



GROUP – 28

SYSTEM TESTING Landing , Signup and Login

Testers : Kirtan Chauhan and Ruchir Joshi

Introduction

This document explains the system testing done for the Signup, Login, and Landing Page of the Smart Expense app. We used Black-Box Testing methods such as Equivalence Class Partitioning (ECP) and Boundary Value Analysis (BVA) to check how the system behaves with different types of inputs. Acceptance Testing was also performed to verify real user actions like submitting forms and navigating through the app.

Along with validation testing for Signup and Login, the Landing Page was tested for overall usability, navigation, and support form functionality to ensure a smooth and responsive user experience.

BlackBox Testing - Landing Page

1] Landing Page – System Constraints

- **Support Form:** All fields must be filled; email must be valid; empty form cannot be submitted; after submitting, show success message and close the popup.

- **Theme Switch:** On Clicking the sun/moon icon theme should change from Light to Dark (or vice versa) instantly.
- **Page Display:** Page should open without login; text and images should look correct in both themes.
- **Watch Demo:** Button should play or open a demo video showing how the app works.
- **Create Account Button:** Should open the signup page when clicked.

2] Equivalence Class Partitioning (ECP) – Landing Page

Class	Support Form Fields (Name, Subject, Message)	Email Format	Support Button Click	Expected Result
E1	valid	valid	clicked	Success (form submits + success toast)
E2	invalid (any empty field)	valid	clicked	Error, cannot submit
E3	valid	invalid (wrong format)	clicked	Error, invalid email
E4	— (form not opened yet)	—	clicked	Support popup opens
E5	—	—	not clicked	No action / stays on page

3] Boundary Value Analysis (BVA) – Landing Page


Field	Boundary Value	Expected Result
Name / Subject / Message	Empty	Error shown
Name / Subject / Message	1 character	Accepted

Email	Empty / invalid (abc@)	Error
Email	First valid (a@gmail.com)	Accepted
Submit	All fields valid	Success message & close popup
Theme Toggle	1 click	Switches theme

Acceptance Testing – Landing Page

Test Case 1 – Create Account Button Navigation

- **Action:** User clicks the Create Account button.
- **Expected Output:** The system should navigate to the Signup Page.



Coincious

Start your journey to smarter expense management


Create Account

Sign up to start tracking and splitting expenses


Full Name

Email

Password




Confirm Password



☐ I agree to the [Terms of Service](#) and [Privacy Policy](#)

[Create Account](#)

 [Continue with Google](#)

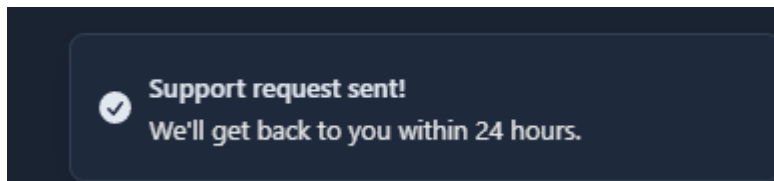
Already have an account? [Sign in](#)

Test Case 2 – Watch Demo Button Functionality

- **Action:** User clicks Watch Demo button.
- **Expected Output:** Demo video should play .

Test Case 3 – Support Form Valid Submission

- **Action:** Enter valid Name, valid Email, Subject, and Message and click Submit.
- **Expected Output:** Form should submit and success message will appear.



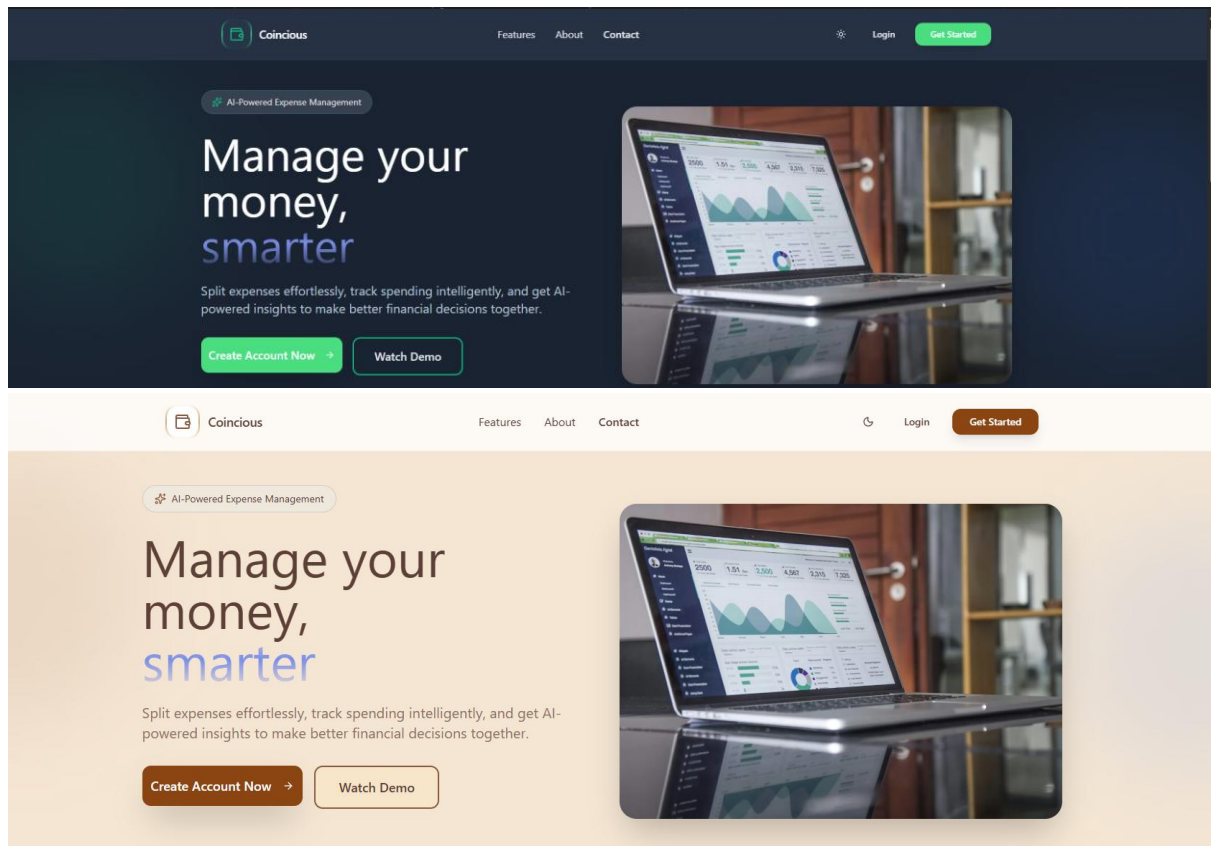
Test Case 4 – Support Form Invalid Submission

- **Input:** Leave one or more fields blank and click Submit.
- **Expected Output:** Error message should display and form **should not submit**.

A dark-themed "Contact Us" form. At the top, there's a green envelope icon and the title "Contact Us". Below it, a subtitle says "Send us a message and we'll get back to you within 24 hours." The form has four main sections: "Name" with a text input field containing "Your full name"; "Email" with a text input field containing "Enter Your Email" and a red error message bubble above it that says "Please fill out this field."; "Subject" with a dropdown menu showing "Select a topic"; and "Message" with a large text area containing "Describe your issue or question in detail...". At the bottom, there are two buttons: a "Cancel" button and a green "Send Message" button with a paper plane icon.

Test Case 5 – Theme Toggle Behaviour

- **Input:** Click the Theme Toggle icon.
- **Expected Output:** Page should switch between Light Mode ↔ Dark Mode immediately.



BlackBox Testing — Signup Page

1. Signup Test

Field Constraints:

Full Name Constraints:

- Cannot be empty.
- Must contain at least one alphabetic character.

Email Constraints:

- Cannot be empty.
- Must follow proper email format ([example@ex.com](#))
- Must not already be registered, new Entries only.

Password Constraints:

- Cannot be empty.
- Must contain at least 8 characters.

- At least one Uppercase letter.
- At least one Numerical value from 0 to 9 .
- Atleast one lowercase letter.
- At least one Special character example: !, @, #

Confirm Password Constraints:

- Must match the above password field exactly.

Terms & Conditions Checkbox Constraint:

- Should be ticked for further process

Equivalence Class Partitioning (ECP)

Equivalence Class	Full Name	Email	Password	Confirm Password	T&C Checkbox	Result
E1	valid	valid	valid (meets all 5 rules)	valid	checked	success
E2	valid	invalid	valid	valid	checked	error
E3	valid	valid	invalid (fails ≥1 rule)	valid	checked	error
E4	valid	valid	valid	invalid	checked	error
E5	valid	valid	valid	valid	unchecked	error
E6	invalid	valid	valid	valid	checked	error
E7	invalid	valid	invalid	valid	checked	error
E8	invalid	invalid	invalid	invalid	unchecked	error

Boundary Value Analysis (BVA)

Full Name	Email	Password	Confirm Password	T&C	Expected	Actual	Reason
John	john@example.com	Ab1@ (4 chars)	Ab1@	✓	fail	fail	Length < 8
John	john@example.com	abcdefgh	abcdefgh	✓	fail	fail	Missing uppercase, number, special
John	john@example.com	Abcdefgh	Abcdefgh	✓	fail	fail	Missing number + special
John	john@example.com	Abcd1234	Abcd1234	✓	fail	fail	Missing special character
John	john@example.com	Abcd@123	Abcd@12	✓	fail	fail	Confirm password mismatch
John	john@example.com	Abcd@123	Abcd@123	✗	fail	fail	T&C not accepted
John	existing@gmail.com	Abcd@123	Abcd@123	✓	fail	fail	Email already registered
John	newuser@gmail.com	Abcd@123	Abcd@123	✓	success	success	Fully valid input

BlackBox Testing — Login Page

1. Login Test

Field Constraints

Email Constraints:

- Cannot be empty.
- Must follow valid email pattern.
- Must be a registered ID.

Password Constraints:

- Cannot be empty.
- Must match the password stored for the given registered email.

Forgot Password Constraints

In the “Reset Password” modal:

Email Constraints (Reset Password):

- Cannot be empty.
- Must follow valid email pattern.
- Must be registered — reset link only worked for registered user

Button Behaviour:

- “Send Reset Email” must trigger an error if:
 - Email invalid
 - Email unregistered
 - Email empty

Equivalence Class Partitioning (ECP)

Equivalence Class	Email	Password	Result
E1	valid	valid	success
E2	invalid	valid	error
E3	valid	invalid	error
E4	invalid	invalid	error
E5	valid but not registered	valid	error
E6	valid	valid but incorrect	error

Forgot Password — Equivalence Class Partitioning (ECP)

Equivalence Class	Email	Result
F1	valid & registered	success
F2	invalid format	error
F3	empty email	error
F4	valid format but not registered	error

Boundary Value Analysis (BVA)

Email	Password	Expected Output	Actual Output	Reason
"" (empty)	Abcd@123	fail	fail	Email cannot be empty
"a@"	Abcd@123	fail	fail	Invalid email format
admin@gmail.com	"" (empty)	fail	fail	Password cannot be empty
user@demo.com	"abc"	fail	fail	Incorrect password
unregistered@gmail.com	Abcd@123	fail	fail	Email not registered
user@demo.com	password	success	success	Valid login with correct credentials

Forgot Password — Boundary Value Analysis (BVA)

Email	Expected Output	Actual Output	Reason
"" (empty)	fail	fail	Email cannot be empty
"a@"	fail	fail	Invalid email format
unregistered@gmail.com	fail	fail	Email not found in database
admin@demo.com	success	success	Valid email — reset link sent

Acceptance Testing — Signup Page

Sign-Up Page

Test 1 — Invalid Email Format

Full Name: John Doe

Email: john@

Password: Abcd@123

Confirm Password: Abcd@123

T&C Checkbox: ✓ Checked

Expected Output: Invalid (Email format error)

Smart Expense

Start your journey to smarter expense management

Create Account
Sign up to start tracking and splitting expenses

Full Name
John Doe

Email
john@

Please enter a part following '@'. 'john@' is incomplete.

Abcd@123

Confirm Password
Abcd@123

☒ I agree to the [Terms of Service](#) and [Privacy Policy](#)

Create Account

Continue with Google

Already have an account? [Sign in](#)

Test 2 — Password constraints not fulfilled.

Full Name: TImepass
Email: you@gmail.com
Password: 1234567
Confirm Password: 1234567
T&C Checkbox: ✓ Checked
Expected Output: Invalid (Password must be ≥ 8 characters)

The screenshot shows a 'Create Account' form for 'Coinious'. The form is titled 'Create Account' and has a subtitle 'Sign up to start tracking and splitting expenses'. It contains the following fields: 'Full Name' (with a person icon), 'Email' (with an envelope icon), 'Password' (with a lock icon and a toggle for visibility), and 'Confirm Password' (with a lock icon and a toggle for visibility). Below the fields is a checkbox for 'I agree to the Terms of Service and Privacy Policy'. There are two buttons: 'Create Account' (green) and 'Continue with Google' (with the Google logo). At the bottom, there is a link 'Already have an account? Sign in'. A small error message at the bottom right states: 'Password must contain at least 8 characters, a lowercase letter, an uppercase letter, a special character'.

Test 3 — Confirm Password Does Not Match

Full Name: Neel Patel
Email: neel.patel@gmail.com
Password: Abcd@123
Confirm Password: Abcd@12
T&C Checkbox: ✓ Checked
Expected Output: Invalid (Passwords do not match)

The screenshot shows a 'Create Account' form for 'Smart Expense'. The form is titled 'Create Account' and has a subtitle 'Sign up to start tracking and splitting expenses'. It contains the following fields: 'Full Name' (with a person icon), 'Email' (with an envelope icon), 'Password' (with a lock icon and a toggle for visibility), and 'Confirm Password' (with a lock icon and a toggle for visibility). Below the fields is a checkbox for 'I agree to the Terms of Service and Privacy Policy'. There are two buttons: 'Create Account' (green) and 'Continue with Google' (with the Google logo). At the bottom, there is a link 'Already have an account? Sign in'. A small error message at the bottom right states: 'Passwords do not match'.

Test 3.1- Toggle button functionality

Full Name: Neel Pa
Email: neel.patel@gmail.com
Password: Abcd@123 toggle button clicked


Confirm Password: Abcd@123toggle button clicked

T&C Checkbox: Checked


Create Account

Sign up to start tracking and splitting expenses



Full Name

 Neel Pa



Email

 neelpatel@gmail.com

Password


 qwertyuiopQ1!

Confirm Password

 qwertyuiopQ1!

☒ I agree to the [Terms of Service](#) and [Privacy Policy](#)

Create Account

 Continue with Google

Already have an account? [Sign in](#)

Test 4 — Terms of service and privacy policy Checkbox Not Selected

Full Name: Neel Patel

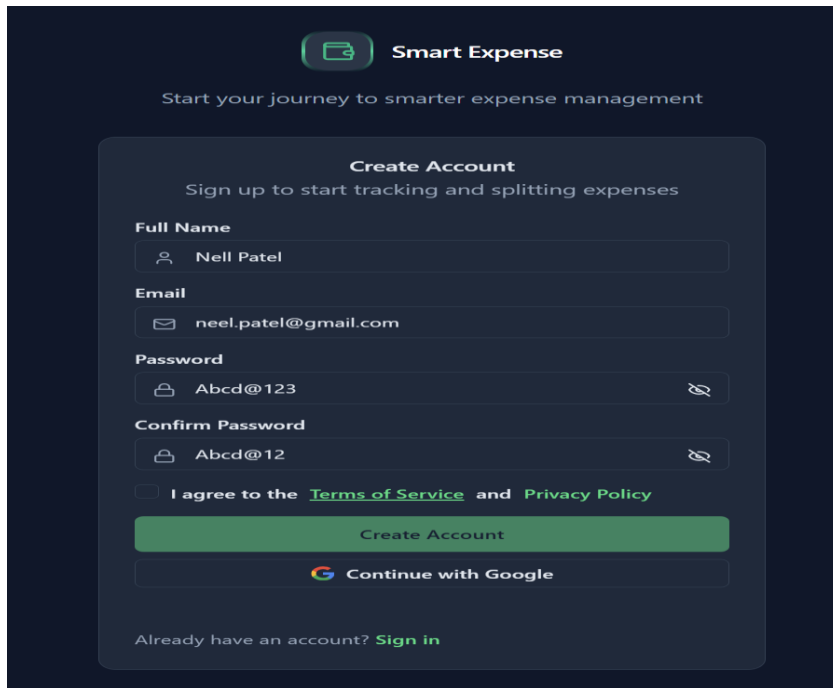
Email: neel.patel@gmail.com

Password: Abcd@123

Confirm Password: Abcd@123

T&C Checkbox: ✗ Not checked

Expected Output: Invalid (User must accept Terms)

A screenshot of a web form titled "Smart Expense" with the subtitle "Start your journey to smarter expense management". The form is for "Create Account" and includes fields for "Full Name" (Nell Patel), "Email" (neel.patel@gmail.com), "Password" (Abcd@123), and "Confirm Password" (Abcd@12). There is a checkbox for "I agree to the Terms of Service and Privacy Policy" which is currently unchecked. Below the form is a "Create Account" button and a "Continue with Google" button. At the bottom, there is a link for "Already have an account? Sign in".

Smart Expense

Start your journey to smarter expense management

Create Account

Sign up to start tracking and splitting expenses

Full Name

Nell Patel

Email

neel.patel@gmail.com

Password

Abcd@123

Confirm Password

Abcd@12

☐ I agree to the [Terms of Service](#) and [Privacy Policy](#)

Create Account

Continue with Google

Already have an account? [Sign in](#)

Create Account Button is not Clickable

Test 5 — Email Already Registered

Full Name: Kirtan

Email: 202301409@dau.ac.in

Password: qwertyuiop

Confirm Password:qwertyuiop

T&C Checkbox: ✓ Checked

Expected Output: Invalid (Email already in use)

The image shows the 'Smart Expense' app registration screen. The header includes the app logo and the text 'Start your journey to smarter expense management'. The main section is titled 'Create Account' with the subtitle 'Sign up to start tracking and splitting expenses'. It contains input fields for 'Full Name' (John Doe), 'Email' (john@example.com), 'Password' (At least 8 characters), and 'Confirm Password' (Confirm your password). There is a checkbox for 'I agree to the Terms of Service and Privacy Policy'. Below these are two buttons: 'Create Account' and 'Continue with Google'. At the bottom left, it says 'Already have an account? Sign in'. A red error message box at the bottom right states: 'Registration failed! Please use admin@gmail.com and password "password"'.

Shows Error signing up , but unclear message.
Message should be User is already registered, try login.

Error solved:

New output:

Will redirect to the login page after this. With proper message popping up

The image shows the 'Smart Expense' app registration screen after a successful registration. The layout is identical to the previous image, but the error message box is gone. A green success message box at the bottom right states: 'The account already exist! Redirecting to login.'.

Test 6 — Email Validation

Full Name: random

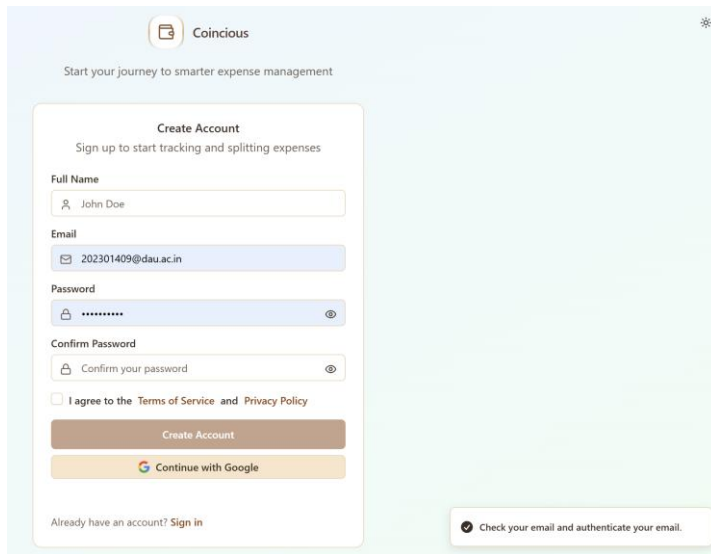
Email: random@gmail.com

Password: qwertyuiopQ1!

Confirm Password:qwertyuiopQ1!

T&C Checkbox: Checked

Expected Output: Feedback informing a Email sent to the Email address indicating registration of account .

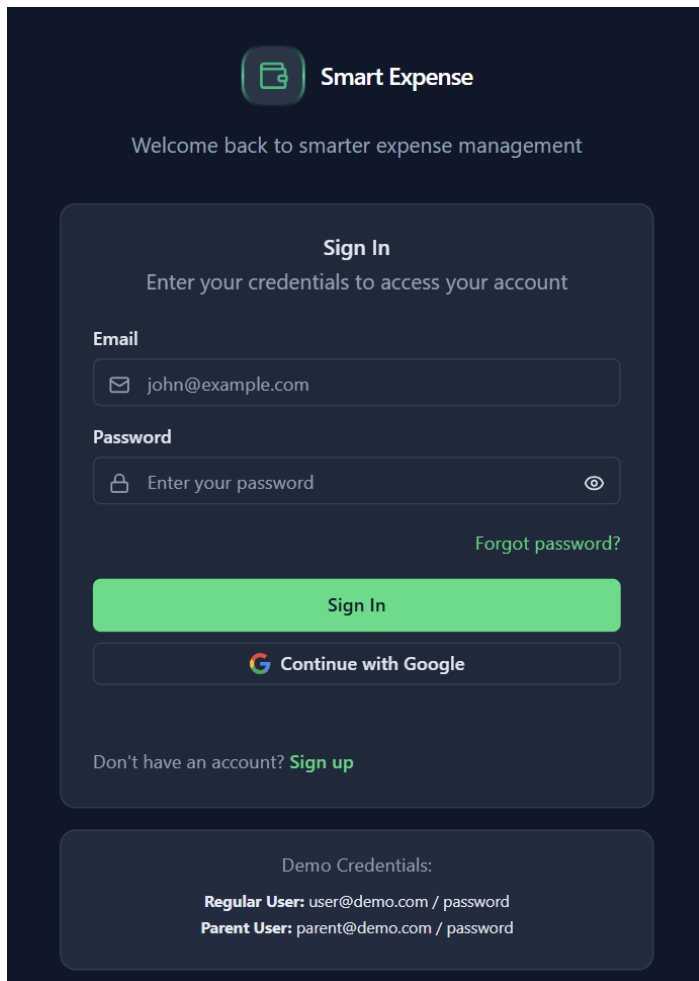


The screenshot shows the 'Create Account' form for 'Coincious'. The form is titled 'Create Account' with a subtitle 'Sign up to start tracking and splitting expenses'. It includes input fields for 'Full Name' (containing 'John Doe'), 'Email' (containing '202301409@dau.ac.in'), 'Password' (masked with dots), and 'Confirm Password' (containing 'Confirm your password'). Below these fields is a checkbox for 'I agree to the Terms of Service and Privacy Policy'. There are two buttons: 'Create Account' and 'Continue with Google'. At the bottom left, there is a link 'Already have an account? Sign in'. At the bottom right, there is a message: 'Check your email and authenticate your email.' The background is a light blue gradient with a subtle pattern.

Test 7 – Redirecting to login page from signup

Action : Click “Sign-in” text

expected output : redirects to login page



The image shows a mobile app login screen for 'Smart Expense'. At the top, there is a logo with a green document icon and the text 'Smart Expense'. Below the logo, a welcome message reads 'Welcome back to smarter expense management'. The main section is titled 'Sign In' and contains the instruction 'Enter your credentials to access your account'. It features two input fields: 'Email' with the placeholder 'john@example.com' and 'Password' with the placeholder 'Enter your password'. A 'Forgot password?' link is located to the right of the password field. Below the inputs are two buttons: a green 'Sign In' button and a 'Continue with Google' button with the Google logo. At the bottom, there is a link 'Don't have an account? Sign up'. A separate box at the very bottom provides 'Demo Credentials' for both a 'Regular User' and a 'Parent User'.

Smart Expense

Welcome back to smarter expense management

Sign In

Enter your credentials to access your account

Email


john@example.com

Password

Enter your password

[Forgot password?](#)

Sign In

 **Continue with Google**

Don't have an account? [Sign up](#)

Demo Credentials:

Regular User: user@demo.com / password

Parent User: parent@demo.com / password

Acceptance Level Testing

Login-In Page

Test 1 — Invalid Email Format

Email: admin@

Password: Abcd@123

Expected Output: Invalid (Invalid email format)

The image shows the 'Smart Expense' sign-in interface. At the top, there's a logo and the text 'Welcome back to smarter expense management'. Below this is a 'Sign In' section with the instruction 'Enter your credentials to access your account'. The 'Email' field contains 'admin@'. A red error message box is displayed below the email field, stating: 'Please enter a part following '@': 'admin@' is incomplete.' The password field is masked with dots. There are buttons for 'Sign In' (in red) and 'Continue with Google'. A link for 'Forgot password?' is also present. At the bottom, there's a 'Sign up' link for users who don't have an account. A 'Demo Credentials' section at the very bottom lists: 'Regular User: user@demo.com / password' and 'Parent User: parent@demo.com / password'.

Test 2 — Empty Password Field

Email: user@demo.com

Password: (*empty*)

Expected Output: Invalid (Password cannot be empty)

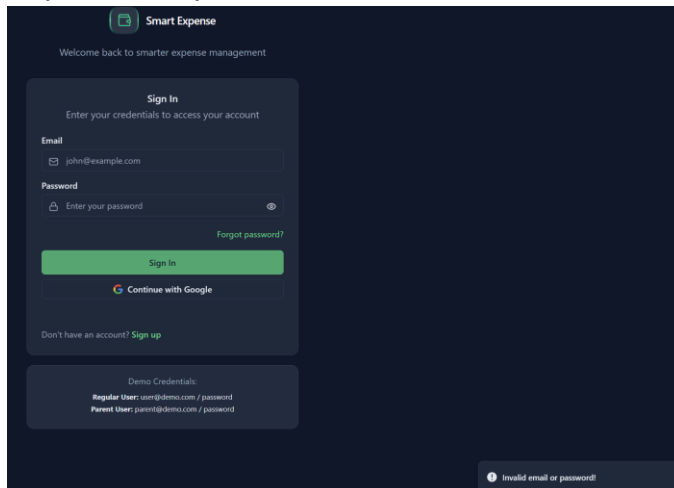
The image shows the 'Smart Expense' sign-in interface. The 'Email' field now contains 'user@demo.com'. The 'Password' field is empty, and a red error message box is displayed below it, stating: 'Please fill in this field.' The 'Sign In' button is in red. The 'Continue with Google' button and 'Forgot password?' link are also visible. The 'Sign up' link is at the bottom. The 'Demo Credentials' section at the bottom lists: 'Regular User: user@demo.com / password' and 'Parent User: parent@demo.com / password'.

Test 3 — Unregistered Email

Email: randomuser999@gmail.com

Password: Abcd@123

Expected output : Invalid Credentials

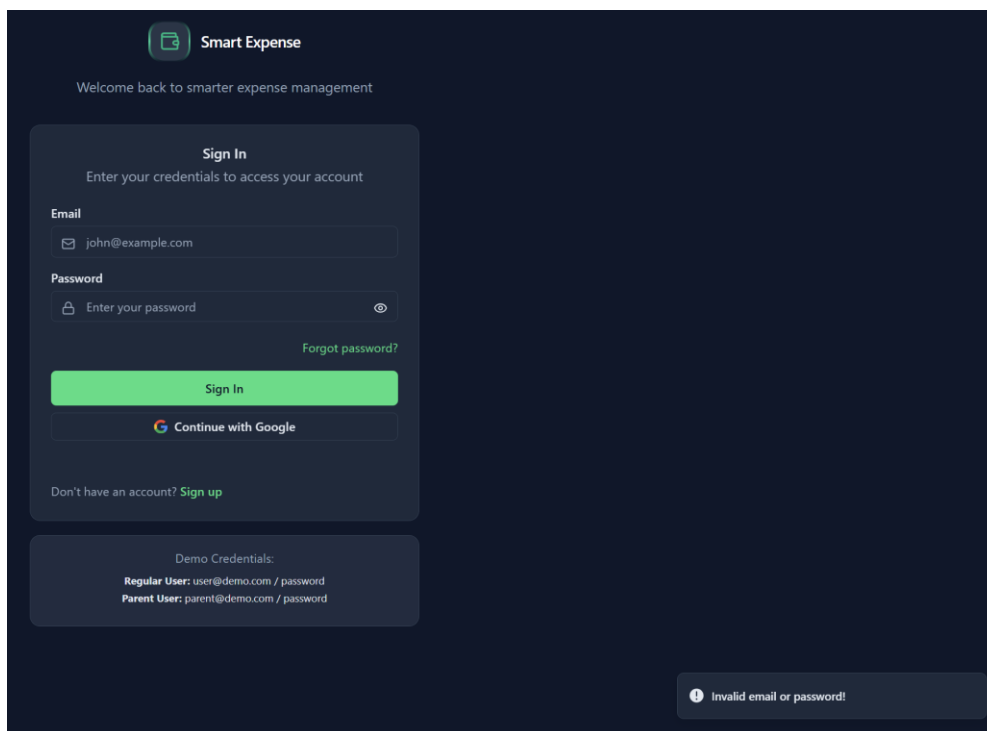


Test 4 — Incorrect Password for Registered Email

Email: user@demo.com

Password: wrongpass

Expected Output: Invalid (Incorrect password)

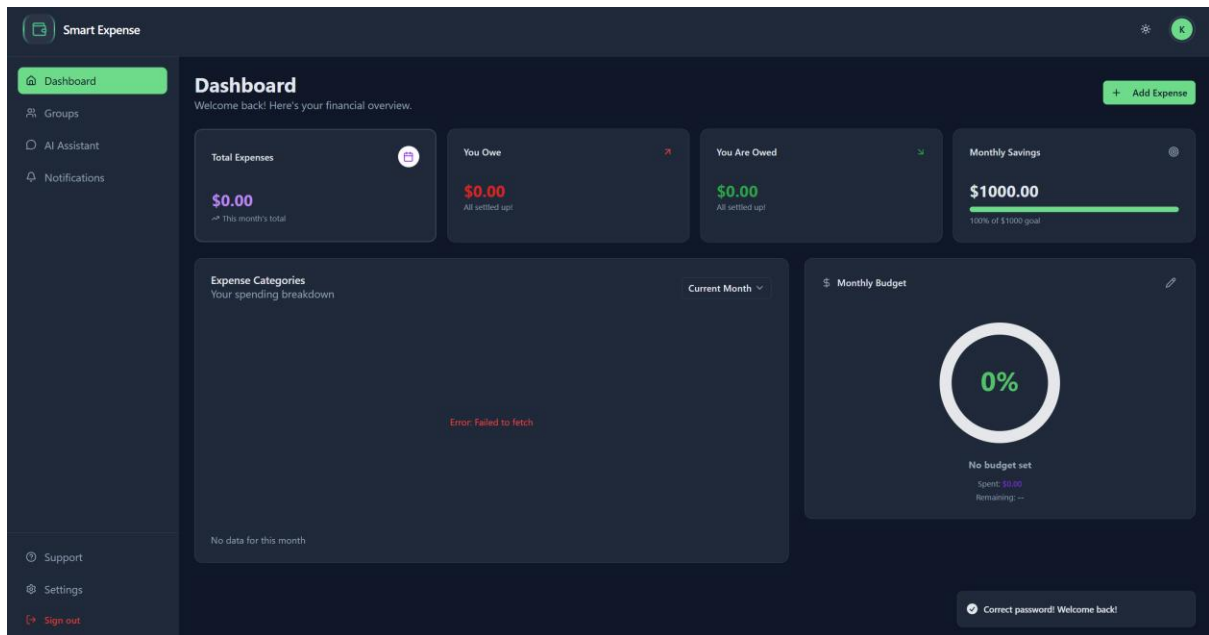


Test 5 — Valid Login Credentials

Email: user@demo.com

Password: password

Expected Output: **Success** (User logged in successfully)

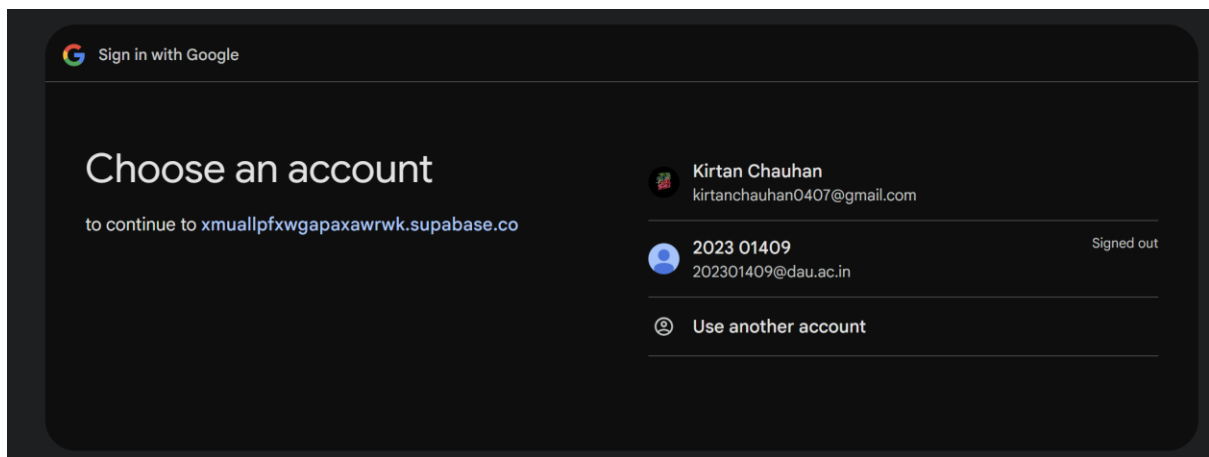


Dashboard shows up with user feedback of correct creds entered .

Test 6 — Google Login Button (UI Acceptance)

Action: Click Continue with Google Button

Expected Output: Google OAuth popup opens



Test 7 – Redirect to Sign-up from login page

Action : Click “Signup” text on login page

Expected output : Redirects to signup page



Smart Expense

Start your journey to smarter expense management

Create Account

Sign up to start tracking and splitting expenses


Full Name

 John Doe

Email

 john@example.com

Password

 At least 8 characters



Confirm Password

 Confirm your password



☐ I agree to the [Terms of Service](#) and [Privacy Policy](#)

Create Account

 Continue with Google

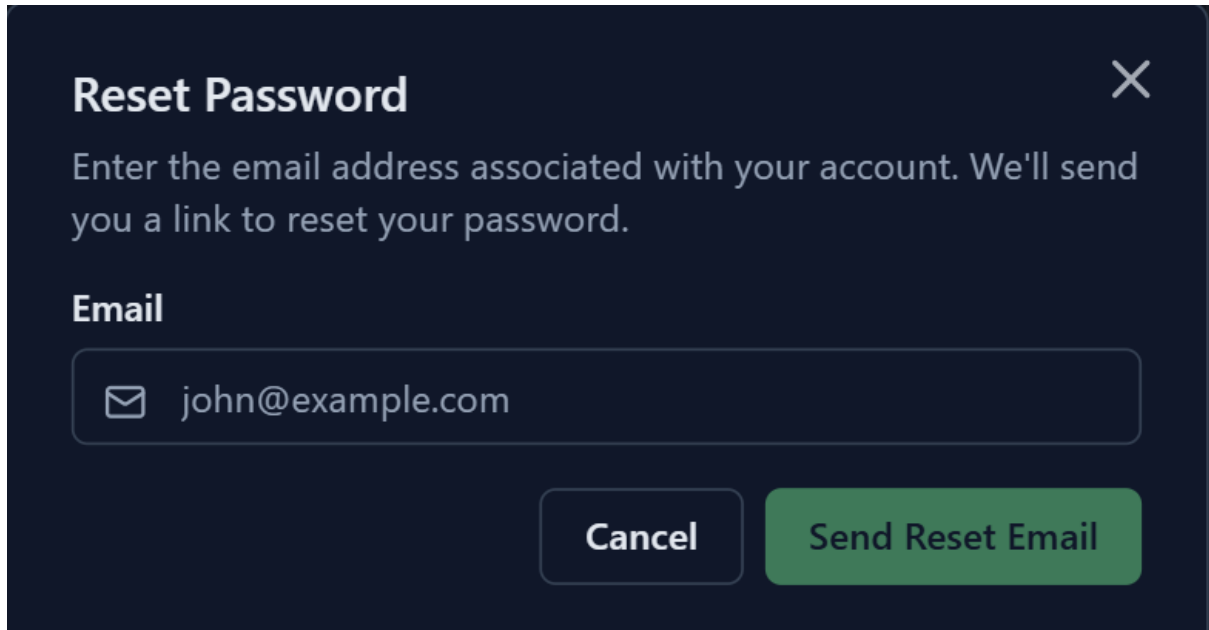
Already have an account? [Sign in](#)

Acceptance Testing — Forgot Password

Test FP-1 — Empty Email Field

Email: Empty

Expected Output: Invalid — Unclickable Button

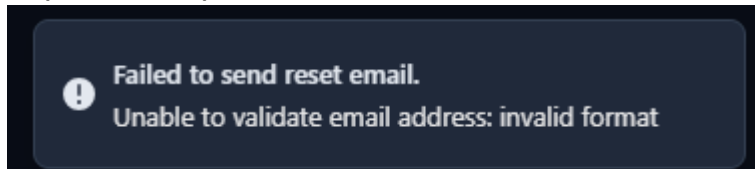


The image shows a 'Reset Password' dialog box with a dark blue background. At the top right is a close button (X). Below the title, there is a text prompt: 'Enter the email address associated with your account. We'll send you a link to reset your password.' Underneath is a label 'Email' followed by a text input field containing 'john@example.com'. At the bottom right are two buttons: 'Cancel' and 'Send Reset Email'. The 'Send Reset Email' button is green, but based on the test description, it is unclickable in this state.

Test FP-2 — Invalid Email Format

Email: john@

Expected Output: Invalid — incorrect email format



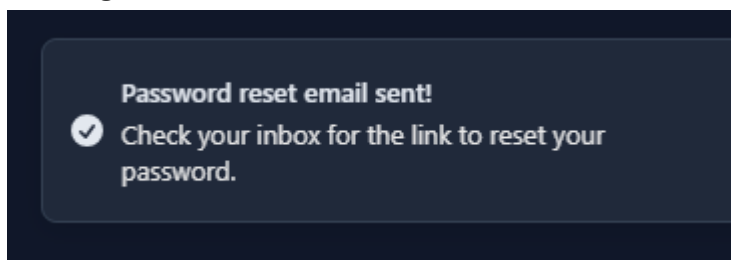
The image shows a dark blue error message box with a white exclamation mark icon. The text inside reads: 'Failed to send reset email. Unable to validate email address: invalid format'.

Test FP-3 — Unregistered Email

Email: notarealuser123@gmail.com

Expected Output: Invalid — account does not exist

Output: if account is invalid link will not be sent anywhere. But it will just show this message.



The image shows a dark blue success message box with a white checkmark icon. The text inside reads: 'Password reset email sent! Check your inbox for the link to reset your password.'

Test FP-4 — Valid Registered Email

Email: joshiruchir35@gmail.com

Expected Output: Success — reset email sent

