

IT-314 Software Engineering

Black Box Testing

Sign up(new account):

Input Fields:

- email field:
 - Must not accept blank inputs.
 - Should enforce email format (e.g., `user@example.com` for email-based Signups).
 - Email id should not be already registered.
 - Name:
 - -Should not be empty.
 - -Maximum 30 characters.
 - Password field:
 - Must not accept blank inputs.
 - Should have a minimum 8 characters.
 - Minimum 1 uppercase character.
 - Minimum 1 lowercase character.
 - Minimum 1 digit should be present.
 - Should handle special characters .
 - Must mask characters while typing.
 - If Show password is selected the characters should be visible
-
- Signup with valid credentials should succeed and show a pop up for it
 - Signup with invalid username/email or password should fail and show an appropriate error message.
 - Case sensitivity for username/email and password should be verified (e.g., "Password123" vs. "password123").
 - Verify proper error messages (e.g., generic "Invalid email id" or "Password incorrect").
 - If the user was already logged in in the previous session, the user should be logged in already.

Test Case ID	Email	Name	Password	Expected Outcome
SU_TC_01	Blank	Valid (≤30 chars)	Valid	A dialouge Box appears stating: "Please Fill Out This Field"
SU_TC_02	Invalid format	Valid	Valid	Error: "Invalid email format."
SU_TC_03	Already registered	Valid	Valid	Error: "Email is already registered."
SU_TC_04	Valid	Blank	Valid	A dialouge Box appears stating: "Please Fill Out This Field"
SU_TC_05	Valid	Exceeds 30 characters	Valid	No inputs allowed after 30 characters
SU_TC_06	Valid	Valid	Blank	A dialouge Box appears stating: "Please Fill Out This Field"
SU_TC_07	Valid	Valid	<8 characters	Error: "Password must be at least 8 characters long."
SU_TC_08	Valid	Valid	No uppercase character	Error: "Password must contain at least one uppercase character."
SU_TC_09	Valid	Valid	No lowercase character	Error: "Password must contain at least one lowercase character."
SU_TC_10	Valid	Valid	No digit	Error: "Password must contain at least one digit."
SU_TC_11	Valid	Valid	Valid but no special char	Error: "Password must contain at least one special character"
SU_TC_12	Valid	Valid	Valid (masked during entry)	A pop up displays: "Account created Successfully"
SU_TC_13	Valid	Valid	Valid (show password toggled)	A pop up displays: "Account created Successfully"
SU_TC_14	Invalid format	Blank	Valid	Error: "Invalid email format" and "Name cannot be blank."
SU_TC_15	Blank	Blank	Blank	A dialogue Box appears stating: "Please Fill Out This Field"

Sign in:

Input Fields:

- Email:
 - Email id should be registered already.
- Password:
 - Must match with the password registered with the email id.

Validations:

- Ensure required fields cannot be left blank.
- Display appropriate error messages for invalid inputs (e.g., "email id or Password is incorrect").
- Verify the presence of visual cues for errors (e.g., red borders around incorrect fields)

Test Case ID	Email	Password	User Status	Expected Outcome
SI_TC_01	Blank	Valid	Not logged in	A dialouge Box appears stating: "Please Fill Out This Field"
SI_TC_02	Invalid format	Valid	Not logged in	Error: "Email or Password is incorrect."
SI_TC_03	Not registered	Valid	Not logged in	Error: "Email or Password is incorrect."
SI_TC_04	Registered	Blank	Not logged in	A dialouge Box appears stating: "Please Fill Out This Field"
SI_TC_05	Registered	Invalid	Not logged in	Error: "Email or Password is incorrect."
SI_TC_07	Registered	Case mismatch password	Not logged in	Error: "Email or Password is incorrect."
SI_TC_08	Registered	Valid	Not logged in	Success. User is signed in.
SI_TC_09	Registered	Valid	Already logged in	Success. User is automatically signed in.
SI_TC_10	Invalid format	Blank	Not logged in	A dialouge Box appears stating: "Please Fill Out This Field"
SI_TC_11	Blank	Blank	Not logged in	A dialouge Box appears stating: "Please Fill Out This Field"
SI_TC_12	whitespace	Valid	Not logged in	Error: "Email or Password is incorrect."

Profile Page:

Edit Profile:

- If we edit multiple input fields together the updates should be reflected.
- update message should be displayed after updating the details.
- While changing the password the current password field should match the actual password
- The new password entered should satisfy all the constraints mentioned previously
- for invalid password the warning message should be displayed

Add Property:

All the fields mentioned should be filled

Fields:

1)Add Photo:

- Max 6 photos can be uploaded
- Max size of photos should be 2 Mb per file
- Only images are uploadable i.e. formats like JPEG, PNG , etc are acceptable.
- one can delete the unwanted uploaded images

2) Pin code:

- only numeric values are accepted
- should have an input of only 6 digits

3) Check Box:

- Any one of Sell Or Rent must be selected
- Other options(Parking,furnished,Gym,Garden) are optional fields.

4) Price:

- Minimum amount of the price should be 5000.
- Maximum amount of the price should be 1000000000.

5) Token Amount:

- Minimum amount of the price should be 5000.
- Maximum amount of the price should be 10000000.

6) Visit Slots:

- Minimum 1 slot should be selected

7) Name:

- You can change the name for your account

8) Email id:

- Email id should be valid and in correct format

9) Contact no. :

- only digits are accepted as inputs
- only 10 digit no. is accepted as valid input

10) Delete Account:

- On deleting the account the account should be removed from the database.

11) Sign Out:

- On signing Out the account should be signed out.

Test Case ID	Field(s) Edited	Input	Expected Outcome
EP_TC_01	Name	Valid name (≤30 characters)	Success: "Profile updated successfully"
EP_TC_02	Name	Blank	A dialouge Box appears stating: "Please Fill Out This Field"
EP_TC_03	Name	Exceeds 30 characters	No inputs will be taken after 30 characters
EP_TC_04	Email	Valid email	Success: "Profile updated successfully"

EP_TC_05	Email	Invalid email format	Error: "Invalid email format."
EP_TC_06	Contact No.	Valid 10-digit number	Success: "Profile updated successfully"
EP_TC_07	Contact No.	<10 digits	Error: "Contact number must be exactly 10 digits."
EP_TC_08	Contact No.	>10 digits	Error: "Contact number must be exactly 10 digits."
EP_TC_09	Password	Current password mismatch	Error: "Invalid Credentials."
EP_TC_10	Password	New password <8 characters	Error: "Password must be at least 8 characters long."
EP_TC_11	Password	New password missing uppercase letter	Error: "Password must include at least one uppercase letter."
EP_TC_12	Password	New password missing lowercase letter	Error: "Password must include at least one lowercase letter."
EP_TC_13	Password	New password missing digits	Error: "Password must include at least one digit."
EP_TC_14	Password	Valid current password and valid new password	Success: "Profile updated successfully"
EP_TC_15	Multiple fields	Valid inputs for all	Success: "Profile updated successfully"
EP_TC_16	Multiple fields	Invalid inputs for some fields	Error messages displayed for specific invalid fields.
EP_TC_17	Email	Email already registered	Error: "Email already exists."

Test Case ID	Photos Uploaded	Expected Outcome
AP_TC_01	1 valid photo (JPEG, <2MB)	Success. Photo is uploaded.
AP_TC_02	6 valid photos (JPEG/PNG, <2MB)	Success. All photos are uploaded.
AP_TC_03	7 valid photos	Error: "Maximum of 6 photos allowed."
AP_TC_04	Photo >2MB	Error: "Photo exceeds maximum size of 2MB."

AP_TC_05	Non-image file	Error
AP_TC_06	Delete a valid uploaded photo	Success. Photo is removed from the upload list.
AP_TC_07	Mix of valid and invalid files	Error: "Photo exceeds maximum size of 2MB."

Test Case ID	Pin Code Input	Expected Outcome
AP_TC_08	Valid 6-digit pin	Success.
AP_TC_09	Less than 6 digits	Error: "Pin code must be exactly 6 digits."
AP_TC_10	More than 6 digits	Error: "Pin code must be exactly 6 digits."
AP_TC_11	Non-numeric values	No non numeric input is accepted

Test Case ID	Checkbox Selection	Expected Outcome
AP_TC_12	Sell selected	Success. Form submission proceeds.
AP_TC_13	Rent selected	Success. Form submission proceeds.
AP_TC_14	Optional fields selected (e.g., Gym)	Success. Form submission proceeds with selected options.

Test Case ID	Price Input	Expected Outcome
AP_TC_16	$5000 \leq \text{Price} \leq 1,000,000,000$	Success.
AP_TC_17	Price < 5000	Error: "Price must be at least 5000."
AP_TC_18	Price > 1,000,000,000	Error: "Price cannot exceed 1,000,000,000."

Test Case ID	Token Amount Input	Expected Outcome
AP_TC_19	$5000 \leq \text{Token Amount} \leq 10,000,000$	Success.
AP_TC_20	Token Amount < 5000	Error: "Token amount must be at least 5000."
AP_TC_21	Token Amount > 10,000,000	Error: "Token amount cannot exceed 10,000,000."

Test Case ID	Slots Selected	Expected Outcome
AP_TC_22	1 slot selected	Success. Visit slots are accepted.
AP_TC_23	No slots selected	Error: "Select one or more visiting slots."

Test Case ID	Confirmation Provided	Expected Outcome
DA_TC_01	Confirmed	Success. Account is deleted, and data is removed from the database.
DA_TC_02	Canceled	No changes are made.

Test Case ID	Sign Out Action	Expected Outcome
SO_TC_01	User clicks "Sign Out"	Success. User is logged out, and the session is cleared.

Home Page (Search and Filter):

Input Field:

- Search Bar
 - Users can search for properties using Pincode, Property name and City name.
 - It accepts alphanumeric characters.
 - It is not case sensitive.
 - If left blank, then properties near the user's location will be displayed. (i.e Ahmedabad in our case)
- Filter Options
 - BHK: Users can select any one BHK via radio buttons.
 - Type: Users can select any type via radio buttons.
 - Facilities: Users can select multiple options via checkboxes.
 - Max Price: It accepts the numerical value as well as '+' and '-' sign
- After applying filters, only the properties that match the selected criteria are displayed.
- Clicking Discard Filters removes all applied filters and resets the property listing.

Equivalence Class Partitioning:

Equivalence Class	Description
E1	No search Query is entered
E2	Search query is entered
E3	No BHK option is selected
E4	Any one BHK option is Selected
E5	No Type option is Selected
E6	Any one type option is Selected
E7	No Facility is Selected
E8	One or more Facility is selected
E9	Price Entered is more than equals to 0.
E10	Price Entered is less than 0.

Test Cases

Test Case ID	Search Query	BHK	Type	Price	Facilities	Expected Outcome
TC_01	Blank	None	None	Blank	None	Properties near our Location Will be Displayed
TC_02	Surat	1	Rent	100000	Gym	Properties matching the string 'Surat' in their pincode, name or city , filtered by type as Rent, 1BHK, with a gym Facility and a price of 100000 or less will be displayed.
TC_03	Ah	None	None	-239	None	Properties matching the string 'Ah' in their pincode, name or city , filtered price of -239 or less will be displayed.
TC_04	sURAT	More than 4	none	+10000	Gym, Parking	Properties matching the string 'Surat' in their pincode, name or city , filtered by 4+ BHK, with a gym and parking Facility and a price of 100000 or less will be displayed.
TC_05	Blank	2	Sale	Blank	Gym, parking, Furnished ,Garden	Properties near our location Filtered by type as Sale , 2 BHK, with a gym, parking, garden and furnished Facilities will be displayed.
TC_06	38001	3	Sale	0	Garden, parking, ,garden	Properties matching the string '38001' in their pincode, name or city , filtered by type as Sale, 3 BHK, with a gym, parking and garden Facilities and a price of 0 or less will be displayed.

My Properties:

- 1) The details of the property will be displayed on this page. No. of BHK, price, parking and location will be displayed. Other functionalities will be displayed if clicked on the property details.
- 2) Property details are editable and can be deleted

Property Details Page:

- If the details are updated by the seller, it is reflected in the property description.
- Multiple dates can not be selected.

- If the user doesn't select the date and time for booking or even if the one is incomplete then a "select both fields" message is displayed.
- A pop up is displayed on successfully booking the slot.
- A single user can't book multiple slots for the same date and time.
- If a slot is booked it will be reflected in the pending slots of the seller.

Test Case ID	Scenario	Input Data/Action	Expected Output
TC001	Seller updates property details	Seller updates description or other details	Updated details are reflected on the property description page for the users.
TC002	User selects multiple dates	Attempt to select two different dates	System prevents selecting multiple dates (either disables other dates or shows an error message).
TC003	User doesn't select date and time	Leave "Date" and "Time" fields empty and click "Book"	Displays "Select both fields" message.
TC004	User selects only date	Select a date but leave "Time" field empty and click "Book"	Displays "Select both fields" message.
TC005	User selects only time	Select a time but leave "Date" field empty and click "Book"	Displays "Select both fields" message.
TC006	User books slot successfully	Select valid date and time and click "Book"	Displays a pop-up confirming successful booking.

TC007	Single user books multiple slots for the same date and time	Attempt to book another slot for the same date and time	System prevents booking, displays an appropriate error message, e.g., "Slot already booked."
TC008	Slot booking reflects in seller's pending slots	Successfully book a slot	The booked slot appears in the seller's pending slots section.
TC009	User books a slot for a different date or time	Select a different date or time and book	Slot is successfully booked, pop-up confirmation displayed, and the slot is reflected in seller's records.
TC010	User cancels an incomplete booking attempt	Do not select any fields, then navigate away	No booking is made, and no changes are reflected in the pending slots.
TC011	System handles multiple users booking the same slot	Simulate concurrent booking attempts by multiple users	System prevents overbooking, and only the first successful booking is reflected in the seller's pending slots.

Transaction Page :

- If the user clicks on pay token fees then it will redirect to razorpay payment gateway.
- On entering otp, the transaction proceeds.
- If the user leaves a field empty or incomplete while entering the payment details, a message "please enter valid card number" is displayed.
- If a transaction is successful, the Transaction Page will show the history of the recorded transaction with correct time and details.
- If the transaction could not be completed due to network or server issues, then the portal timeouts and shows a "try again" message for payment.

- If the user has already paid the amount and clicks on the property's pay token amount button, it leads to the details page stating it is paid.
- If the user enters non numeric details for the card number or cvv, it will display a valid details message.

Test Case ID	Scenario	Input Data	Expected Output
TC001	User clicks on "Pay Token Fees"	Click action on the button	Redirects to Razorpay payment gateway.
TC002	User enters valid OTP	Valid OTP	Transaction proceeds.
TC003	User leaves a field empty while entering payment details	Leave "Card Number" field empty	Displays "Please enter valid card number" message.
TC004	User leaves "CVV" field empty	Leave "CVV" field empty	Displays "Please enter valid card number" message.
TC005	User enters non-numeric data in card number field	Enter "abcd1234" in the "Card Number" field	Displays "Please enter valid card number" message.
TC006	User enters non-numeric data in CVV field	Enter "xyz" in the "CVV" field	Displays "Please enter valid card number" message.
TC007	User enters incomplete card number	Enter "1234" in the "Card Number" field	Displays "Please enter valid card number" message.

TC008	Transaction is successful	Complete all fields correctly	Redirects to Transaction Page with a history of the recorded transaction showing correct time and details.
TC009	Transaction fails due to network issues	Simulate network timeout	Displays "Try again" message for payment.
TC010	Transaction fails due to server issues	Simulate server error	Displays "Try again" message for payment.
TC011	User tries to pay again after already paying	Click "Pay Token Fees" button again	Redirects to a details page stating the token amount has already been paid.
TC012	User enters valid numeric card details	Enter valid card number and CVV	Proceeds to the OTP entry page.
TC013	User skips OTP entry	Leave OTP field empty	Displays error message for missing OTP.
TC014	Payment gateway redirect failure	Simulate Razorpay redirect failure	Displays appropriate failure messages or handles fallback appropriately.

Favourites Page:

- When the user views a property and selects the add to favourites option, it will be added to the Favourites page and displayed in the Favorites section.
- When the user deselects the property, it will be reflected in the favourites option.

Test Case ID	Scenario	Input Data/Action	Expected Output
TC001	User adds a property to Favourites	Click "Add to Favourites" on a property	Property is added to the Favourites page and displayed in the Favourites section.
TC002	User views Favourites after adding a property	Navigate to the Favourites page	The recently added property is displayed in the Favourites section.
TC003	User deselects a property from Favourites	Click "Remove from Favourites" on a favourite	The property is removed from the Favourites page and no longer displayed in the Favourites section.
TC004	User adds multiple properties to Favourites	Click "Add to Favourites" on multiple properties	All selected properties are displayed in the Favourites section on the Favourites page.
TC005	User deselects multiple properties	Deselect multiple properties in the Favourites page	All selected properties are removed from the Favourites section.
TC006	User tries to add the same property twice	Click "Add to Favourites" on the same property twice	The property remains listed only once in the Favourites section (duplicate addition is prevented).
TC007	User accesses Favourites without adding any property	Navigate to the Favourites page without adding any	The Favourites section displays an appropriate message, e.g., "No favourites added yet."

TC008	User adds a property and navigates away	Add a property to Favourites and navigate to another page	The property remains in the Favourites section when returning to the Favourites page.
TC009	User deselects a property and refreshes	Deselect a property from Favourites and refresh the page	The property is no longer displayed in the Favourites section after refresh.
TC010	User deselects all properties	Remove all properties from Favourites	The Favourites page displays an appropriate message, e.g., "No favourites added yet," and the Favourites section is empty.
TC011	User performs rapid toggle actions	Rapidly toggle "Add to Favourites" on/off repeatedly	System handles the toggling efficiently, and the final state reflects the user's last action (either added or removed).

Pending Visitors:

- The seller will see the booked slots and have options like cancel and mark as visited.
- The button should be reflected as visited, canceled as per the option selected.

Test Case ID	Scenario	Input Data/Action	Expected Output
TC001	Seller views booked slots	Navigate to the "Booked Slots" section	All booked slots are displayed with options to "Cancel" or "Mark as Visited."

TC002	Seller cancels a booked slot	Click "Cancel" for a specific booked slot	The status of the slot changes to "Canceled," and it is reflected in the seller's interface and the buyer's booking history.
TC003	Seller marks a booked slot as visited	Click "Mark as Visited" for a specific booked slot	The status of the slot changes to "Visited," and it is reflected in the seller's interface and the buyer's booking history.
TC004	Seller views canceled slots	Navigate to the "Canceled Slots" section	Only slots marked as "Canceled" are displayed.
TC005	Seller views visited slots	Navigate to the "Visited Slots" section	Only slots marked as "Visited" are displayed.
TC006	Seller attempts to cancel a visited slot	Click "Cancel" on a slot already marked as visited	System prevents the action and displays a message like "Action not allowed. Slot already marked as visited."
TC007	Seller attempts to mark a canceled slot as visited	Click "Mark as Visited" on a slot already canceled	System prevents the action and displays a message like "Action not allowed. Slot already been canceled."
TC008	Seller performs rapid status changes	Quickly toggle between "Cancel" and "Mark as Visited"	The final status accurately reflects the seller's last action (either "Canceled" or "Visited") without duplication or inconsistency.
TC009	Seller cancels a slot and buyer refreshes their view	Cancel a booked slot and check buyer's booking view	The slot appears as "Canceled" in the buyer's booking history.

TC010	Seller marks a slot as visited and buyer refreshes their view	Mark a slot as visited and check buyer's booking view	The slot appears as "Visited" in the buyer's booking history.
TC011	Seller cancels all booked slots	Cancel all slots in the "Booked Slots" section	The "Booked Slots" section displays an appropriate message like "No slots booked."
TC012	Seller marks all slots as visited	Mark all slots as visited	The "Booked Slots" section displays an appropriate message like "No slots booked," and the "Visited Slots" section lists all marked slots.
TC013	Seller tries to cancel or mark a non-existent slot	Attempt to take action on a non-existent slot	System prevents the action and displays an error message like "Slot not found or action already performed."

Booked slots:

- The booked slots are shown and the option to cancel is available. If the user cancels the slot, a cancelled message is displayed.
- If the slot is left to be visited, a pending message is shown.
- If the slot is visited it will be reflected.

Test Case ID	Scenario	Input Data/Action	Expected Output
Test Case ID	User views booked slots	Navigate to the "Booked Slots" section	All booked slots are displayed with the current status ("Pending," "Visited," or "Canceled") and a "Cancel" option for pending slots.
Test Case ID	User cancels a slot	Click "Cancel" for a pending slot	The status of the slot changes to "Canceled," and a "Canceled" message is displayed.

Test Case ID	User leaves a slot as pending	Do not perform any action on the slot	The status remains as "Pending," and a "Pending" message is displayed.
Test Case ID	User marks a slot as visited	Slot status is updated automatically after the visit	The status changes to "Visited," and a "Visited" message is displayed.
Test Case ID	User views canceled slots	Navigate to the "Booked Slots" section	Slots marked as "Canceled" are displayed with the appropriate "Canceled" message.
Test Case ID	User views pending slots	Navigate to the "Booked Slots" section	Slots left as pending are displayed with the appropriate "Pending" message.
Test Case ID	User views visited slots	Navigate to the "Booked Slots" section	Slots marked as "Visited" are displayed with the appropriate "Visited" message.
Test Case ID	User cancels multiple slots	Cancel multiple pending slots	Each canceled slot changes status to "Canceled," and the "Canceled" message is displayed for each.
Test Case ID	User cancels a non-pending slot	Attempt to cancel a slot already marked as visited	System prevents the action and displays an error message, e.g., "Cannot cancel. Slot already marked as visited."
Test Case ID	User marks a canceled slot as visited	Attempt to mark a canceled slot as visited	System prevents the action and displays an error message, e.g., "Cannot mark as visited. Slot is canceled."
Test Case ID	User cancels all pending slots	Cancel all slots marked as "Pending"	All slots change status to "Canceled," and "Canceled" messages are displayed for each.
Test Case ID	Slot is left pending beyond the visit date	Do not mark or cancel the slot after the visit date	System automatically updates the status to "Pending Expired" or similar, with a message indicating the slot was not marked or canceled in time.

Test Case ID	User checks system behavior after status updates	Perform various actions (cancel, mark visited, etc.)	The system maintains consistent statuses for all slots, and updates are reflected in real-time across the interface.
---------------------	--	--	--