southampton’, ‘Chelsea’, ‘Arsenal’, ‘Everton’, ‘Burnley’ | Display all the statistics of the given club name | Display all the statistics of the given club name | Pass |
| 15 | Display Premier League Table  **(from CLI)** | Select the option 4 from the menu  Enter “2019-20” as the season | Displays the Premier League Table for the season 2019-20 records sorted in descending order of points and goals if points are equal | Displays the Premier League Table for the season 2019-20 records sorted in descending order of points and goals if points are equal | Pass |
| 16 | Display Premier League Table  **(from CLI)** | Select the option 4 from the menu  Enter “2018-19” as the season | Displays the Premier League Table for the season 2018-19 records sorted in descending order of points and goals if points are equal | Displays the Premier League Table for the season 2018-19 records sorted in descending order of points and goals if points are equal | Pass |
| 17 | Display GUI  **(from CLI)** | Select the option 6 from the menu | Displays message “Opening the GUI at localhost: 4200”  The GUI opens in a new tab in the web browser. | Displays message “Opening the GUI at localhost: 4200”  The GUI opens in a new tab in the web browser. | Pass |
| 18 | Display table in the GUI  **(from GUI)** | Select the “tables” option from the nav bar from the GUI | This displays a scrollable record table with the options such as sort by points, goals scored and wins. Moreover, it has an option to select the season to display the records. | This displays the table with the options such as sort by points, goals scored and wins. Moreover, it has an option to select the season to display the records. | Pass |
| 19 | Display matches in the GUI  **(from GUI)** | Select the “matches” option from the nav bar from the GUI | This displays a scrollable list of matches and the user will have the option to search matches by “date” and also select matches by season, Moreover the user is also able to generate a match as well. | This displays a scrollable list of matches and the user will have the option to search matches by “date” and also select matches by season, Moreover the user is also able to generate a match as well. | Pass |
| 20 | Save data to file  **(from CLI)** | Select the option 7 from the menu. | This will display the following message if there are no exceptions caused  “Saving the data . . .”  “Successfully saved!”  The data will be stored into the text file | This will display the following message if there are no exceptions caused  “Saving the data . . .”  “Successfully saved!”  The data will be stored into the text file | Pass |
| 21 | Clear data from file  **(from CLI)** | Select the option 8 from the menu | This will display the following message if there are no exceptions caused  “Clearing the contents of the file”  “Successfully cleared the file details”  All the data from the text file will be cleared | This will display the following message if there are no exceptions caused  “Clearing the contents of the file”  “Successfully cleared the file details”  All the data from the text file will be cleared | Pass |
| 22 | Exit Program  **(from CLI)** | Select the option 9 from the menu.  Enter “y” to confirm that you want to exit | This will display the following message  “Saving data ...”  “Exiting program…”  The program will exit | This will display the following message  “Saving data ...”  “Exiting program…”  The program will exit | Pass |

# Validation Test Cases

**(make sure the txt file is empty before running these tests)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Test Case** | **Input data** | **Expected Output** | **Actual Output** | **Pass/**  **Fail** |
| 1 | Validating the menu options.  **(from CLI)** | 10 | Displays the message below  “You have entered an invalid option! Please check the menu properly and re-enter!”  And asks for user input again | Displays the message below  “You have entered an invalid option! Please check the menu properly and re-enter!”  And asks for user input again | Pass |
| 2 | Validating Integers.  **(from CLI)** | 1.2 | Displays the message below  “Invalid input, please enter a valid integer!” | Displays the message below  “Invalid input, please enter a valid integer!” | Pass |
| 3 | Validating same club names entered again to create a new club  **(from CLI)** | Select the Option 1 from the menu and again select option 1 for normal football club and create a club with the name “Juventus” and fill all the other prompts with any random data.  Again, select Option 1 and create a club with the same name “Juventus” | Displays the message below  “There is already a team with the name 'Juventus', please enter another name  ”  And asks for user input again | Displays the message below  “There is already a team with the name 'Juventus', please enter another name  ”  And asks for user input again | Pass |
| 4 | Validating same club names entered twice for adding a played match  **(from CLI)** | Select the Option 1 from the menu and again select option 1 for normal football club and create a club with the name “Barca” and fill all the other prompts with any random data.  Select Option 5 and added the first club name as “Juventus” with any score and again “Juventus” for the other(opponent) club name as well. | Displays the message below  “There should be two different clubs to play a match and you have entered the same club twice!  Please enter a different club name!”  And asks for user input again | Displays the message below  “There should be two different clubs to play a match and you have entered the same club twice!  Please enter a different club name!”  And asks for user input again | Pass |
| 5 | Validating clubs entered for add played matches, checks if the club name entered is valid  **(from CLI)** | Select the option 5 from the menu.  For the club name 1, enter “Manchester” | Displays the message below  “There is no team with the name 'Manchester', please enter another name”  And asks for the user input again. | Displays the message below  “There is no team with the name 'Manchester', please enter another name”  And asks for the user input again. | Pass |
| 6 | Validating the day entered with a valid range or not  **(from CLI)** | Select the option 5  Enter the first club name as “Juventus” with any random score  Enter the second club name as “Barca” with any random score  Enter -5 or 35 for the day input | Displays the message below  “Invalid day entered, day entered should be with in the range of (1 to 31)!”  And asks for the user input again. | Displays the message below  “Invalid day entered, day entered should be with in the range of (1 to 31)!”  And asks for the user input again. | Pass |
| 7 | Validating the month entered with a valid range or not  **(from CLI)** | Select the option 5  Enter the first club name as “Juventus” with any random score  Enter the second club name as “Barca” with any random score  Enter 14 for the day input  Enter -5 or 13 for the month | Displays the message below  “Invalid month entered, month entered should be with in the range of (1 to 12)!  And asks for the user input again. | Displays the message below  “Invalid month entered, month entered should be with in the range of (1 to 12)!”  And asks for the user input again. | Pass |
| 8 | Validating the year entered with a valid range or not (assumed range 1000 - 3000)  **(from CLI)** | Select the option 5  Enter the first club name as “Juventus” with any random score  Enter the second club name as “Barca” with any random score  Enter 14 for the day input  Enter 12 for the month input  Enter 999 or 3001 for the year | Displays the message below  “Invalid year entered, year entered should be with in the range of (1000 to 3000)!”  And asks for the user input again. | Displays the message below  “Invalid year entered, year entered should be with in the range of (1000 to 3000)!”  And asks for the user input again. | Pass |
| 9 | Validating the season selected by the user when adding a played match  **(from CLI)** | Select the option 5  Enter the first club name as “Juventus” with any random score  Enter the second club name as “Barca” with any random score  Enter 14 for the day input  Enter 12 for the month input  Enter 2020 for the year  Enter any number other than 1 and 2 for the, select season option | Displays the message below  “Invalid Input, please only enter either '1' or '2' as the season option!”  And asks for the user input again. | Displays the message below  “Invalid Input, please only enter either '1' or '2' as the season option!”  And asks for the user input again. | Pass |
| 10 | Validating the type of match played  **(from CLI)** | Select the option 5  Enter the first club name as “Juventus” with any random score  Enter the second club name as “Barca” with any random score  Enter 14 for the day input  Enter 12 for the month input  Enter 2020 for the year  Enter 1 for the select season option  Enter anything other than “home” and “away” for the type of match played | Displays the message below  “Invalid match input, please only enter either 'HOME' or 'AWAY' as the match type!”  And asks for the user input again. | Displays the message below  “Invalid match input, please only enter either 'HOME' or 'AWAY' as the match type!”  And asks for the user input again. | Pass |
| 11 | Validating season entered for displaying the premier league table  **(from CLI)** | Select option 4 from the menu and enter ‘20-2021’ as the season input | Displays the message below  “Given input is not in proper format, use this format please (0000-00) with integers only!  Season played (eg:- '2018-19')”  And asks for the user input again. | Displays the message below  “Given input is not in proper format, use this format please (0000-00) with integers only!  Season played (eg:- '2018-19')”  And asks for the user input again | Pass |
| 12 | Validating Strings inputs  **(from CLI)** | Select the Option 1 from the menu and again select option 1 for normal football club and create a football club with:  Club name: n@12x | Displays the message below  “Given input is not in proper format, only include alphabets please!”  And asks for the user input again. | Displays the message below  “Given input is not in proper format, only include alphabets please!”  And asks for the user input again. | Pass |
| 13 | Validating Club Names when creating new Clubs  **(from CLI)** | Select the Option 1 from the menu and again select option 1 for normal football club and create a football club with:  Club name: aVeNgErS  Location: Spain  Coach Name: Nazhim  Select the Option 4 and enter the season as “2020-21” | Displays the club name entered by user as “aVeNgErS” into “Avengers” in a proper format in the table | Displays the club name entered by user as “aVeNgErS” into “Avengers” in a proper format in the table | Pass |
| 14 | Validating adding match when there is only one club present  **(from CLI)** | Select the Option 8 to clear all the data from the file.  Select the Option 1 from the menu and again select option 1 for normal football club and create a club with the name “Barca” and fill all the other prompts with any random data.  Select the Option 5 from the menu. | Displays the message “Sorry there is only 1 club present currently, so a match can't be played!” and returns the main menu | Displays the message “Sorry there is only 1 club present currently, so a match can't be played!” and returns the main menu | Pass |
| 15 | Validating that no more than 20 clubs can be created. | Keep creating clubs by selecting the option number 1 and entering the necessary information, until the 21st club details are entered | Displays the following message to the user “Sorry there is no room for a new club, the maximum number of club limit has been reached!  ” | Displays the following message to the user “Sorry there is no room for a new club, the maximum number of club limit has been reached!  ” | Pass |
| 16 | Validating that a club cannot play the same type of match twice with the same club for the same season | Get 2 clubs from the list which didn’t play a match so far with each other.  Select option 5 to add a match of type “Home” for season “2020-21”  Repeat the same thing of adding match to the same season and match type | Displays the following message to the user  “Sorry can't add match, because it's already played for the given teams, season and match type!  ” | Displays the following message to the user  “Sorry can't add match, because it's already played for the given teams, season and match type!  ” | Pass |
| 17 | Validating delete club when the user enters an invalid club to be deleted | Select option 2 and enter a random club name which is not in the premier league club list | Displays a message indicating that there is no club with the given name | Displays a message indicating that there is no club with the given name | Pass |
| 18 | Validating display statistics of an invalid club entered | Select option 3 and enter a random club name which is not in the premier league club list | Displays a message indicating that there is no club with the given name | Displays a message indicating that there is no club with the given name | Pass |

# Further test cases for GUI with validation test cases.

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| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Test Case** | **Input data** | **Expected Output** | **Actual Output** | **Pass/**  **Fail** |
| 1 | Displaying table records (which is by default sorted by points) | Select tables from the navigation bar | Displays the table records which are sorted by points for a specific season, in descending order. | Displays the table records which are sorted by points for a specific season, in descending order. | Pass |
| 2 | Displaying table records (which are sorted by goals) | From the “Sort By” drop down menu select “goals” option, from the tables page | Displays the table records for a specific which are sorted by goals in descending order. | Displays the table records for a specific which are sorted by goals in descending order. | Pass |
| 3 | Displaying table records (which are sorted by wins) | From the “Sort By” drop down menu select “wins” option, from the tables page | Displays the table records for a specific which are sorted by wins in descending order. | Displays the table records for a specific which are sorted by wins in descending order. | Pass |
| 4 | Displaying table records (which are sorted by points) | From the “Sort By” drop down menu select “points” option, from the tables page | Displays the table records for a specific which are sorted by points in descending order. | Displays the table records for a specific which are sorted by points in descending order. | Pass |
| 5 | Displaying table records from different seasons | From the “Season” drop down menu select any season you wish, from the tables page | Displays the table records for the selected season in descending order of points | Displays the table records for the selected season in descending order of points | Pass |
| 6 | Displaying the list of matches played | Select matches from the navigation bar | Displays the list of matches played for a specific season in ascending order of sorted date | Displays the list of matches played for a specific season in ascending order of sorted date | Pass |
| 7 | Displaying the list of played matches for a selected season | Select the season drop down menu and select a season, from the matches page | Displays a list of matches for the selected season in ascending order of sorted date | Displays a list of matches for the selected season in ascending order of sorted date | Pass |
| 8 | Displaying the list of matches by a specific date | Enter a date in proper format inside the text field for searching by date  Click the search button | Displays a list of matches for a specific season with a specific date. | Displays a list of matches for a specific season with a specific date. | Pass |
| 9 | Generating a new match and display with all the list of matches for a specific season | Select any season you wish to generate a match.  Click the “Generate Match” button | Displays a message that a match is generate (assuming that random data generated are all valid )and displays the total list of matches with the generated match for the season | Displays a message that a match is generate (assuming that random data generated are all valid )and displays the total list of matches with the generated match for the season | Pass |
| 10 | Validating if user enters date in invalid format | Select the date text field and enter the following “2020-12-14e”  Click Search button | Display the message “Invalid date / format !” | Display the message “Invalid date / format !” | Pass |
| 11 | Validating generation of match when there is only 1 team available | “Assuming that there is only 1 club present”  Click the “Generate Match” button | Display and error message indicating the issue | Display and error message indicating the issue | Pass |
| 12 | Validating match generation, when the maximum number of matches played by a club is reached | “Assuming that there are only 2 clubs present for any given season at the moment”, so make sure that a season contains only 2 clubs  Since the maximum number of matches can be played is 2 per club  Keep clicking “Generate Match” button | Displays the Error message to the user once all the 2 matches are played by each club  This may also Display an error message even before both the matches are played, this is because this is a random process and there is a probability that the same type of match being selected again. (eg:- Club A can play with Club B with 2 differnent match types such as “Home” and “Away”, they can play the same match type twice) | Displays the Error message to the user once all the 2 matches are played by each club  This may also Display an error message even before both the matches are played, this is because this is a random process and there is a probability that the same type of match being selected again. (eg:- Club A can play with Club B with 2 differnent match types such as “Home” and “Away”, they can play the same match type twice) | Pass |
| 13 | Date Search Validation | Leaving the Search input field empty and clicking the search button | This will display a message indicating that invalid date entered | This will display a message indicating that invalid date entered | Pass |