

**Test Case ID: TC001**

Test Case Title: Verify App Launch

**Description:**

Verify that the app launches successfully and displays the initial screen.

**Preconditions:**

The app is installed and accessible on the device.

**Test Steps:**

1. Launch the app.

**Expected Results:**

The app launches and displays the initial screen with the IRCTC logo and app name.

**Actual Results:**

The app launches and displays the initial screen with the IRCTC logo and app name.

**Test Data:**

N/A

**Notes:**

## Test Case ID: TC002

Test Case Title: Verify Login Functionality

### Description:

Verify that a user can successfully log in with valid credentials.

### Preconditions:

The user has a registered account with valid credentials.

### Test Steps:

1. Open the app.
2. Tap on the 'Sign In' button.
3. Enter the registered username in the 'User Name' field.
4. Enter the registered password in the 'Password' field.
5. Tap the 'Login' button.

### Expected Results:

The user is successfully logged in and redirected to the home screen or the dashboard.

### Actual Results:

The user is successfully logged in and redirected to the home screen or the dashboard.

### Test Data:

Username: valid\_username

Password: valid\_password

### Notes:

Test with invalid credentials, empty fields, and edge cases like forgotten passwords.

## Test Case ID: TC003

Test Case Title: Verify Registration Functionality

### Description:

Verify that a new user can register with valid details.

### Preconditions:

The user is not already registered.

### Test Steps:

1. Open the app.
2. Tap on the 'Sign In' button.
3. Tap on the 'Register User?' link.
4. Enter a valid username in the 'User Name' field.
5. Enter a valid email address in the 'Email' field.
6. Enter a valid password in the 'Password' field.
7. Enter the captcha code.
8. Tap the 'Register' button.

### Expected Results:

The user is successfully registered and redirected to the login screen.

### Actual Results:

The user is successfully registered and redirected to the login screen.

### Test Data:

Username: new\_user

Email: new\_user@example.com

Password: valid\_password

### Notes:

Test with invalid data, duplicate usernames, and email formats.

## **Test Case ID: TC004**

Test Case Title: Verify Home Screen Navigation

### **Description:**

Verify that the user can navigate between different sections of the home screen.

### **Preconditions:**

The user is logged in successfully.

### **Test Steps:**

1. Open the app.
2. Verify the presence of the following sections: Plan My Journey, My Bookings, PNR Enquiry, Cancel Ticket, Refund History, File TDR, Book Meal, Flights, Tourism, Magazines, iMudra.
3. Tap on each of the sections and verify that the respective screens are displayed.

### **Expected Results:**

Each section should navigate to the corresponding screen without any errors.

### **Actual Results:**

Each section should navigate to the corresponding screen without any errors.

### **Test Data:**

N/A

### **Notes:**

## Test Case ID: TC005

Test Case Title: Verify Train Search Functionality

### Description:

Verify that the user can search for trains based on source, destination, and date.

### Preconditions:

The user is logged in successfully.

### Test Steps:

1. From the home screen, tap on the 'Plan My Journey' section.
2. Enter the source station in the 'From' field.
3. Enter the destination station in the 'To' field.
4. Select the desired departure date.
5. Optionally, select 'Flexible with Date' or 'I'll Book in Special Concession'.
6. Tap on the 'Search Trains' button.

### Expected Results:

The app displays a list of available trains matching the search criteria.

### Actual Results:

The app displays a list of available trains matching the search criteria.

### Test Data:

Source: New Delhi

Destination: Agra Cantt

Departure Date: 2023-10-27

### Notes:

Test with different combinations of source, destination, and date. Test for invalid inputs, empty fields, and edge cases like future dates.

## **Test Case ID: TC006**

Test Case Title: Verify Train List Display

### **Description:**

Verify that the train list displays relevant information and allows for filtering and sorting.

### **Preconditions:**

A train search has been performed successfully.

### **Test Steps:**

1. Verify the train list displays the train name, departure time, arrival time, and other relevant information.
2. Test the 'Sort' and 'Order' filters by selecting different options and verifying the list reorders accordingly.
3. Verify the 'Train Details' button is available for each train.
4. Tap on the 'Train Details' button for a specific train.

### **Expected Results:**

The train list should display relevant information and allow for sorting and filtering. The 'Train Details' button should navigate to the detailed information page.

### **Actual Results:**

The train list should display relevant information and allow for sorting and filtering. The 'Train Details' button should navigate to the detailed information page.

### **Test Data:**

N/A

### **Notes:**

Test for cases where no trains are found based on the search criteria. Verify that the filters function correctly and that the train details page is displayed properly.

## **Test Case ID: TC007**

Test Case Title: Verify Train Details Display

### **Description:**

Verify that the train details page displays comprehensive information.

### **Preconditions:**

The user has navigated to the train details page.

### **Test Steps:**

1. Verify the train details page displays information like train name, train number, departure time, arrival time, duration, available seats, and other relevant information.
2. Verify the availability of seats is accurate and updated.

### **Expected Results:**

The train details page should display all relevant information, including accurate availability of seats.

### **Actual Results:**

The train details page should display all relevant information, including accurate availability of seats.

### **Test Data:**

N/A

### **Notes:**

Test with different train types and check for accuracy of information. Verify the layout and usability of the details page.

## Test Case ID: TC008

Test Case Title: Verify Passenger Details Input

### Description:

Verify that the user can input passenger details correctly.

### Preconditions:

The user has selected a train and is on the passenger details page.

### Test Steps:

1. Verify the 'Select Passengers' section displays options for adding new passengers or existing passengers.
2. Tap on the 'Add New' button.
3. Enter the passenger name, age, gender, and any other required details.
4. Verify the 'Add Infant' and 'Add Existing' options are functional.
5. Enter the passenger mobile number.

### Expected Results:

The passenger details should be inputted correctly, and the app should validate the data as required. The 'Add Infant' and 'Add Existing' options should allow adding passengers accordingly.

### Actual Results:

The passenger details should be inputted correctly, and the app should validate the data as required. The 'Add Infant' and 'Add Existing' options should allow adding passengers accordingly.

### Test Data:

Passenger Name: Test User

Age: 29

Gender: M

Mobile Number: 9999999999

### Notes:

Test with different types of passengers, including infants, senior citizens, and passengers with disabilities. Test the validation logic for inputs like age, gender, and mobile number.



## **Test Case ID: TC009**

Test Case Title: Verify Booking Details Display

### **Description:**

Verify that the booking details are displayed correctly.

### **Preconditions:**

The user has entered passenger details and is on the booking details page.

### **Test Steps:**

1. Verify the booking details page displays the train name, train number, journey date, departure time, arrival time, boarding station, PNR number, and other relevant information.
2. Verify the passenger details are displayed correctly.
3. Verify the ticket status is displayed accurately.

### **Expected Results:**

The booking details page should display all the relevant information, including accurate passenger details and ticket status.

### **Actual Results:**

The booking details page should display all the relevant information, including accurate passenger details and ticket status.

### **Test Data:**

N/A

### **Notes:**

Test with different booking scenarios and verify the accuracy of information displayed. Verify the layout and usability of the booking details page.

## **Test Case ID: TC010**

Test Case Title: Verify Booking Confirmation

### **Description:**

Verify that the booking is confirmed successfully.

### **Preconditions:**

The user has reviewed the booking details and is ready to confirm.

### **Test Steps:**

1. Tap on the 'Confirm Booking' button.

### **Expected Results:**

The booking is confirmed, and the user receives a confirmation message with the PNR number and other details.

### **Actual Results:**

The booking is confirmed, and the user receives a confirmation message with the PNR number and other details.

### **Test Data:**

N/A

### **Notes:**

Test with different payment methods and verify the success and failure scenarios. Ensure the confirmation message is displayed correctly and that the user is redirected to the appropriate screen.

## Test Case ID: TC011

Test Case Title: Verify My Bookings Functionality

### Description:

Verify that the user can view their bookings.

### Preconditions:

The user has at least one booking.

### Test Steps:

1. From the home screen, tap on the 'My Bookings' section.
2. Verify the app displays a list of the user's bookings.
3. Verify the bookings list displays information like PNR number, train name, journey date, and ticket status.
4. Tap on a specific booking to view the details.

### Expected Results:

The app should display a list of the user's bookings with relevant information. Tapping on a booking should display the details of that specific booking.

### Actual Results:

The app should display a list of the user's bookings with relevant information. Tapping on a booking should display the details of that specific booking.

### Test Data:

N/A

### Notes:

Test with different booking statuses, including confirmed, cancelled, and partially cancelled. Verify the layout and usability of the My Bookings screen.

## Test Case ID: TC012

Test Case Title: Verify PNR Enquiry Functionality

### Description:

Verify that the user can check the status of a PNR.

### Preconditions:

The user has a valid PNR number.

### Test Steps:

1. From the home screen, tap on the 'PNR Enquiry' section.
2. Enter the PNR number in the provided field.
3. Tap on the 'Check PNR' button.

### Expected Results:

The app displays the status of the PNR, including information like train name, journey date, booking status, and other relevant details.

### Actual Results:

The app displays the status of the PNR, including information like train name, journey date, booking status, and other relevant details.

### Test Data:

Pnr Number: 2341501619

### Notes:

Test with invalid PNR numbers and verify the error handling. Test with different PNR statuses and verify the accuracy of information displayed.

## **Test Case ID: TC013**

Test Case Title: Verify Cancel Ticket Functionality

### **Description:**

Verify that the user can cancel a ticket.

### **Preconditions:**

The user has a confirmed booking that is eligible for cancellation.

### **Test Steps:**

1. From the home screen, tap on the 'Cancel Ticket' section.
2. Enter the PNR number of the ticket to be cancelled.
3. Tap on the 'Cancel Ticket' button.
4. Confirm the cancellation.

### **Expected Results:**

The ticket is successfully cancelled, and the user receives a confirmation message.

### **Actual Results:**

The ticket is successfully cancelled, and the user receives a confirmation message.

### **Test Data:**

N/A

### **Notes:**

Test with different cancellation scenarios, including partial cancellations and cancellations within the cancellation window. Verify the cancellation policy and refund process.

## **Test Case ID: TC014**

Test Case Title: Verify Refund History Functionality

### **Description:**

Verify that the user can view their refund history.

### **Preconditions:**

The user has received refunds for cancelled tickets.

### **Test Steps:**

1. From the home screen, tap on the 'Refund History' section.
2. Verify the app displays a list of the user's refund history.
3. Verify the refund history displays information like the PNR number, refund amount, and date of refund.

### **Expected Results:**

The app should display a list of the user's refund history with relevant information.

### **Actual Results:**

The app should display a list of the user's refund history with relevant information.

### **Test Data:**

N/A

### **Notes:**

Test with different refund scenarios and verify the accuracy of information displayed. Verify the layout and usability of the Refund History screen.

## **Test Case ID: TC015**

Test Case Title: Verify File TDR Functionality

### **Description:**

Verify that the user can file a TDR (Ticket Deposit Receipt).

### **Preconditions:**

The user has a valid reason for filing a TDR.

### **Test Steps:**

1. From the home screen, tap on the 'File TDR' section.
2. Enter the PNR number of the ticket for which the TDR is being filed.
3. Provide the reason for filing the TDR.
4. Upload any supporting documents, if required.
5. Tap on the 'Submit TDR' button.

### **Expected Results:**

The TDR is successfully submitted, and the user receives a confirmation message.

### **Actual Results:**

The TDR is successfully submitted, and the user receives a confirmation message.

### **Test Data:**

N/A

### **Notes:**

Test with different TDR scenarios and verify the accuracy of information submitted. Verify the confirmation message and the process for tracking the TDR status.

## **Test Case ID: TC016**

Test Case Title: Verify Book Meal Functionality

### **Description:**

Verify that the user can book meals for their train journey.

### **Preconditions:**

The user has a confirmed booking.

### **Test Steps:**

1. From the home screen, tap on the 'Book Meal' section.
2. Enter the PNR number of the ticket for which the meal is being booked.
3. Select the desired meal type and quantity.
4. Provide any dietary restrictions.
5. Tap on the 'Confirm Order' button.

### **Expected Results:**

The meal order is placed successfully, and the user receives a confirmation message.

### **Actual Results:**

The meal order is placed successfully, and the user receives a confirmation message.

### **Test Data:**

N/A

### **Notes:**

Test with different meal options and verify the accuracy of information submitted. Verify the confirmation message and the process for tracking the meal order status.



## **Test Case ID: TC017**

Test Case Title: Verify Flights Functionality

### **Description:**

Verify that the user can search and book flights.

### **Preconditions:**

### **Test Steps:**

1. From the home screen, tap on the 'Flights' section.
2. Enter the source and destination airports.
3. Select the desired travel dates.
4. Tap on the 'Search Flights' button.
5. Verify the app displays a list of available flights.
6. Select a flight and enter passenger details.
7. Confirm the booking.

### **Expected Results:**

The user can successfully search and book flights.

### **Actual Results:**

The user can successfully search and book flights.

### **Test Data:**

N/A

### **Notes:**

Test with different flight search criteria, including different airlines, travel classes, and dates. Verify the accuracy of information displayed and the booking process.

## **Test Case ID: TC018**

Test Case Title: Verify Tourism Functionality

### **Description:**

Verify that the user can browse and book tourism packages.

### **Preconditions:**

### **Test Steps:**

1. From the home screen, tap on the 'Tourism' section.
2. Browse the available tourism packages.
3. Select a package and review the details.
4. Confirm the booking.

### **Expected Results:**

The user can successfully browse and book tourism packages.

### **Actual Results:**

The user can successfully browse and book tourism packages.

### **Test Data:**

N/A

### **Notes:**

Test with different tourism package categories and destinations. Verify the accuracy of information displayed and the booking process.

## **Test Case ID: TC019**

Test Case Title: Verify Magazines Functionality

### **Description:**

Verify that the user can access and browse magazines.

### **Preconditions:**

### **Test Steps:**

1. From the home screen, tap on the 'Magazines' section.
2. Browse the available magazines.
3. Select a magazine and read the content.

### **Expected Results:**

The user can successfully access and browse magazines.

### **Actual Results:**

The user can successfully access and browse magazines.

### **Test Data:**

N/A

### **Notes:**

Test with different magazine categories and publications. Verify the functionality and usability of the magazine reading experience.

**Test Case ID: TC020**

Test Case Title: Verify iMudra Functionality

**Description:**

Verify that the user can access and use the iMudra feature.

**Preconditions:****Test Steps:**

1. From the home screen, tap on the 'iMudra' section.
2. Verify the functionality of the iMudra feature, including its purpose and usage.

**Expected Results:**

The user can successfully access and use the iMudra feature.

**Actual Results:**

The user can successfully access and use the iMudra feature.

**Test Data:**

N/A

**Notes:**

Test the functionality of the iMudra feature and its different features.

## Test Case ID: TC021

Test Case Title: Verify Navigation Between Screens

### Description:

Verify that the user can navigate between different screens within the app.

### Preconditions:

The user is logged in.

### Test Steps:

1. Navigate from the home screen to other screens like Plan My Journey, My Bookings, and other sections.
2. Navigate back to the home screen from different screens.

### Expected Results:

The user should be able to navigate between different screens within the app without any errors or issues.

### Actual Results:

The user should be able to navigate between different screens within the app without any errors or issues.

### Test Data:

N/A

### Notes:

Test the navigation flow between different screens and ensure the back button functionality works correctly.

## Test Case ID: TC022

Test Case Title: Verify User Account Functionality

### Description:

Verify that the user can access and manage their account information.

### Preconditions:

The user is logged in.

### Test Steps:

1. From the home screen, tap on the 'My Account' section.
2. Verify the user can view their profile information.
3. Verify the user can update their profile information.
4. Verify the user can change their password.
5. Verify the user can view their booking history.
6. Verify the user can view their refund history.
7. Verify the user can log out of their account.

### Expected Results:

The user should be able to access and manage their account information without any errors or issues.

### Actual Results:

The user should be able to access and manage their account information without any errors or issues.

### Test Data:

N/A

### Notes:

Test the functionality of each option within the My Account section and ensure that user information is updated correctly.

## **Test Case ID: TC023**

Test Case Title: Verify Help and Support Functionality

### **Description:**

Verify that the user can access help and support resources.

### **Preconditions:**

The user is in the app.

### **Test Steps:**

1. Verify the availability of a Help or Support section within the app.
2. Access the Help or Support section.
3. Verify the presence of resources like FAQs, contact information, or a support portal.
4. Test the functionality of accessing support resources.

### **Expected Results:**

The user should be able to access help and support resources within the app without any errors or issues.

### **Actual Results:**

The user should be able to access help and support resources within the app without any errors or issues.

### **Test Data:**

N/A

### **Notes:**

Verify the availability and accessibility of help and support resources within the app.

## Test Case ID: TC024

Test Case Title: Verify App Stability

### Description:

Verify the stability of the app under various conditions.

### Preconditions:

The app is installed and accessible on the device.

### Test Steps:

1. Perform multiple consecutive actions within the app, such as searching for trains, booking tickets, and navigating between screens.
2. Simulate different network conditions, including slow internet speed and no internet connectivity.
3. Force close the app and relaunch it.

### Expected Results:

The app should remain stable and responsive under various conditions, without crashing or exhibiting any unexpected behavior.

### Actual Results:

The app should remain stable and responsive under various conditions, without crashing or exhibiting any unexpected behavior.

### Test Data:

N/A

### Notes:

Test the app's stability under different scenarios to ensure it functions smoothly.



## Test Case ID: TC025

Test Case Title: Verify App Performance

### Description:

Verify the performance of the app, including loading times, responsiveness, and resource consumption.

### Preconditions:

The app is installed and accessible on the device.

### Test Steps:

1. Measure the loading times for different screens and features within the app.
2. Test the app's responsiveness to user interactions, such as button clicks and screen transitions.
3. Monitor the app's resource consumption, including battery usage and data usage.

### Expected Results:

The app should perform efficiently with fast loading times, quick responsiveness, and reasonable resource consumption.

### Actual Results:

The app should perform efficiently with fast loading times, quick responsiveness, and reasonable resource consumption.

### Test Data:

N/A

### Notes:

Test the app's performance under different scenarios to ensure a smooth user experience.

## **Test Case ID: TC026**

Test Case Title: Verify Accessibility

### **Description:**

Verify that the app is accessible to users with disabilities.

### **Preconditions:**

The app is installed and accessible on the device.

### **Test Steps:**

1. Verify the app follows accessibility guidelines, such as providing sufficient contrast between text and background colors, using clear and concise language, and allowing for screen reader compatibility.
2. Test the app's functionality using assistive technologies, such as screen readers and keyboard navigation.

### **Expected Results:**

The app should be accessible to users with disabilities, providing an inclusive user experience.

### **Actual Results:**

The app should be accessible to users with disabilities, providing an inclusive user experience.

### **Test Data:**

N/A

### **Notes:**

Test the app's accessibility using different assistive technologies and verify its compliance with accessibility guidelines.

## **Test Case ID: TC027**

Test Case Title: Verify Security

### **Description:**

Verify that the app protects user data and information.

### **Preconditions:**

The app is installed and accessible on the device.

### **Test Steps:**

1. Verify that the app uses secure communication protocols, such as HTTPS.
2. Test the app's login functionality to ensure that passwords are securely stored.
3. Verify the app's handling of user data and privacy.

### **Expected Results:**

The app should protect user data and information using secure protocols and practices.

### **Actual Results:**

The app should protect user data and information using secure protocols and practices.

### **Test Data:**

N/A

### **Notes:**

Test the app's security features and verify its compliance with security standards.

