

System and Unit Test Report

PhotoOp
Team CIDL
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System Test Scenarios

- A) **User story 1 from Sprint 2:** As a user, I need to be able to sign up for an account or login to my account so I can see my saved favorite locations.
- B) **User story 1 from Sprint 3:** As a user, I need to be able to see my recommended locations in order of closest to farthest from my entered location and be able to see the distance to each location so I can decide which place I would like to go to.
- C) **User story 1 from Sprint 4:** As a user, I need to be able to enter the desired location from which I would like to see recommendations so I can see which locations are closest to that location.
- D) **User story 2 from Sprint 4:** As a user, I need to see a picture and the address of the recommended location I am interested in when I click on it
- E) **User story 3 from Sprint 4:** As a user, I need to be able to save a photo location to my favorites list so I can remember which recommended location I liked.
- F) **User story 4 from Sprint 4:** As a user, I want to be able to filter my recommended locations by type so I can narrow down my search to find the type of location I am looking for

Scenario:

1. Start PhotoOp application; type
 - email = <bobjones@gmail.com>
 - password = <bobby1234>
 - Click on 'Sign Up' button
 - User should now be navigated to Home page and see default address as 1156 High Street
2. Tap on user input box; type
 - Address = <1901 Mission St>
 - User should see a re-sorted list of locations
3. Click on a location: Nearly Lagoon Park 0.5 mi
 - User should see the name Nearly Lagoon Park
 - User should see a picture of Neary Lagoon Park
 - User should see the address of Neary Lagoon Park: 110 California St, Santa Cruz, CA, 95060, United States
 - User should see a button to add this location to their favorites
4. Click on 'Add to Favorites' button
5. Click on the 'Home' button in the top left corner to navigate back to the home screen
 - User should see the same list of ordered locations as earlier
 - User should be able to scroll down to see other possible locations

6. Click on another location: Wilder Ranch State Park 2.3 mi
 - User should see the name 'Wilder Ranch State Park'
 - User should see a picture of Wilder Ranch State Park
 - User should see the address of Wilder Ranch State Park: 1401 Coast Rd, Santa Cruz, CA, 95060, United States
 - User should see a button to add this location to their favorites: 'Add to Favorites'
7. Click on 'Add to Favorites' button
8. Click on the 'Home' button in the top left corner to navigate back to the home screen
 - User should see the same list of ordered locations as earlier
9. Click on the 'Favorites' at the bottom of the screen
 - User should see the two locations they added to their favorites: Neary Lagoon Park and Wilder Ranch State Park
10. Click on a location: Neary Lagoon Park
 - User should see the name Neary Lagoon Park
 - User should see a picture of Neary Lagoon Park
 - User should see the address of Neary Lagoon Park: 110 California St, Santa Cruz, CA, 95060, United States
 - User should see a button to remove this location from their favorites: 'Remove from Favorites'
11. Click on 'Remove from Favorites' button
 - User should now be redirected to the Favorites screen where they will see only favorite location remaining: Wilder Ranch State Park
12. Click on the 'Home' button in the top left corner to navigate back to the home screen
 - User should see the same list of ordered locations as earlier
13. Tap on user input box; type
 - Address = <1011 Pacific Ave>
 - User should see a re-sorted list of locations
14. Using the picker at the bottom of the screen, change the filter type from 'All' to 'Beach'
 - User should see a re-sorted list of locations with only those that satisfy the 'Beach' filter
15. Using the picker at the bottom of the screen, change the filter type from 'Beach' to 'Vista Point'
 - User should see a re-sorted list of locations with only those that satisfy the 'Vista Point' filter
16. Using the picker at the bottom of the screen, change the filter type from 'Vista Point' to 'Hidden Gem'
 - User should see a re-sorted list of locations with only those that satisfy the 'Hidden Gem' filter
17. Using the picker at the bottom of the screen, change the filter type from 'Hidden Gem' to 'All'
 - User should see a re-sorted list of locations with all possible locations displayed
18. Click on the 'Sign Out' button at the bottom of the screen
 - User should be redirected to the Sign Up screen

- A) **User story 1 from Sprint 2:** As a user, I need to be able to sign up for an account or login to my account so I can see my saved favorite locations.

Scenario:

1. Start PhotoOp application
2. Click on 'Login' button; type
 - email = <amandajones@gmail.com> (already existing account)
 - password = <doggyPuppies134>
 - User should now be navigated to Home page and see default address as 1156 High Street
3. Click on 'Favorites' button at the bottom of the screen
 - User should see a list of all their favorite locations: Jogging Track, Mitchell's Cove Beach, Wilder Ranch State Park, and Walton Lighthouse
4. Click on 'Home' button at the top left corner
 - User should see a list of ordered locations
 - User should be able to scroll down to see other possible locations
5. Click on 'Sign Out'
 - User should see the Sign Up screen again

Unit Tests

1. Sign up (Iva)

- a. Equivalence Classes
 - i. Valid email
 - ii. Valid email format
 - iii. Valid password format
- b. Test Cases
 - i. Entered email: csingal@ucsc.edu; Entered password: Timp123
 - 1. Expected output: User is added to list of users in Firebase authentication console and is navigated to their home screen
 - ii. Entered email: ivpetkov@ucsc.edu; Entered password: timp
 - 1. Expected output: Throws the following error: "the given password is invalid"
 - iii. Entered email: csingal@ucsc.edu; Entered password: Timp123
 - 1. Expected output: Throws the following error: "The email address is already in use by another account"
 - iv. Entered email: catandcloud@; Entered password: hahahaha
 - 1. Expected output: Throws the following error: "The email address is badly formatted"

2. Login (Chhavi)

- a. Equivalence Classes
 - i. Registered account
 - ii. Correct password
- b. Test Cases
 - i. Entered (registered) email: dimevada@ucsc.edu; Entered (valid) password: cse115a!
 - 1. Expected output: User is registered on the list of users in Firebase authentication console, app navigates to the home screen
 - ii. Entered (unregistered) email: fake123@gmail.com; Enter random password: blah
 - 1. Expected output: Throws the following error: "There is no user record corresponding to this identifier. The user may have been deleted."
 - iii. Entered (registered) email: dimevada@ucsc.edu; Entered (invalid) password: cse115b!
 - 1. Expected output: Throws the following error: "The password is invalid or the user does not have a password"

3. List of ordered locations (Disha)

- a. Equivalence Classes
 - i. List of location buttons is displayed
 - ii. Buttons are ordered based on distance from default address - 1156 High St

b. Test Cases

i. Navigate to home screen

1. Expected output: List of all possible recommended locations is visible in a scrollable component
2. Expected output: Each button contains the name of the location and distance from default address and is sorted in increasing order

4. User inputted address (Leah)

a. Equivalence Classes

- i. Valid address format
- ii. Buttons are ordered based on distance from inputted address

b. Test Cases

i. Entered address: 1011 Pacific Ave

1. Expected output: Locations are reloaded and resorted based on input address

ii. Entered address: 5365 Alton Pkwy (this is in Irvine, CA)

1. Expected output: Locations are reloaded and resorted, but locations are specific to Santa Cruz and are not helpful for the inputted address

5. Search filter (Iva)

a. Equivalence Classes

- i. Returns the right filtered locations for each type of filter (All, Beach, Vista Point, Hidden Gem)

b. Test Cases

i. Search filter chosen: All

1. Expected output: Displays all of the locations, regardless of category (22)

ii. Search filter chosen: Beach

1. Expected output: Displays all of the beach locations (4)

iii. Search filter chosen: Vista Point

1. Expected output: Displays all of the Vista Point locations (4)

iv. Search filter chosen: Hidden Gems

1. Expected output: Displays all of the Hidden Gem locations (6)

6. Sign out (Chhavi)

a. Equivalence Classes

- i. User signed out of application

b. Test Cases

i. User clicks sign out button

1. Expected output: User is signed out and redirected to Sign Up screen

7. Location description page (Disha)

a. Equivalence Classes

- i. Displays the correct name

- ii. Displays the correct photo
 - iii. Displays the correct address
 - iv. Displays the Add to Favorites button
- b. Test Cases
 - i. For every location, we clicked on the button to go to the Details page and checked for all four components.
 - 1. Expected output: Details page includes the proper name, photo, address, and the Add to Favorites button

8. Add to favorites (Leah)

- a. Equivalence Classes
 - i. Place is added to favorites list
- b. Test Cases
 - i. On the home screen, click on a photo location. Then, click on the “add to favorites” button
 - 1. Expected output: When you navigate to the Favorites screen, the recently added location is displayed
 - 2. Expected output: The name, address, and photo reference of the location has been added to the Firebase database for that specific user

9. Favorites page (Iva)

- a. Equivalence Classes
 - i. All locations that were added to Favorites are present
 - ii. Navigates to the location’s page when clicked in the Favorites list
 - iii. Details page shown has a “Remove From Favorites” button
- b. Test Cases
 - i. Add a couple locations to Favorites by clicking on the “Add to Favorites” button on their Details page, then go to the Favorites list and check to make sure they are there
 - 1. Expected output: The added locations should show in a list in order of when they were added on the Favorites page
 - ii. Click on a location and make sure the details page for that location shows
 - 1. Expected output: After clicking the button for the location, app navigates to that location’s details page
 - iii. On the details page for a location from Favorites, make sure the Remove From Favorites button is present
 - 1. Expected output: The Remove from Favorites button is present at the bottom of the details page.

10. Favorites location description page (Chhavi)

- a. Equivalence Classes
 - i. Displays the correct name
 - ii. Displays the correct photo
 - iii. Displays the correct address
 - iv. Displays the Remove from Favorites button

b. Test Cases

- i. For every location in Favorites, we clicked on the button to go to the page and checked for all four components.
 - 1. Expected output: Details page includes the proper name, photo, address, and the Remove from Favorites button

11. Remove from favorites (Disha)

a. Equivalence Classes

- i. Place is removed from Favorites list

b. Test Cases

- i. On the Favorites screen, click on a photo location. Then, click on the “remove from favorites” button
 - 1. Expected output: When you navigate back to the Favorites screen, the recently removed location is no longer there
 - 2. Expected output: The name, address, and photo reference of the location has been removed from the Firebase database for that specific user