

Test Plan

Individual Project



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Contents

Test Cases.....	3
1.1 Authentication Functionalities.....	3
1.2 Event Functionalities.....	5
1.3 Booking Functionalities.....	6
1.4 Account Functionalities.....	7
Testing Strategy	8

Test Cases

1.1 Authentication Functionalities

TC	User Story	Pre-condition	Test data	Expected result
TC-01	Successful login as a user.	Application must be open on the device	Username: test Password: test	The user is redirected to the home page and is able to make bookings.
TC-02	Successful login as an admin.	Application must be open on the device	Username: admin Username: admin	The user is redirected to the home page, where he can manage all the events on the website.
TC-03	Login with wrong credentials	Application must be open on the device	Username: fail Password: fail	The user will remain on the same page and a pop-up message "Invalid credentials" will be displayed.
TC-04	Login with empty field(s).	Application must be open on the device	Username: Password: test	A pop-up message "Please fill out this field" will appear under the missing field.
TC-05	Successful registration	Application must be open on the device	Email: s.p@gmail.com Username: s.petkov Password: 123456 Confirm Password: 123456 First Name: Stanislav Last Name: Petkov Gender: Male Phone: +3124312332434 Email: stasg@gmail.com	A pop message "You have signed up successfully" will be displayed and the user will get automatically logged in and redirected to the home page.
TC-06	Registration with already taken (registered) email or username.	Application must be open on the device	Email: test@gmail.com Username: test1 Password: 123456 Confirm Password: 123456 First Name: Stanislav Last Name: Petkov Gender: Male Phone: +3124312332434 Email: stasg@gmail.com	The user will remain on the same page and a message "User with this email already exists" will be displayed.
TC-07	Registration with a too short password	Application must be open on the device	Email: test1@gmail.com Username: test1 Password: 1234 Confirm Password: 1234 First Name: Stanislav Last Name: Petkov Gender: Male Phone: +3124312332434 Email: stasg@gmail.com	The user will remain on the same page and a message "Password must be at least 6 characters long" will be displayed.

TC-08	Registration with passwords not matching.	Application must be open on the device	Email: s.p@gmail.com Username: s.petkov Password: 123456 Confirm Password: 123450 First Name: Stanislav Last Name: Petkov Gender: Male Phone: +3124312332434 Email: stasg@gmail.com	The user will remain on the same page and a message "Passwords do not match" will be displayed.
TC-09	Registration with missing field(s).	Application must be open on the device	Email: s.p@gmail.com Username: Password: 123456 Confirm Password: 123456 First Name: Stanislav Last Name: Petkov Gender: Male Phone: +3124312332434 Email: stasg@gmail.com	The user will remain on the same page and a message "Please fill out this field" under the missing field will be displayed.
TC-10	Logout	The user is already logged into the application		The user will be logged out of the application and redirected to the home page.

1.2 Event Functionalities

TC	User Story	Pre-condition	Test data	Expected result
TC-11	Viewing available matches as a user.	The user is already logged into the application		The user is redirected to the schedule page and a list of the upcoming matches is displayed.
TC-12	Adding a new match successfully.	The user is already logged as admin.	Opponent: FC Barcelona League: Champion's League Ticket price: 60 Date: 15/03/2022 Time: 5:00 PM	The user is redirected to the home page, where the new event is displayed on the list of events.
TC-13	Adding event with non-existent team name.	The user is already logged as admin.	Opponent: FC Barcelona123 League: Champion's League Ticket price: 60 Date: 15/03/2022 Time: 5:00 PM	The user gets a message, that a team with the specified name doesn't exist.
TC-14	Editing event successfully	The user is already logged as admin.	Opponent: FC Barcelona League: Champion's League Ticket price: 80 Date: 19/03/2022 Time: 8:00 PM	The user gets a confirmation message and is redirected to the home page.
TC-15	Editing event info with non-existent team.	The user is already logged as admin.	Opponent: FC Barcelona111 League: Champion's League Ticket price: 80 Date: 19/03/2022 Time: 8:00 PM	The user gets a message that a team with this name doesn't exist and remains on the same page.
TC-16	Deleting an event.	The user is already logged as admin.		The user presses the "delete" button and gets an "are you sure message", if he presses "ok" the event is deleted and the user is redirected to the home page, if the user selects "cancel", he remains on the same page and the event is not deleted.
TC-17	Adding a new team successfully.	The user is already logged as admin.	Team: FC Manchester City Logo: ManchesterCity.png	The user gets a confirmation message that the team has been added and remains on the same page.
TC-18	Adding a team that already exists.	The user is already logged as admin.	Team: FC Barcelona Logo: ManchesterCity.png	The user gets a message, that a team with this name already exists and remains on the same page.

1.3 Booking Functionalities

TC	User Story	Pre-condition	Test data	Expected result
TC-19	Making a successful booking. 1. Press "Book Now" 2. Select Quantity 3. Press "Buy Now" 4. Press "+" button 5. Enter payment info 6. Check "Use My Account" 7. Check "Agreement to terms and conditions" 8. Press "Complete Order"	The user is already logged into the application	Category: 3 Quantity: 4 Block: 308 Cardholder name: Stanislav Petkov Card number: 4111 1111 1111 1111 Security code: 850 Expiration date: 12/25	The user gets confirmation that his booking has been successful and is redirected to his booking history, where his new booking is displayed.
TC-20	Entering wrong payment info 1. Press "Book Now" 2. Select Quantity 3. Press "Buy Now" 4. Press "+" button 5. Enter payment info 6. Check "Use My Account" 7. Check "Agreement to terms and conditions" 8. Press "Complete Order"	The user is already logged into the application	Category: 3 Quantity: 4 Block: 308 Cardholder name: Stanislav Petkov Card number: 1111 1111 1111 1111 Security code: 850 Expiration date: 12/25	The user gets a message that his credit card number is invalid and remains on the same page.
TC-21	Booking with empty field(s) Entering wrong payment info 1. Press "Book Now" 2. Select Quantity 3. Press "Buy Now" 4. Press "+" button 5. Enter payment info 6. Check "Agreement to terms and conditions" 7. Press "Complete Order"	The user is already logged into the application	Category: 3 Quantity: 4 Block: 308 Cardholder name: Stanislav Petkov Card number: 4111 1111 1111 1111 Security code: 850 Expiration date: 12/25 First Name: Stanislav Last Name: "" Gender: Male Phone Number: +31 123453435 Email: stn@gmail.com	The user gets a message that he needs to fill in the "Last Name" field to proceed.
TC-22	Trying to book tickets without being logged in. 1. The user presses the "Book Now" button	The user is NOT logged into the application		The user is redirected to the login page.

1.4 Account Functionalities

TC	User Story	Pre-condition	Test data	Expected result
TC-23	Viewing your bookings.	The user is already logged into the application		The user is redirected to the bookings page, where he can view his bookings.
TC-24	Editing personal profile successfully.	The user is already logged into the application	First Name: Stanislav1 Last Name: Petkov1 Gender: Male Phone: +31243123324343 Email: stasg123@gmail.com	The account information has been changed successfully and the user is redirected to the home page.
TC-25	Editing profile with empty field(s).	The user is already logged into the application	First Name: Last Name: Petkov1 Gender: Male Phone: +31243123324343 Email: stasg123@gmail.com	The user gets a pop-up message below the "first name" field, that says "Please fill out this field" and remains on the same page.
TC-26	Successfully changing account's password	The user is already logged into the application	Username: stan Password: stan -- Current Password: stan New Password: 123456 Repeat New Password: 123456	A message that informs the user that he has changed his password successfully is displayed and he is redirected to the home page.
TC-27	Changing password with wrong current password field	The user is already logged into the application	Username: test Password: test -- Current Password: test123 New Password: 123456 Repeat New Password: 123456	The user gets a message that the current password doesn't match his current password.
TC-28	Changing password without matching new passwords.	The user is already logged into the application	Username: test Password: test -- Current Password: test New Password: 111111 Repeat New Password: 222222	The user gets a message that the new password fields do not match.

Testing Strategy

With regards to testing I will be doing several integration tests to confirm that my three subsystems (front-end, back-end and database) function correctly as one whole system, at least 1 system test and 60%+ code coverage via unit tests, where the focus would be to test at least all the functions in my logic layer, because the logic of my application is the most error-prone part of the system. The plan is to make a unit test per use case. Having a large amount of single use cases will simplify the testing process and improve the codes future debugging and maintainability. Tests that validate several things may become too complex and hard to maintain in the future. To be able to have maintainable code I will stick with having one (or if needed two) assertions per test. Every test will be self-contained and not interact with other components to verify validity.

Continuous integration will also be part of my testing strategy because it will allow me to integrate new parts of my code more smoothly and detect potential issue at an earlier stage. Gitlab CI and SonarQube will be my main tools for utilizing this strategy.

Continuous deployment via docker will also help me with running integration tests and testing if my subsystems are compatible.