

SOFTWARE ENGINEERING TESTING

RAILWAY RESERVATION SYSTEM

Test Case 1:

Test Focus: Login Functionality

Test Description: To test the login functionality of the admin/user who uses the website

Pre and Post Conditions: The user/admin should be registered to the database before login, else an alert box displaying the error “Incorrect username and password” will be displayed and the browser will reload the login page.

Test Steps:

1. Open the browser (Google Chrome)
2. Enter the URL: localhost/railway_reservation/mainhome.php
3. Click on “Log In” on the Navigation Bar of the home page, choose the option in dropbox Login as User (for user), or “Login as admin” (for admin)
4. Enter the username
5. Enter the password
6. Click on Login

S. No	Test Data	Expected Result	Actual Result	Test Result
1	Correct username, correct password	Login	Login	Pass
2	Correct username, wrong password	User can't login	User can't login	Pass
3	Wrong username, correct password	User can't login	User can't login	Pass
4	Wrong username, wrong password	User can't login	User can't login	Pass
5	Click on the home button on the top right corner	It should direct to main home page	It should direct to main home page	Pass

Test Case 2:

Test Focus: Register Functionality

Test Description: To test the register functionality for new clients

Pre and Post Conditions: Null

Test Steps:

1. Open the browser (Google Chrome)
2. Enter the URL: localhost/railway_reservation/mainhome.php

3. Click on “Register” on the Navigation Bar of the home page
4. Enter the firstname
5. Enter the lastname
6. Enter the username
7. Enter the password
8. Enter the password
9. Click on register

S. No	Test Data	Expected Result	Actual Result	Test Result
1	Enter username which already exists and register	User can't register as username already exists	User can't register as username already exists	Pass
2	Enter password which does not contain one lowercase letter or one uppercase letter or a digit or at least 8 characters	User can't register as password does not match the required format	User can't register as password does not match the required format	Pass
3	Enter username which does not exist in the database and password which contains one digit, one uppercase letter, one lowercase letter and is at least 8 characters long	User registered successfully	User registered successfully	Pass
4	Click on the home button on the top right corner	It should direct to main home page	It should direct to main home page	Pass

Test Case 3:

Test Focus: Book Trains Functionality

Test Description: To test the booking of train by the passenger who uses the website

Pre and Post Conditions: Login by user, The page will not load by pasting the corresponding URL , instead redirect to user login page.

Test Steps:

1. Open the browser (Google Chrome)
2. Enter the URL: localhost/railway_reservation/mainhome.php
3. Click on “Log In” on the Navigation Bar of the home page, choose the option in dropdown Login as User (for user)
4. Enter the username
5. Enter the password
6. Click on Login

7. From the navigation bar, click “Book Train”

S. No	Test Data	Expected Result	Actual Result	Test Result
1	Enter more than 10 digits in the “Number” input box	The conditions won’t allow you	The conditions won’t allow you	Pass
2	Enter the email id that does not have @	A small box will pop up showing that ‘@’ is compulsory in email	A small box will pop up showing that ‘@’ is compulsory in email	Pass
3	Enter the email id that does not have ‘.com’	A small box will pop up showing that email does not match the required format	A small box will pop up showing that email does not match the required format	Pass
4	Insert a seat number that is already booked	A page displaying the available seats and displaying the message “Seat is already booked” is displayed	A page displaying the available seats and displaying the message “Seat is already booked” is displayed	Pass
5	Click the tiny home button on the top right corner	It should redirect to the user login page	It should redirect to the user login page	Pass
6	Try to proceed without filling all the fields	A small box will pop up showing that the fields are required	A small box will pop up showing that the fields are required	Pass
7	Button at the bottom of the display box “Show” when clicked should show the available seats	The available non-booked seats are shown	The available non-booked seats are shown	Pass
8	Click the button book by satisfying all the above conditions	The seat will be reserved and a confirmation page will load	The seat will be reserved and a confirmation page will load	Pass

Test Case 4:

Test Focus: View Booked Trains Functionality

Test Description: To view the booked trains by the user who uses the website

Pre and Post Conditions: Login by user, The page will not load by pasting the corresponding URL , instead redirect to user login page.

Test Steps:

1. Open the browser (Google Chrome)
2. Enter the URL: localhost/railway_reservation/mainhome.php

3. Click on “Log In” on the Navigation Bar of the home page, choose the option in dropdown Login as User (for user)
4. Enter the username
5. Enter the password
6. Click on Login
7. From the navigation bar, click “View Booked Trains”

S. No	Test Data	Expected Result	Actual Result	Test Result
1	User clicks on “View Booked Trains” on navigation button of user login page	All the booked trains list should appear	All the booked trains list should appear	Pass
2	Click on the home button on the top right corner	It should direct to user login home page	It should direct to user login home page	Pass

Test Case 5:

Test Focus: Register Trains Functionality

Test Description: To test the addition of trains by the admin

Pre and Post Conditions: Login by admin, The page will not load by pasting the corresponding URL , instead redirect to admin login page.

Test Steps:

1. Open the browser (Google Chrome)
2. Enter the URL: localhost/railway_reservation/mainhome.php
3. Click on “Log In” on the Navigation Bar of the home page, choose the option in dropdown Login as Admin (for admin)
4. Enter the admin username
5. Enter the admin password
6. Click on Login
7. From the navigation bar, click “Register Trains”

S. No	Test Data	Expected Result	Actual Result	Test Result
1	User clicks on “Register Trains”	Enter the Source , Destination , TrainID, Arrival Time, Departure Time (all required	Enter the Source , Destination , TrainID, Arrival Time, Departure Time (all required	Pass

		fields) else page won't proceed	fields) else page won't proceed	
2	User clicks on "Search Trains" on navigation bar and searches for trains between the new source and destination entered	The new trains should appear	The new trains should appear	Pass
3	Click on the home button on the top right corner	It should direct to admin login home page	It should direct to admin login home page	Pass

Test Case 6:

Test Focus: Update Trains Functionality

Test Description: To update the train (say arrival or departure time) by the admin

Pre and Post Conditions: Login by admin, The page will not load by pasting the corresponding URL , instead redirect to admin login page.

Test Steps:

1. Open the browser (Google Chrome)
2. Enter the URL: localhost/railway_reservation/mainhome.php
3. Click on "Log In" on the Navigation Bar of the home page, choose the option in dropbox Login as Admin (for admin)
4. Enter the admin username
5. Enter the admin password
6. Click on Login
7. From the navigation bar, click "Update Trains"

S. No	Test Data	Expected Result	Actual Result	Test Result
1	User clicks on "Update Trains"	Enter the Source , Destination , TrainID, Arrival Time, Departure Time (all required fields) else page won't proceed	Enter the Source , Destination , TrainID, Arrival Time, Departure Time (all required fields) else page won't proceed	Pass
2	User clicks on "Search Trains" on navigation bar and searches for trains between the new source and destination entered	The trains with details updated should appear	The trains with details updated should appear	Pass
3	Click on the home button on the top right corner	It should direct to admin login home page	It should direct to admin login home page	Pass

Test Case 7:

Test Focus: View Trains Functionality

Test Description: To view all the trains in the database by the admin

Pre and Post Conditions: Login by admin, The page will not load by pasting the corresponding URL , instead redirect to user login page.

Test Steps:

1. Open the browser (Google Chrome)
2. Enter the URL: localhost/railway_reservation/mainhome.php
3. Click on “Log In” on the Navigation Bar of the home page, choose the option in dropdown Login as Admin (for admin)
4. Enter the admin username
5. Enter the admin password
6. Click on Login
7. From the navigation bar, click “View Trains”

S. No	Test Data	Expected Result	Actual Result	Test Result
1	User clicks on “View Trains”	All the trains in the database should be showed	All the trains in the database should be showed	Pass
2	Click on the home button on the top right corner	It should direct to admin login home page	It should direct to admin login home page	Pass

Test Case 8:

Test Focus: Delete Trains Functionality

Test Description: To test the deletion of trains by the admin

Pre and Post Conditions: Login by admin, The page will not load by pasting the corresponding URL , instead redirect to user login page.

Test Steps:

1. Open the browser (Google Chrome)
2. Enter the URL: localhost/railway_reservation/mainhome.php
3. Click on “Log In” on the Navigation Bar of the home page, choose the option in dropdown Login as Admin (for admin)
4. Enter the admin username
5. Enter the admin password
6. Click on Login

7. From the navigation bar, click “Delete Trains”

S. No	Test Data	Expected Result	Actual Result	Test Result
1	Admin clicks on “Delete Trains”	Enter the Source , Destination , TrainID (all required fields) else page won’t proceed	Enter the Source , Destination , TrainID (all required fields) else page won’t proceed	Pass
2	Admin clicks on “View Trains”	The deleted train should not be displayed	The deleted train should not be displayed	Pass
3	User enters the source and destination of the deleted train	No train should be displayed	No train should be displayed	Pass
4	Click on the home button on the top right corner	It should direct to admin login home page	It should direct to admin login home page	Pass

Test Case 9:

Test Focus: Search Trains Functionality

Test Description: To test the search trains functionality by the actor

Pre and Post Conditions: Null

Test Steps:

1. Open the browser (Google Chrome)
2. Enter the URL: localhost/railway_reservation/mainhome.php
3. Click on “Search Trains” on the Navigation Bar of the home page

S. No	Test Data	Expected Result	Actual Result	Test Result
1	Actor clicks on “Search Trains”	Enter the source and destination(required) fields and corresponding trains should be displayed	Enter the source and destination(required)fields and corresponding trains should be displayed	Pass
2	Click on the home button on the top right corner	It should direct to admin login home or user login home or main home page as per login activity of the actor	It should direct to admin login home or user login home or main home page as per login activity of the actor	Pass
3	Enter the source and destination that is not in the route database	An alert should pop up and no results should be displayed	An alert showing “No trains exists on this route” is	Pass

			showed and no results are displayed	
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Test Case 10:

Test Focus: Home Button Functionality

Test Description: To test action of button by actor

Pre and Post Conditions: Null

Test Steps:

1. Open the browser (Google Chrome)
2. Enter the URL: localhost/railway_reservation/mainhome.php
3. Click on “Home” on the Navigation Bar of the home page

S. No	Test Data	Expected Result	Actual Result	Test Result
1	Actor clicks on “Home”	It should direct to admin login home or user login home or main home page as per login activity of the actor	It should direct to admin login home or user login home or main home page as per login activity of the actor	Pass

Test Case 11:

Test Focus: Logout Functionality

Test Description: To test the logout functionality by a particular user

Pre and Post Conditions: Login by user

Test Steps:

1. Open the browser (Google Chrome)
2. Enter the URL: localhost/railway_reservation/mainhome.php
3. Click on “Log Out” on the Navigation Bar of the home page

S. No	Test Data	Expected Result	Actual Result	Test Result
1	Checking the functionality of Log out button	None of the functionalities that requires login by the actor will work	None of the functionalities that requires login by the actor will work	Pass