



IT314 Software Engineering System Testing

Project: Canteen Automation System

Prepared by
Team No. 31 | Group 6

Group Members

202001023 Vandan Patel 202001409 Kashyap Panchani
202001271 Dhruv Patel 202001415 Pinak Trivedi
202001403 Jaimin Baurasi 202001420 Divya Patel
202001405 Kenil Vaghasiya 202001430 Aryan Shah
202001407 Karan Patel 202001432 Aditya Jadeja
202001465 Jaykumar Navadiya

Under the guidance of
Prof. Khare, Prof. Tiwari and
Teaching Assistant Ankita Ma'am

System Testing:

Test 1: Register method

Description: User is asked to enter profile image, name, email address, password, confirm password and mobile number. Here, the name field must have non-null value, email address should be following length rule applied in test 1, password and confirm password should be following length rule applied in test 1 and both should have same value, mobile number should be numeric value with 10 digit length and profile image must be uploaded.

Accepted name length NL: $NL > 0$

Accepted length of email address EL: [7, 32]

Accepted length of Password PL: [6, 20]

Accepted length of Confirm Password CPL: [6, 20]

Accepted Mobile number M: $999999999 < M < 10000000000$

Profile Image \neq NULL

Password = Confirm Password

Decision Table:

Test Case	T1	T2	T3	T4	T5	T6	T7
-----------	----	----	----	----	----	----	----

Input				
C1: $NL > 0$	T			F
C2: EL: [7, 32]	T		F	-
C3: PL, CPL: [6, 12]	T		F	-
C4: $999999999 < M$	T		F	-

M<1000000000 0							
C5:Profile Image	T		F	-	-	-	-
C6: Pass = Cnf Pass	T	F	-	-	-	-	-
Test Case	T1	T2	T3	T4	T5	T6	T7
Output							
a1: Register and Login	X						
a2: Valid Input, Password don't match		X					
a3: Invalid Input			X	X	X	X	X

Test Cases:

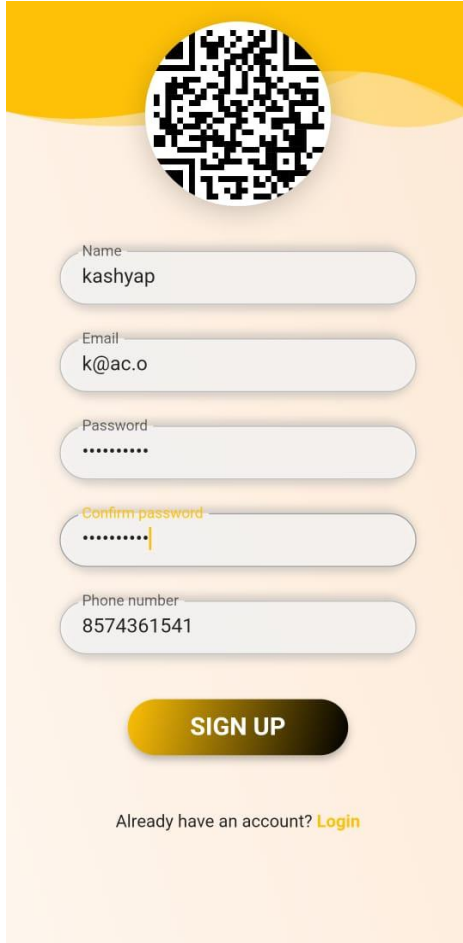
No.	Name	Email	Password	Confirm Passwo	Mobile Number	Profile Image	Expected output	Actual Output	Status
1	Happy Foods	happyfoods@gn	qwerty123	qwerty123	9876543210	Yes	Register and Log	Register and Log	Passed
2	Happy Foods	happyfoods@gn	qwerty123	qwerty	9876543210	Yes	Password Must	Password Must	Passed
3	Happy Foods	happyfoods@gn	qwerty123	qwerty123	9876543210	No	Invalid Input	Invalid Input	Passed
4	Happy Foods	happyfoods@gn	qwerty123	qwerty123	123456	Yes	Invalid Input	Invalid Input	Passed
5	Happy Foods	happyfoods@gn	asdfg	asdfg	9876543210	No	Invalid Input	Invalid Input	Passed
6	Happy Foods	happy	qwerty123	qwerty123	123456	Yes	Invalid Input	Invalid Input	Passed
7		happy	happy	happy	9876543210	No	Invalid Input	Invalid Input	Passed

Screenshots:

(1)

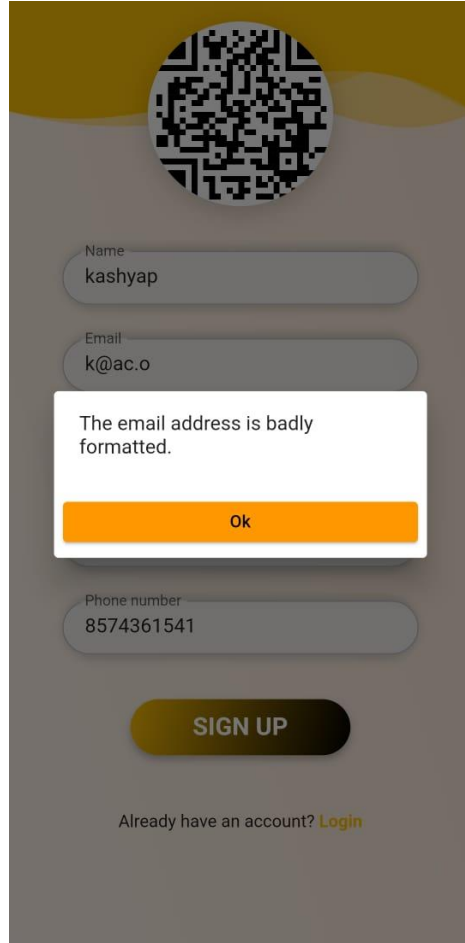
Input:

Email address length is less than 6.



A registration form with a yellow-to-orange gradient background. At the top is a circular QR code. Below it are five input fields: Name (kashyap), Email (k@ac.o), Password (masked with dots), Confirm password (masked with dots), and Phone number (8574361541). A yellow 'SIGN UP' button is at the bottom, with a link 'Already have an account? Login' below it.

Output:

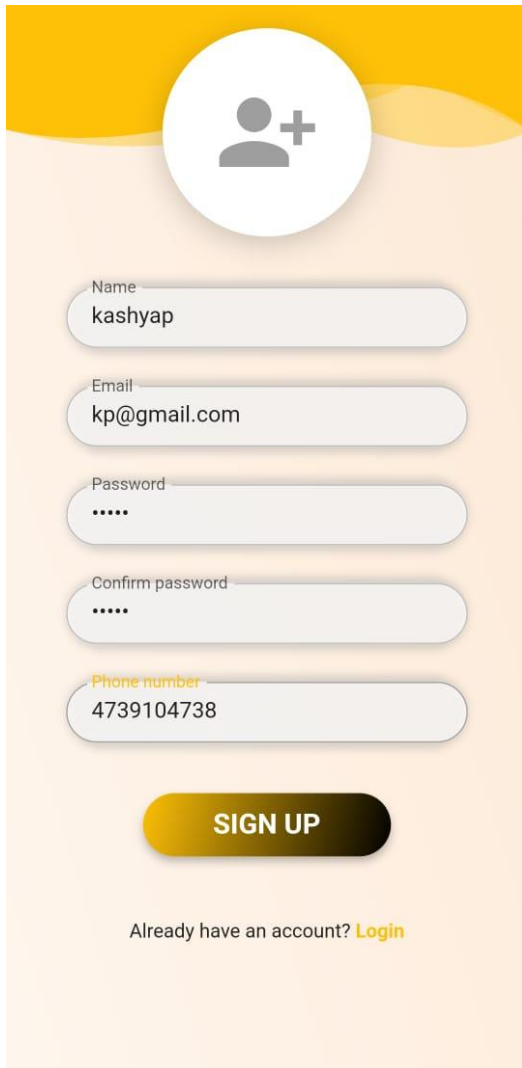


The same registration form as the input screenshot, but with a dark grey background. A white modal dialog box is centered on the screen, displaying the error message 'The email address is badly formatted.' with an 'Ok' button. The input fields and the 'SIGN UP' button are visible in the background.

(2)

Input:

Password length is less than 6.

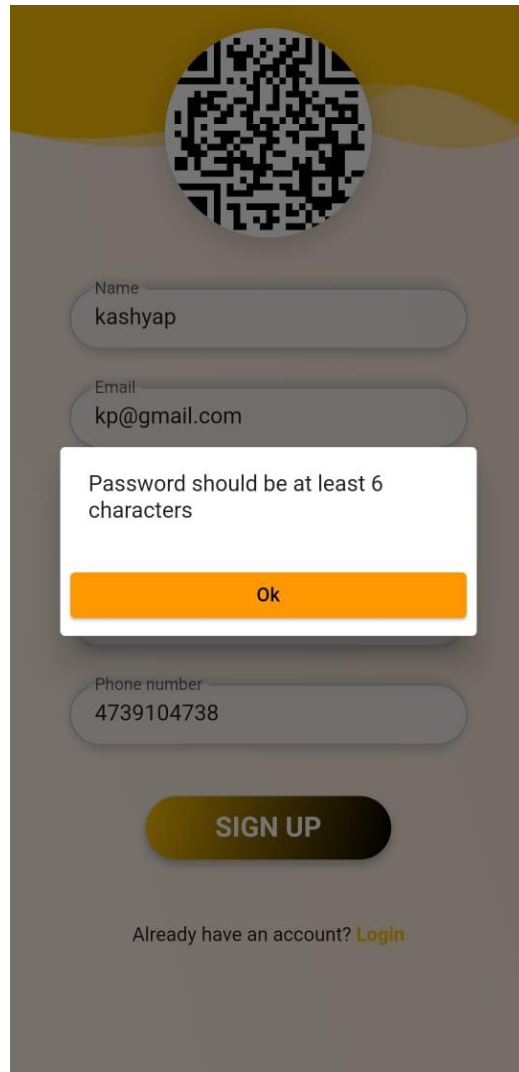


A user registration form with a yellow header and a white circular icon containing a person silhouette and a plus sign. The form fields are as follows:

- Name: kashyap
- Email: kp@gmail.com
- Password: *****
- Confirm password: *****
- Phone number: 4739104738

At the bottom, there is a yellow "SIGN UP" button and a link "Already have an account? [Login](#)".

Output:



A user registration form with a dark header and a circular QR code icon. The form fields are as follows:

- Name: kashyap
- Email: kp@gmail.com
- Password: *****
- Confirm password: *****
- Phone number: 4739104738

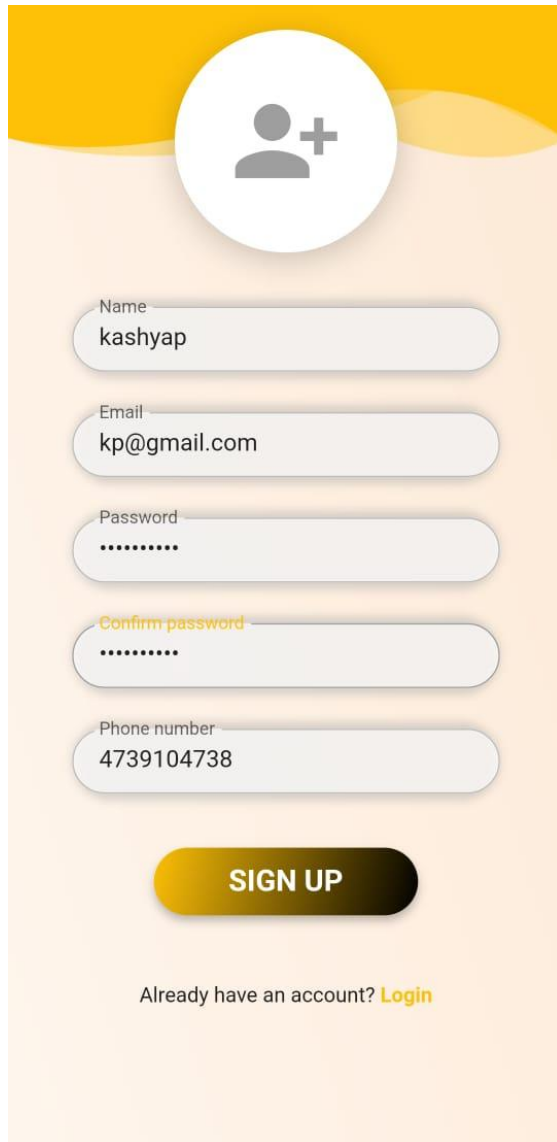
A white error message box is displayed over the password field, containing the text "Password should be at least 6 characters" and an orange "Ok" button.

At the bottom, there is a dark "SIGN UP" button and a link "Already have an account? [Login](#)".

(3)

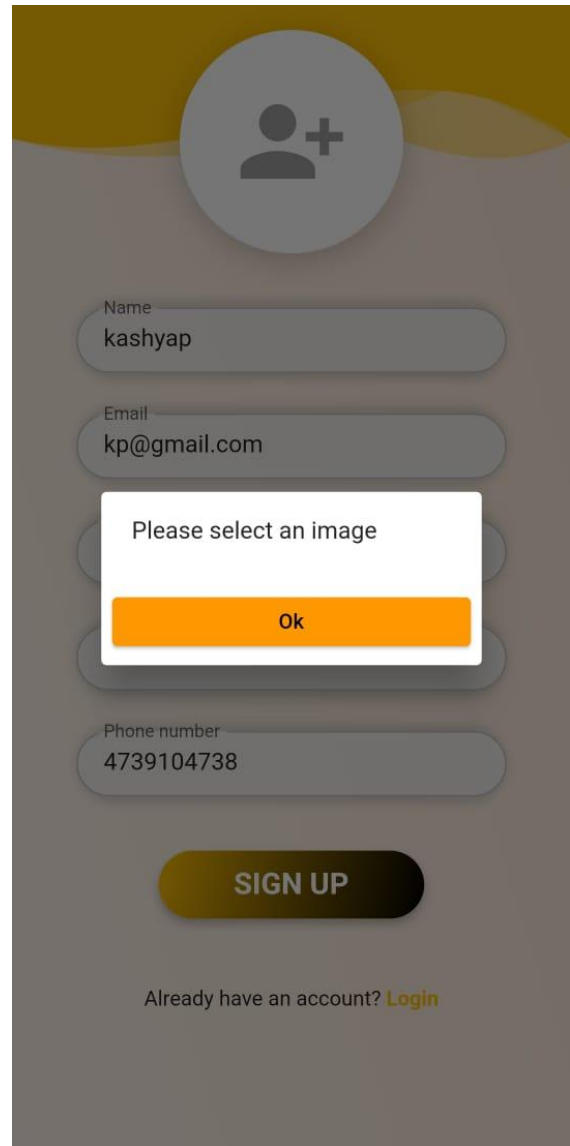
Input:

Image was not selected.



A user registration form with a yellow header and orange background. At the top is a white circular profile picture placeholder with a grey person icon and a plus sign. Below it are five input fields: Name (kashyap), Email (kp@gmail.com), Password (masked with dots), Confirm password (masked with dots), and Phone number (4739104738). A yellow 'SIGN UP' button is at the bottom, and a link 'Already have an account? Login' is below it.

Output:

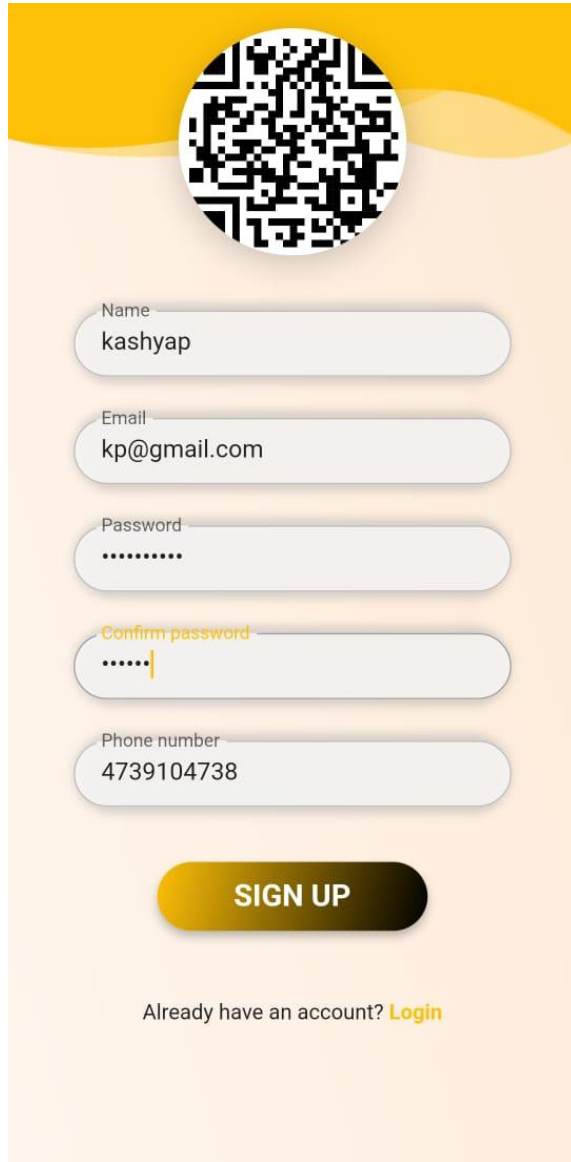


The same user registration form as the input, but with a dark grey header and background. A white modal dialog box is centered over the form with the text 'Please select an image' and an orange 'Ok' button. The form fields and the 'SIGN UP' button are dimmed.

(4)

Input:

Confirm password is not equal to Password.



QR Code

Name
kashyap

Email
kp@gmail.com

Password
.....

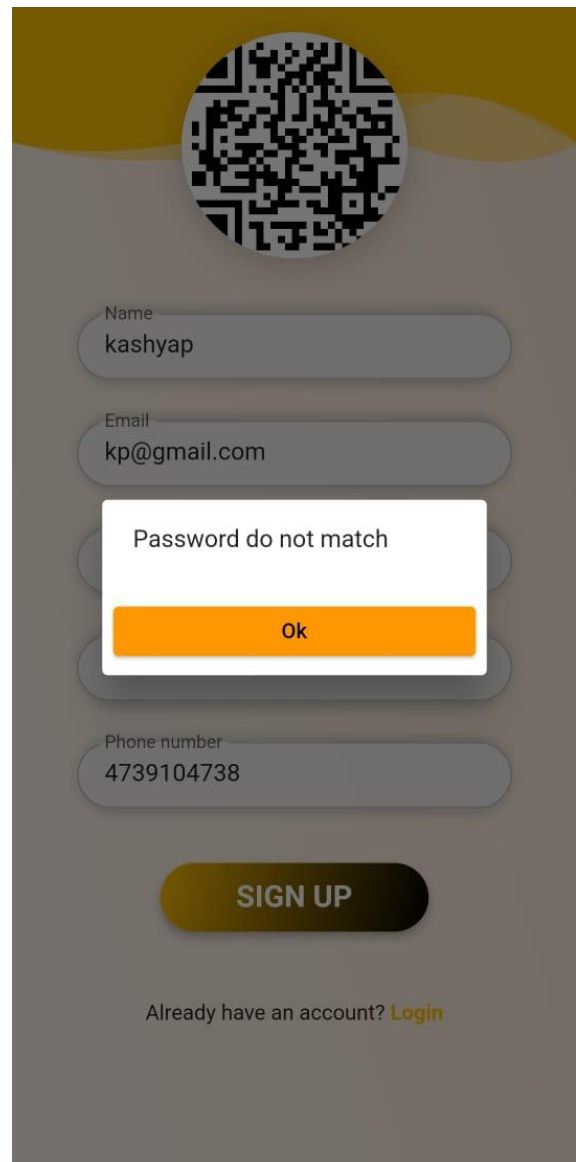
Confirm password
.....|

Phone number
4739104738

SIGN UP

Already have an account? [Login](#)

Output:



QR Code

Name
kashyap

Email
kp@gmail.com

Password do not match

Ok

Phone number
4739104738

SIGN UP

Already have an account? [Login](#)

Test 2: Login Method

Description: Whenever a new device tries to open the app the login method is called. The method requires the user to enter a valid email address which is already registered and its password. The length of the password must be greater or equal to 6 and must not exceed 12. Similarly, the email address' length must be greater or equal to 7 and must not exceed 32. Users will be directed to the home page if a password corresponding to email ID is entered.

Accepted length of email address EL: [7, 32]

Accepted length of Password PL: [6, 20]

Decision Table:

Test Case	T1	T2	T3	T4	T5
Input					
C1: $7 \leq EL \leq 32$	TRUE			FALSE	
C2: $6 \leq PL \leq 12$	TRUE		FALSE	TRUE	FALSE
C3: Match	TRUE	FALSE	-	-	-
Output					
a1: Login Successful	X				
a2: Valid Input, login Failed		X			
a3: Invalid Input			X	X	X

Test Cases:

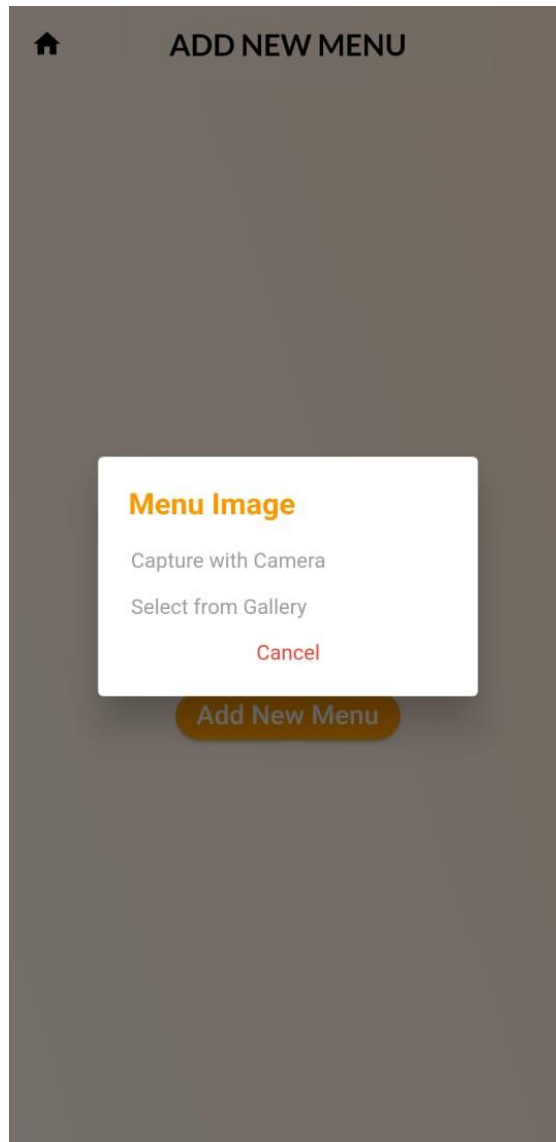
No.	Email ID	Password	Expected Output	Actual Output	Status
T1	shinestar@star.com	shinestar	Login Successful	Login Successful	Passed
T2	shinestar@star.com	1234567	Login Failed	Login Failed	Passed
T3	shinestar@star.com	shi	Invalid Input	Invalid Input	Passed
T4	shine	shinestar	Invalid Input	Invalid Input	Passed
T5	123	123	Invalid Input	Invalid Input	Passed

Test Cases:

No.	Feature Image	Item name	Description	Expected output	Received Output	Status
1	Yes	drinks	xyzz	Item added	Item added	Pass
2	Yes		No name item.	Invalid input	Invalid input	Pass
3	Yes	abcdhfdhdfsdhghg	Greater than 15 length.	Invalid input	Invalid input	Pass
4	Yes	Greater_than_15_	Greater than 15 length.	Invalid input	Invalid input	Pass
5	Yes	a		Invalid input	Invalid input	Pass
6	Yes	drinks	abcdefghijklmnop qrstuvwxyz	Invalid input	Invalid input	Pass
7	Yes	Drinks	abcdefghijklmnop qrstuvwxyz	Invalid input	Invalid input	Pass
8	Yes	abcdefghijklmno	abcdefghijklmnop qrstuvwxyz	Invalid input	Invalid input	Pass
9	No			Invalid input	Invalid input	Pass
10	Yes			Invalid input	Invalid input	Pass

Screenshots:

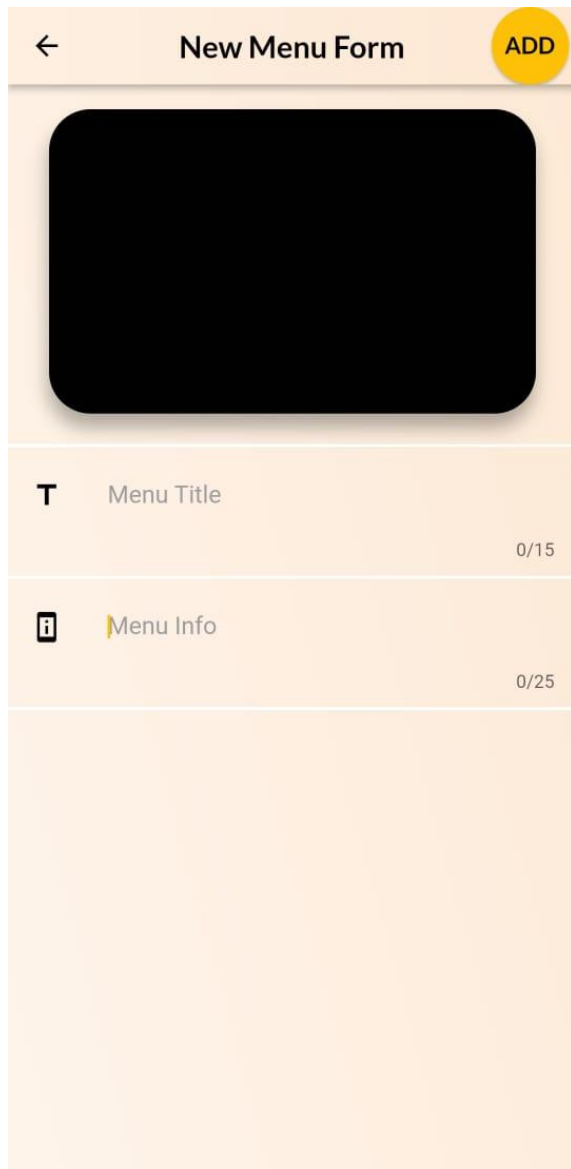
(1) First we have to insert an image.



(2)

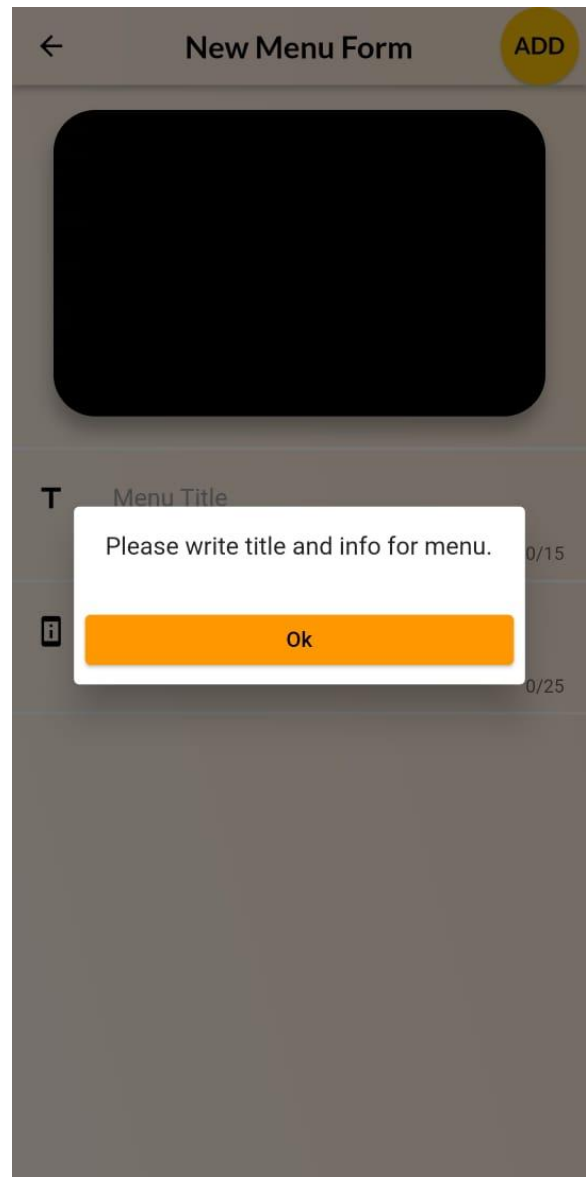
Input:

Empty Menu title and Info.



The image shows a mobile app screen titled "New Menu Form". At the top, there is a back arrow on the left and an "ADD" button on the right. Below the header is a large black rounded rectangle representing a menu item image. Underneath the image are two text input fields. The first field is labeled "Menu Title" with a character count of "0/15". The second field is labeled "Menu Info" with a character count of "0/25". Both fields are currently empty.

Output:



The image shows the same "New Menu Form" screen, but with a validation error. A white dialog box with a black border is centered on the screen. It contains the text "Please write title and info for menu." and an "Ok" button. The background of the screen is dimmed, and the "Menu Title" and "Menu Info" fields are visible behind the dialog box.

(3) We cannot insert more than 15 characters in the Menu title and more than 25 characters in the Menu Info.

The screenshot displays a mobile application interface for creating a new menu. At the top, there is a header bar with a back arrow, the title "New Menu Form", and a yellow "ADD" button. Below the header is a large black rectangular area for an image. Underneath the image are two input fields. The first field is labeled with a "T" icon and contains the text "123456789012345". To its right, a green box highlights the text "15/15". The second field is labeled with an "i" icon and contains the text "1234567890123456789012345". To its right, a green box highlights the text "25/25".

Test 4: Add Item to cart

Description: To add an item to the cart, the user will be asked to select the quantity of the item that he is going to order. The range of the quantity that the user can select is 1 to 9. It means that it can not have a value that is less than or equal to zero or greater than or equal to 10.

Accepted range of the quantity of the Item(QL): $0 < QL < 10$

Decision Table:

Test case	T1	T2	T3	T4	T5	T6	T7
Input							
C1: $0 < QL < 10$	FALSE	TRUE	TRUE	TRUE	FALSE	FALSE	FALSE
Output							
A1: Item added to the cart	✓	✓	✓	✓			
A2: Invalid input	✓				✓	✓	✓

Test case:

No	Quantity of the item	Description	Expected Output	Received Output	Status
1	20	Random value greater than 10	Invalid input	Invalid input	Pass
2	6	Random value in valid range	Item added to the cart	Item added to the cart	Pass
3	1	Left most boundary value of the range	Item added to the cart	Item added to the cart	Pass
4	9	Right most boundary value of the range	Item added to the cart	Item added to the cart	Pass
5	0	Value that is just less than left most boundary	Invalid input	Invalid input	Pass
6	10	Value that is just greater than right most boundary	Invalid input	Invalid input	Pass
7	-50	Negative value	Invalid input	Invalid input	Pass

If we try to add values that are less than 1 it will automatically convert to 1 and if we try to add values that are greater than 9 it will automatically convert to 9, which means that you have to order at least one item or you can order at max 9 items.

Test 5: Add an item to the menu

Description: To add an item to the menu, the canteen owner is asked to add a feature image. No process can be done before adding a feature image. After adding the feature image, the system asks for item name and item description. Both item name and item description fields can't have null values.

Feature Image != NULL

Accepted length of Item Title TL: $0 < TL < 18$

Accepted length of Item info IL: $0 < IL < 35$

Accepted length of Item Description DL: $0 < DL < 200$

Accepted length of Item Price: $0 < PL < 1000$

Decision Table:

Test-case	Input					Output		
	C1: Feature Image != NULL	C2: 0<TL<18	C3: 0<IL<35	C4: 0<DL<200	C5: 0<PL<1000	Item added to the menu	Invalid Input	
T1	Yes	TRUE	TRUE	TRUE	FALSE	✓		
T2	Yes			FALSE	TRUE		✓	
T3	Yes		FALSE	TRUE			✓	
T4	Yes	FALSE	TRUE	TRUE			✓	
T5	Yes	TRUE			FALSE	FALSE		✓
T6	Yes		TRUE	TRUE			✓	
T7	Yes		FALSE	FALSE	FALSE	TRUE		✓
T8	Yes	TRUE					TRUE	
T9	Yes	FALSE		TRUE	FALSE		FALSE	
T10	Yes		TRUE		TRUE			✓
T11	Yes	TRUE	FALSE	FALSE	FALSE			✓
T12	Yes	FALSE	TRUE					✓
T13	Yes		FALSE		FALSE	TRUE		✓

T14	Yes			TRUE	FALSE		✓
T15	No	NULL					✓

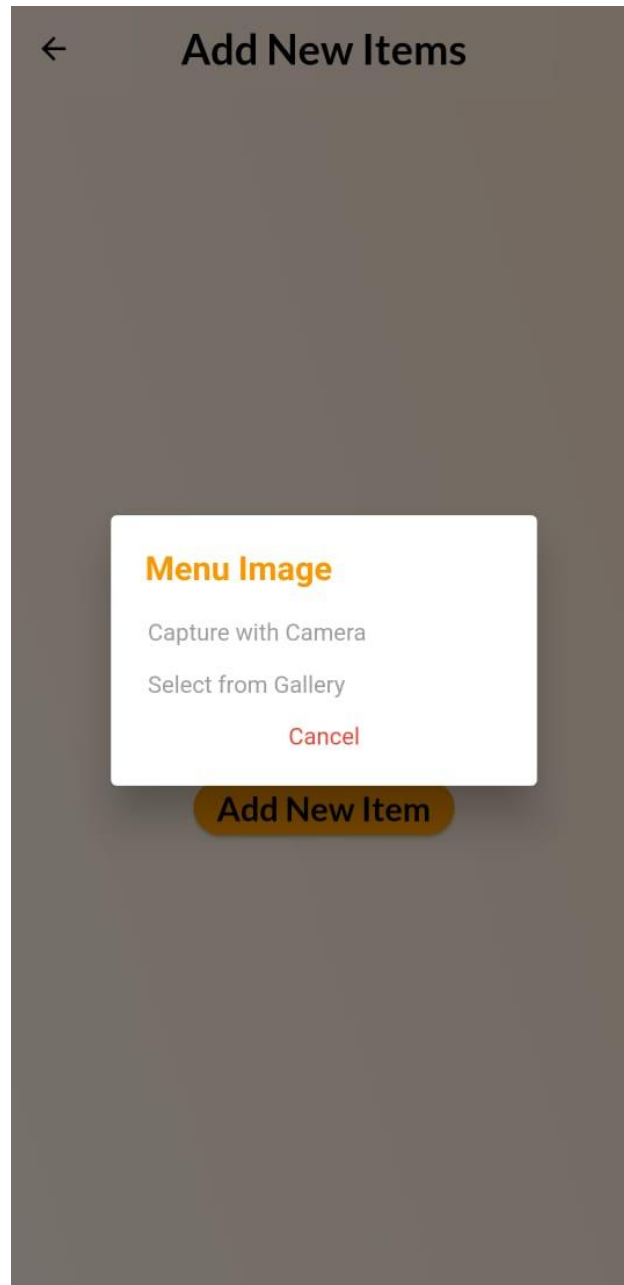
Test case:

No.	Feature Image	Item name	Item Info	Item Description	Item price	Expected output	Received Output	Status
1	Yes	Jalebi	It is very delicious	good in taste	0	Item added	Item added	Pass
2	Yes	Jalebi	No description		10	Invalid input	Invalid input	Pass
3	Yes	Jalebi		No Info	10	Invalid input	Invalid input	Pass
4	Yes		No name	No name	10	Invalid input	Invalid input	Pass
5	Yes	Jalebi	It is very delicious		-1	Invalid input	Invalid input	Pass
6	Yes	Jalebi		No Info and price		Invalid input	Invalid input	Pass
7	Yes	Jalebi			10	Invalid input	Invalid input	Pass
8	Yes	abcdefghijklmn opqrstuvwxyz	abcdefghijklmnopqrst vwxyzabcdefghijkl	Name and Info greater than range	100	Invalid input	Invalid input	Pass
9	Yes	abcdefghijklmn opqrstuvwxyz	Very big name		100	Invalid input	Invalid input	Pass
10	Yes	abcdefghijklmn opqrstuvwxyz	Very big name	Very big name	1000	Invalid input	Invalid input	Pass
11	Yes	Jalebi	abcdefghijklmnopqrst vwxyzabcdefghijkl		0	Invalid input	Invalid input	Pass
12	Yes	abcdefghijklmn opqrstuvwxyz	Very big name		1000	Invalid input	Invalid input	Pass
13	Yes	abcdefghijklmn opqrstuvwxyz	abcdefghijklmnopqrst vwxyzabcdefghijkl	Very big Info and name	-10	Invalid input	Invalid input	Pass
14	Yes	abcdefghijklmn opqrstuvwxyz	abcdefghijklmnopqrst vwxyzabcdefghijkl		10	Invalid input	Invalid input	Pass
15	No	Null	Null	Null	Null	Invalid input	Invalid input	Pass

Screenshots:

(1)

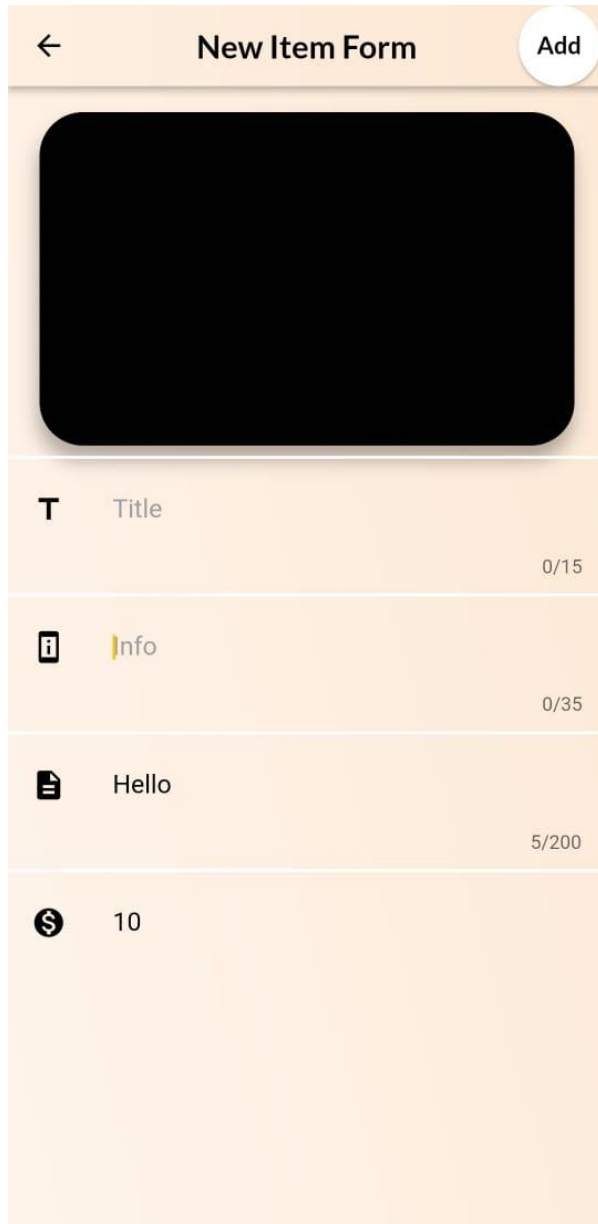
First thing you have to do when adding an item is add an image. No process can be done without adding an image.



(2)

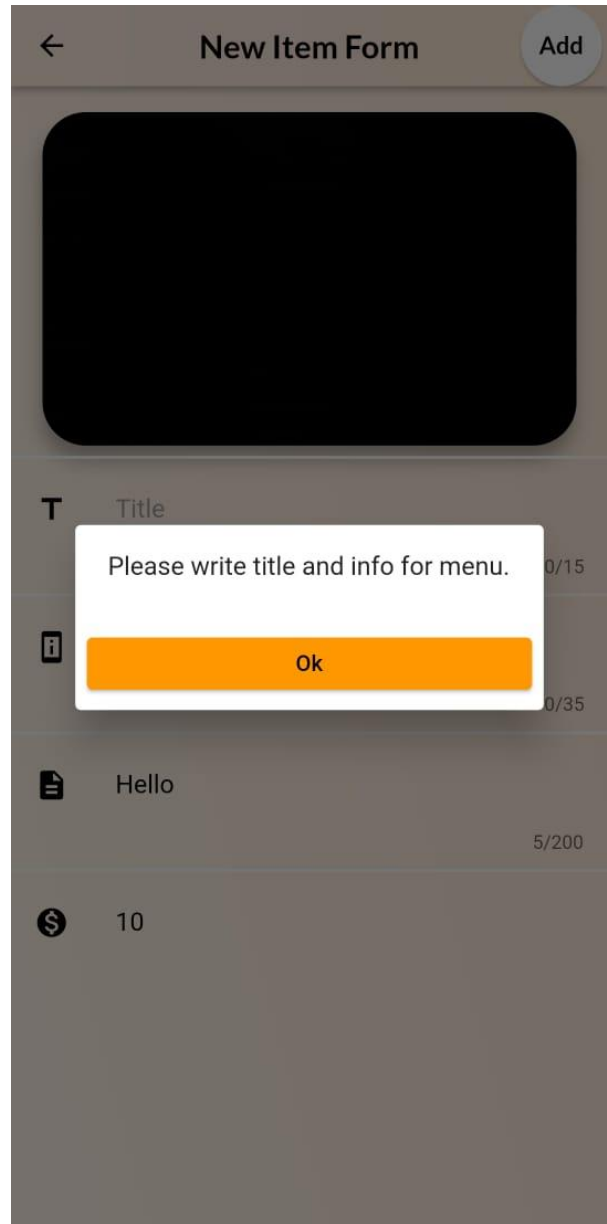
Input:

Empty Title name and Info.



A mobile app interface titled "New Item Form" with a light orange background. At the top left is a back arrow, and at the top right is an "Add" button. Below the header is a large black rounded rectangle representing a missing image. The form contains four input fields: 1. "Title" with a "T" icon and a character count of "0/15". 2. "Info" with an "i" icon and a character count of "0/35". 3. A text field with a document icon, containing the text "Hello", and a character count of "5/200". 4. A price field with a dollar sign icon, containing the value "10".

Output:

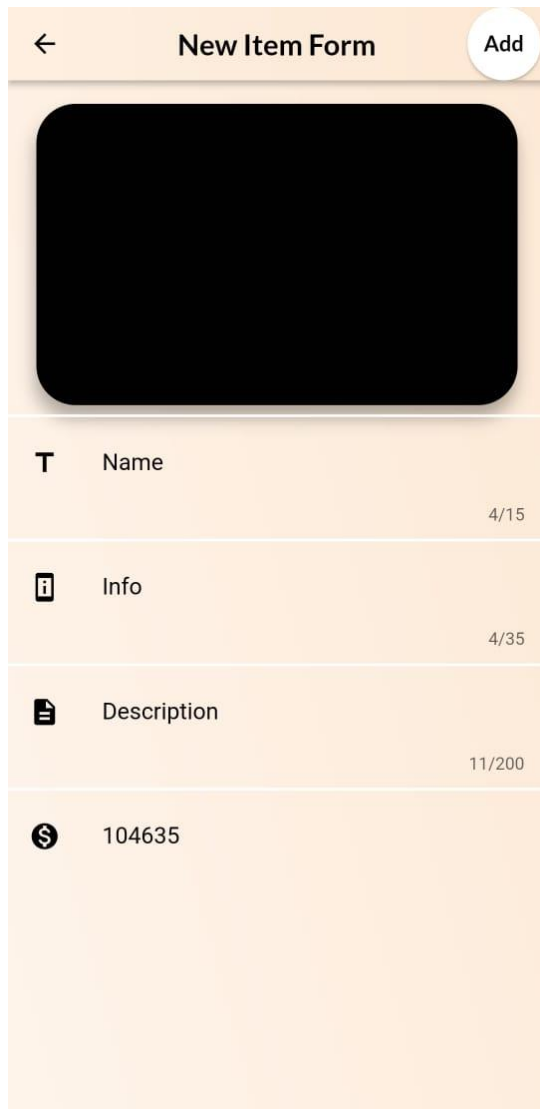


The same "New Item Form" interface as in the input, but with a dark gray background. A white validation dialog box is centered on the screen, displaying the message "Please write title and info for menu." and an orange "Ok" button. The form fields behind the dialog are dimmed.

(3)

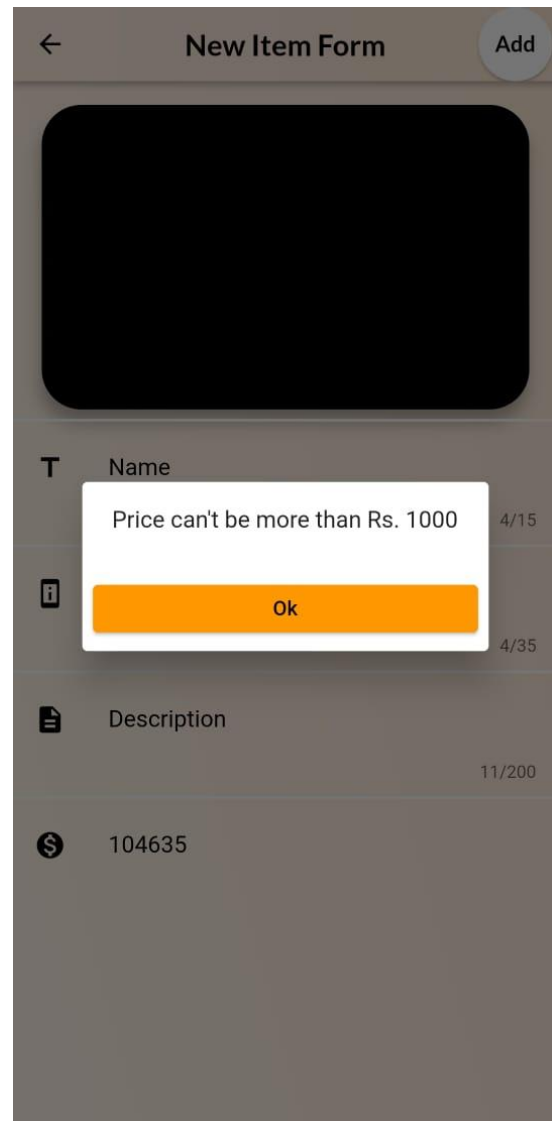
Input:

Price is greater than 1000.



A mobile application form titled "New Item Form" with a light orange background. At the top left is a back arrow, and at the top right is an "Add" button. Below the header is a large black rounded rectangle representing an image. The form contains four input fields: "Name" (text icon, 4/15 characters), "Info" (info icon, 4/35 characters), "Description" (document icon, 11/200 characters), and a price field with a dollar sign icon and the value "104635".

Output:



The same "New Item Form" as in the input state, but with a dark gray background. A white error dialog box is displayed in the center, containing the text "Price can't be more than Rs. 1000" and an "Ok" button. The form fields are dimmed in the background.