

V&V Test Procedures

TRACEABILITY OF THE REVISIONS

Rev.	Date	CO	Author	Verifier	Approver	Authorizer	Revision Description
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1 Scope

1.1. Purpose and Applicability

This document provides the Verification & Validation Test Procedures for The Nest Habit Tracker. It defines the testing approach to ensure that the application meets both functional and non-functional requirements as specified in the SRS. Completion of these procedures will demonstrate compliance with project specifications and user expectations.

1.2. Reference Documents

- *The Nest SRS*
- *Eagle Tech Software Design Document (SWDD)*

1.3. Terms, Acronyms and Abbreviations

- *SRS: Software Requirements Specification*
- *SWDD: Software Design Description*
- *V&V: Verification and validation*
- *API: Application programming interface*

2. Verification Tasks/Activities

2.1. Documentation Verification

All project documents will be reviewed for

2. *Completeness of functional and nonfunctional requirements*
3. *Consistency between the design and requirements*
4. *Traceability from requirements to the test cases*

2.2. Define Suite of Tests

Describe the planned scenarios and test cases. Traceability to requirements and acceptability criteria need to be documented elsewhere (SRS).

A comprehensive suite of test cases is developed to verify system functionality against the SRS requirements. These include:

Functional test: ensuring that each feature performs as supposed to and specified

UI Tests: Confirming that the UI elements are functioning as intended

Traceability: Each test case is mapped to specific requirements and acceptance criteria

3. TEST PROCEDURES

Requirement 3.2.1

Login/Create Account

This Module will show how users create an account or log into their account by using their email and password.

Pre-Condition

- *The application server is running*
- *User has access to The Nest website*

Acceptance Criteria 3.2.1.1

1. Load the Website
2. Click on sign up
3. Enter email address
4. Enter password
5. Enter Verification number
6. Account is created

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
1.1.1	Load website home page	1: Navigate to website home page	None	The website will load successfully

1.1.2	Create an account	<p>1: Click on the sign up button</p> <p>2: Enter the email address into the input box</p> <p>3: Enter a valid password into the input box</p> <p>4: Enter account verification number that is sent to the entered email</p>	<p>Email: "abc123@example.org, Password:abcd1234!, Verification Code: 123456</p>	<p>The account will be successfully created and the user is redirected to the dashboard</p>
1.1.3	Missing field	<p>1: Click on the sign up button</p> <p>2: Leave the email input box empty</p> <p>3: Enter a valid password into the input box</p> <p>4: Enter account verification number that is sent to the entered email</p>	<p>Password:abcd1234!, Verification code: 123456</p>	<p>Error prompts the user to fill out the required fields</p>

Acceptance Criteria 3.2.1.2

1. Load the Website
2. Click on log in
3. Enter email address

4. Enter Verification number
5. Logged into account

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
1.2.1	Load website home page	1: Navigate to website home page	None	The website will load.
1.2.2	Log in to account	1: Click on log in 2: Enter email address into the input box 3: Enter the account verification number code sent to the entered email	Email: "abc123@example.org, Password:abcd1234!, Verification Code: 123456	The user is successfully logged in and is redirected to the dashboard.

Acceptance Criteria 3.2.1.3

6. Load the Website
7. Click on log in
8. Enter email address
9. Enter invalid verification number
10. Error message is displayed or incorrect verification number

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
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1.2.1	Invalid login attempt	1: Navigate to website home page	None	The website will load.
	Log in to account failed	1: Click on log in 2: Enter email address into the input box 3: Enter the wrong account verification number code	Email: abc123@example.org Verification code:"123457"	The system displays an error message such as "Invalid verification code" and does not log the user in

Requirement 3.2.2 Month Navigation

This module verifies that users can navigate forward and backward through the calendar months using the arrow buttons, and that the correct month's data is displayed.

Pre-Condition

- *User has access to the Nest website*
- *User is logged into an active account*
- *Dashboard with the calendar is displayed*

Acceptance Criteria 3.2.2.1

1. Log in to the website
2. Click the right pointing arrow next to the month
3. Look at calendar month

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
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1.3.1	Load the website and log in	1: Navigate to the website 2: Log in	Log in info	Users' accounts will load.
	Navigate to the next month	1: Click the right pointing arrow next to the month being displayed	None	The calendar updates to display the next month and the corresponding days and habits
	Look at the data shown	1: See the data shown 2: Is the month shown the month after the current month?	None	The website will display next month.

Acceptance Criteria 3.2.2.2

1. Log in to the website
2. Click the left pointing arrow next to the month
3. Look at calendar month

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
1.4.1	Load the website and log in	1: Navigate to the website 2: Log in	Log in info	Users' accounts will load.

	The calendar updates to show the previous month	1: Click the left pointing arrow next to the month being displayed	None	Website updates the users data for the previous month.
	After clicking the arrow, verify that the calendar updates to display the next month	1: See the data shown 2: Is the month shown the month before the current month?	None	The website will display the previous month.

Requirement 3.2.3.1 Habit Management

This test is used to validate that users can effectively add a habit, edit, or delete a habit with the system providing clear feedback and errors when needed.

Pre-Condition

- *User is logged in and on the dashboard*

Add New Habit

Users must have the ability to add up to 10 habits

Acceptance Criteria 3.2.3.1.1

1. Log in to the website
2. Click the "+ New Habit" button
3. Enter a habit name
4. Click the monthly goal text box
5. Enter the monthly goal for this habit
6. Click Save
7. Look at the data shown

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
1.5.1	Load the website and log in	1: Navigate to the website 2: Log in	Log in info	Users' accounts will load.
1.5.2	Add new habit	1: Click the "+ New Habit" button 2: Enter the habit name 3: Click in the Monthly Goal text box 4: Enter the monthly goal 5: Click the "Save" button	Habit name: "Reading", monthly goal number: 12	Website updates the user's account with the new habit "Reading" and goal data of 12.
1.5.4	Look at the data shown	1: See the data shown 2: Is the Habit name and goal correctly displayed?	None	The website will display the added habit along with the monthly target goal.

Attempt to exceed add habit limit

Acceptance Criteria 3.2.3.1.1

8. Log in to the website
9. Click the "+ New Habit" button
10. Enter a habit name
11. Click the monthly goal text box
12. Enter the monthly goal for this habit

13. Click Save

14. Look at the data shown

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
1.5.1	Load the website and log in	1: Navigate to the website 2: Log in	Log in info	Users' accounts will load.
1.5.2	Add an 11th habit	1: Click the "+ New Habit" button 2: Enter the habit name 3: Click in the Monthly Goal text box 4: Enter the monthly goal 5: Click the "Save" button	Habit name: "Reading", monthly goal number: 12	The website returns an error message: "Habit limit exceeded"
1.5.4	Look at the data shown	1: See the data shown 2: Is the Habit name and goal correctly displayed?	None	The website will not display the 21st habit.

Attempt to exceed over habit name limit

Acceptance Criteria 3.2.3.1.1

1. Attempt to enter a habit name longer than 30 characters

2. The system prevents saving and prompts the user to shorten the habit name

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
1.5.1	Load the website and log in	1: Navigate to the website 2: Log in	Log in info	Users' accounts will load.
1.5.2	Add a habit that exceeds the character amount	1: Click the "+ New Habit" button 2: Enter a habit name exceeding 30 characters 3: Click in the Monthly Goal text box 4: Enter the monthly goal 5: Click the "Save" button	Habit name: "working out and tracking foods for a competition", monthly goal number: 12	The website will not allow you to save the habit and you will remain in the add new habit display.
1.5.4	Look at the data shown	1: See the data shown 2: Is the Habit name and goal correctly displayed?	None	The website will not display the 21st habit.

Requirement 3.2.3.2 Edit Habits

Users must be able to hover over the name of the habit in the dashboard and be shown an edit symbol to click.

Acceptance Criteria 3.2.3.2.1

1. Log in to the website
2. Have a habit created or in account already
3. Hover over the habit name
4. Click the pencil for editing
5. Click on the habit name text box
6. Enter the updated habit name
7. Click on the monthly goal text box
8. Enter the updated monthly goal
9. Click the “Save” button
10. Look at the data shown

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
1.6.1	Load the website and log in. Have an existing habit that the user wants to edit.	<p>1: Navigate to the dashboard of The Nest</p> <p>2: Log in</p> <p>3: Create a habit with a monthly goal</p>	Log in info, habit info	Users' accounts will load, and a habit will be created.
	Edit the habit	<p>1: Hover over the habit name and click the edit button (pencil symbol)</p> <p>2: Click in the habit name text box</p> <p>3: Enter the updated habit name</p> <p>3: Click in the Monthly Goal text box</p>	Habit name: “Journaling”, monthly goal number: 17	Website updates the user's account with the new habit” Journaling ” and goal data of 17.

		4: Enter the updated monthly goal 5: Click the “Save” button		
	Look at the data shown	1: See the displayed changes on the calendar 2: Is the edited Habit name and goal correctly displayed?	None	The website will display the edited habit along with the edited monthly target goal.

Invalid edit habit

Acceptance Criteria 3.2.3.2.1

1. Attempt to edit a habit but leave the habit name blank
2. Click save
3. The system displays an error message prompting for habit name

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
1.6.1	Load the website and log in. Have an existing habit that the user wants to edit.	1: Navigate to the dashboard of The Nest 2: Log in 3: Create a habit with a monthly goal	Log in info, habit info	Users' accounts will load, and a habit will be created.
	Edit the habit(Invalid)	1: Hover over the habit name and click the edit button (pencil symbol)	Habit name:, monthly	An error message will be displayed prompting that

		2: Click in the habit name text box 3: Leave the habit name blank 3: Click in the Monthly Goal text box 4: Enter the updated monthly goal 5: Click the “Save” button	goal number:19	habit name was left blank.
	Look at the data shown	1: See the displayed changes on the calendar 2: Is the edited Habit name and goal correctly displayed?	None	The website will not show the new habit name or the monthly goal.

Requirement 3.2.3.3
Delete Habit

Users must be able to hover over the name of the habit in the dashboard and be shown a trash icon to click. The user will then be prompted with a pop up to make sure they want to delete it.

Acceptance Criteria 3.2.3.3.1

1. Log in to the website
2. Have a habit created or in account already
3. Hover over the habit name
4. Click the trash can for deleting
5. A pop up will ask if you are sure to delete the habit
6. Click “Yes, Delete”
7. Look at the data shown

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
1.6.1	Load the website and log in. Have an existing habit that needs to be deleted.	<p>1: Navigate to the website</p> <p>2: Log in</p> <p>3: Create a habit with a monthly goal</p>	Log in info, habit info	Users' accounts will load, and a habit will be created.
	Delete the habit	<p>1: Hover over the habit name and click the delete button (trash can symbol)</p> <p>2: Click "Yes, Delete" in the pop up</p>	Click delete	Website updates the user's account with the habit now removed.
	Look at the data shown	<p>1: See the data shown</p> <p>2: Is the targeted Habit correctly removed from the page?</p>	None	The website will no longer display the habit that has been removed.

Cancel delete Habit

Acceptance Criteria

1. Hover over the habit name and click the delete icon
2. Click cancel in the confirmation pop-up
3. The system retains the habit without changes

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Results
1.6.1	Website log in	1: Navigate to the website 2: Log in 3: Create a habit with a monthly goal	Log in info, habit info	Users' accounts will load, and a habit will be created.
	Delete the habit but do not confirm	1: Hover over the habit name and click the delete button (trash can symbol) 2: Click "Cancel" in the pop up	None	The website does not delete the habit
	Look at the data shown	1: See the data shown 2: Is the targeted Habit correctly removed from the page?	None	The website will continue to show the habit.