

Testing

SENG 401 - L01

Group: 18
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GLOW

[Site Link](#)

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Passed	49
Failed	0
Blocked	3
Not Executed	0

Testing Development

We have implemented system testing to test the critical parts of the system. We decided to begin with testing the functional requirements using scripted testing. Using the RTM, we developed test cases for the basic user functions and created the corresponding scripts. Using these scripts, the tester would be able to interact with the system to ensure proper functionality. We first covered common paths for registered users and guest users to ensure we tested the highest interacted scenarios a user would encounter. This included navigating between pages, using the generator with different inputs, logging into the system and more. We also made sure to include error cases for user authentication and registration to ensure our system would properly handle user errors such as missing or mismatched credentials. The testing of non functional tests have been tested using scripted testing as well. We focused specifically on UI/UX, performance, and Security components. For design, we made sure that the quality of the project on multiple devices, including phones, laptops and tablets. We tested this using the inspect function on the browser making sure text is legible, spacing is adequate and the general visuals of the page remain unchanged. For the performance components we were testing the speed of the application to load initially and the time it takes to generate a new routine. Performance testing was compounded with load testing as well, connecting multiple users at the same time, all interacting with the page and generating routines, in order to evaluate whether or not the reliability of the application or its speed decreased.

Functional Requirements - Registered User

Test Case ID	Use Case	Function Being Tested	Initial System State	Input	Expected Outputs	Actual Outputs	Status
T-001	Navigation	Home Page Navigation	New web browser.	Navigate to home page.	Home page loads.	Home page loads.	Passed
T-002	Navigation	Login Page Navigation	User not logged in and on home page.	Select "Get Started" button.	Login page loads.	Login page loads.	Passed
T-003	Navigation	Sign-Up Navigation	User not logged in and on login page.	Select "Sign-up here" button.	Sign-up page loads.	Sign-up page loads.	Passed

T-004	User Authentication	Failed Registration	User not logged in and on sign-up page.	Input username that is already in the database and password.	Registration fails.	Registration fails. "Username already taken." message appears.	Passed
T-005	User Authentication	User Registration	User not logged in and on sign-up page.	Valid username and password.	Successful registration, user redirected to skin care generator page and logged in.	Successful registration, user redirected to skin care generator page and logged in.	Passed
T-006	User Authentication	Failed Login	User not logged in and navigated to login page.	Invalid username and password combination.	Failed login attempt.	Failed login attempt. "Invalid credentials!" message appears.	Passed
T-007	User Authentication	Login	User not logged in and navigated to login page.	Valid username and password.	Successful login and user redirected to skin care generator page.	Successful login and user redirected to skin care generator page.	Passed
T-008	Routine Criteria	Time Preferences Selection	User logged in and on skin care generator page.	Select time preference then select "Create Routine" button.	Routine generated for selected time preference.	Night routine selected and night routine generated.	Passed
T-009	Routine Criteria	Skin Type Selection	User logged in and on skin care generator page.	Select skin type then select "Create Routine" button.	Routine generated for selected skin type.	Input dry skin and routine for dry skin generated.	Passed
T-010	Routine Criteria	Skin Condition Selection	User logged in and on skin care generator page.	Select skin conditions then select "Create Routine" button.	Routine generated for selected skin conditions.	Input acne and routine for acne generated.	Passed
T-011	Routine Criteria	Allergies Selection	User logged in and on skin care generator page.	Select allergies then select "Create Routine" button.	Routine generated excluding products related to selected allergies.	Fragrance allergy input and fragrance free routine generated.	Passed
T-012	Routine Criteria	Skin Concerns Input	User logged in and on skin care generator page.	Select skin concerns then select "Create Routine" button.	Routine generated for selected skin concerns.	Puffy eyes selected and routine generated for puffy eyes.	Passed

T-013	Product Criteria	Ingredient Product Preferences (alcohol-free, fragrance-free, etc.)	User logged in and on skin care generator page.	Select ingredient preferences then select "Create Routine" button.	Routine generated with ingredient preferences.	Alcohol-free selected and routine generated without alcohol.	Passed
T-014	Product Criteria	Ethical Product Preferences (vegan, cruelty-free, etc.)	User logged in and on skin care generator page.	Select ethical preferences then select "Create Routine" button.	Routine generated with ethical preferences.	Vegan selected and vegan routine generated.	Passed
T-015	Product Criteria	Budget Selection	User logged in and on skin care generator page.	Select "low" budget then select "Create Routine" button.	Routine generated with products of lower price than medium and high budgets.	Step 1: \$16.99 Step 2: \$19.99 Step 3: \$12.99	Passed
T-016	Product Criteria	Budget Selection	User logged in and on skin care generator page.	Select "medium" budget then select "Create Routine" button.	Routine generated with products priced higher than low budget and lower than high budget.	Step 1: \$16.99 Step 2: \$25.00 Step 3: \$21.99 Step 4: \$39.009	Passed
T-017	Product Criteria	Budget Selection	User logged in and on skin care generator page.	Select "high" budget then select "Create Routine" button.	Routine generated with products of higher price than low and medium budgets.	Step 1: \$17.99 Step 2: \$182.00 Step 3: \$39.00	Passed
T-018	Product Criteria	Price Range Selection (min, max)	User logged in and on skin care generator page.	Input min and max price then select "Create Routine" button.	Routine generated within price range.	\$20-\$40 range input. Routine generated within range.	Passed
T-019	Smart Recommendations	Product Recommendation Based on User Inputs	User logged in and on skin care generator page.	Select routine and product criteria and select "Create Routine" button.	Routine generated with all routine and product criteria.	Routine generated that accounts for all inputs by user.	Passed
T-020	Recommendation Explanation	Explanation of Product Suggestions	User logged in.	Navigate to saved routines.	Saved routines display explanation of product suggestions.	N/A	Blocked
T-021	Product Visualization	Displaying Product Images with Recommendations	User logged in.	Navigate to saved routines.	Saved routines displays images of suggested products.	N/A	Blocked

T-022	Data Persistence	Form Data Persistence	User logged in and on skin care generator page.	Navigate to another page then return to skin care generator page.	Last input routine and product criteria autopopulated.	N/A	Blocked
T-023	Routine Storage	Recommended Routine Saved	User logged in, on skin care generator page, and routine generated.	Select "Save Routine" button.	Routine saved successfully message appears.	"Routine saved successfully!" message appears.	Passed
T-024	Navigation	Saved Routine Page	User logged in and on skin care generator page.	Select profile icon in header.	Saved routine page loads with previously saved routines.	Saved routine page loads with previously saved routines.	Passed
T-025	Navigation	Logout	User logged in.	Select "Sign Out" button.	Successful logout and redirected to home page.	Successful logout and redirected to home page.	Passed

Functional Requirements - Guest

Test Case ID	Use Case	Function Being Tested	Initial System State	Input	Expected Outputs	Actual Outputs	Status
T-026	Navigation	Skin Care Generator Navigation	User not logged in and on login page.	Select "Continue as Guest" button.	Skin Care Generator page loads.	Guest user is succesfully taken to the generator page, navigation bar without user icon.	Passed
T-027	Navigation	Skin Care Generator Navigation	User not logged in and on signup page.	Select "Continue as Guest" button.	Skin Care Generator page loads.	Skin Care Generator page loaded successfully.	Passed
T-028	Routine Criteria	Time Preferences Selection	User logged out and on skin care generator page.	Select time preference then select "Create Routine" button.	Routine generated for selected time preference.	Routines created succesfully, for single day routine, single night routine and mixed routine for guest user.	Passed
T-029	Routine Criteria	Skin Type Selection	User logged out and on skin care generator page.	Select skin type then select "Create Routine" button.	Routine generated for selected skin type.	Input oily skin and routine for oily skin generated.	Passed

T-030	Routine Criteria	Skin Condition Selection	User logged out and on skin care generator page.	Select skin conditions then select "Create Routine" button.	Routine generated for selected skin conditions.	A routine for Eczema skin concerns was prompted, and the produced routine meets this concern.	Passed
T-031	Routine Criteria	Allergies Selection	User logged out and on skin care generator page.	Select allergies then select "Create Routine" button.	Routine generated excluding products related to selected allergies.	A vaseline (petrolatum) free routine was prompted, and only vaseline free products were returned in the proposed routine.	Passed
T-032	Routine Criteria	Skin Concerns Input	User logged out and on skin care generator page.	Select skin concerns then select "Create Routine" button.	Routine generated for selected skin concerns.	A routine for sun-damage and acne was prompted, and all the products in the returned routine match this need.	Passed
T-033	Product Criteria	Ingredient Product Preferences (alcohol-free, fragrance-free, etc.)	User logged out and on skin care generator page.	Select ingredient preferences then select "Create Routine" button.	Routine generated with ingredient preferences.	A non-alcoholic preference was prompted, and only alcohol free products were returned in the proposed routine.	Passed
T-034	Product Criteria	Ethical Product Preferences (vegan, cruelty-free, etc.)	User logged out and on skin care generator page.	Select ethical preferences then select "Create Routine" button.	Routine generated with ethical preferences.	A vegan based preference was prompted, and only vegan products were returned in the proposed routine.	Passed
T-035	Product Criteria	Budget Selection	User logged out and on skin care generator page.	Select "low" budget then select "Create Routine" button.	Routine generated with products of lower price than medium and high budgets.	Product1 : \$16.00 Product 2: \$10.00 Product 3: \$6.00 Product 4: \$12.00 Product 5: \$12.00	Passed
T-036	Product Criteria	Budget Selection	User logged out and on skin care generator page.	Select "medium" budget then select "Create Routine" button.	Routine generated with products priced higher than low budget and lower than high budget.	Product1 : \$16.00 Product 2: \$32.00 Product 3: \$6.00 Product 4: \$121.00 Product 5: \$35.00	Passed
T-037	Product Criteria	Budget Selection	User logged out and on skin care generator page.	Select "high" budget then select "Create Routine" button.	Routine generated with products of higher price than low and medium budgets.	Product1 : \$15.00 Product 2: \$182.00 Product 3: \$46.00 Product 4: \$72.00 Product 5: \$39.00	Passed
T-038	Product Criteria	Price Range Selection (min, max)	User logged out and on skin care generator page.	Input min and max price then select "Create Routine" button.	Routine generated within price range.	\$20-\$30 range input. Routine generated within range.	Passed

T-039	Smart Recommendations	Product Recommendation Based on User Inputs	User logged out and on skin care generator page.	Select routine and product criteria and select "Create Routine" button.	Routine generated with all routine and product criteria.	Routine generated that accounts for all inputs by user.	Passed
T-040	Navigation	Home Page Navigation	User logged out and on skin care generator page.	Select "GLOW" button in header.	Home page loads.	Home page loads succesfully.	Passed

Non-Functional Requirements

Test Case ID	Use Case	Function Being Tested	Initial System State	Input	Expected Outputs	Actual Outputs	Status
T-041	User Interface	UI Design Usability	System running.	Interact with various UI components.	UI is intuitive, responsive, and easy to use.	UI is intuitive, responsive for laptop and movile devices and it is easy to use.	Passed
T-042	Performance	Response Time for Recommendations	System running.	Make a recommendation request.	Response time is under 10 seconds.	Routine generated in 4 seconds.	Passed
T-043	Page Loading	Optimizing Web Page Load Time	System idle.	Open the homepage.	Page loads in under 10 seconds.	Page loads in under 2 seconds.	Passed
T-044	Security	Data Privacy and Security	System running.	Submit sensitive user data.	Data is securely processed and stored.	Data is securely processed and stored. User passwords are encrypted on the database.	Passed
T-045	Responsive Design	Cross-Platform Compatibility	System running.	Access application on mobile, tablet, and desktop.	App adapts to all screen sizes and resolutions.	App is responsive and adapts to mobile, tablet and desktop screen sizes.	Passed

T-046	Performance	High-Traffic Performance	System running.	Multiple users access the site at one time.	App continues to operate without any slow down.	7 users at a time, all generating routines at the same time. The results for all users were produced in less than 10 seconds.	Passed
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Error-Case Testing

Test Case ID	Use Case	Function Being Tested	Initial System State	Input	Expected Outputs	Actual Outputs	Status
T-047	User Authentication	Failed Authentication	User not logged in and on login page.	Missing password.	Unable to authenticate user, remain on login page. Message "Invalid Credentials".	Invalid credentials message, user remains on login page.	Passed
T-048	User Authentication	Failed Authentication	User not logged in and on login page.	Missing username.	Unable to authenticate user, remain on login page. Message "Invalid Credentials".	Invalid credentials message, user remains on login page.	Passed
T-049	User Authentication	Failed Authentication	User not logged in an on login page.	Missing password and username.	Unable to authenticate user, remain on login page. Message "Invalid Credentials".	Invalid credentials message, user remains on login page.	Passed
T-050	User Registration	Failed Registration	User not logged in an on signup page.	Missing username.	Unable to register user, remain on signup page. Message "please fill out this filed".	"please fill out this field message". User remains in signup page.	Passed
T-051	User Registration	Failed Registration	User not logged in an on signup page.	Missing password.	Unable to register user, remain on signup page. Message "please fill out this filed".	"please fill out this field message". User remains in signup page.	Passed
T-052	User Registration	Failed Registration	User not logged in an on signup page.	Mismatched passwords.	Unable to register user, remain on sign up page. Message" passwords do no match".	"passwords do not match message". User remains in signup page.	Passed