# Florida International University School of Computing and Information Sciences

Software Engineering Focus

# **TESTING MANUAL**

Project Title: EnvoScholar v2.0

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# 0.1 Unit Tests

# [NVOS-10] Visualization of Text

o Test Case ID: NVOS-10-T01

# Description/Summary of Test:

- · User has selected a concept relevant to the article selected.
- · User has seen all the sentences in the abstract that contain those concepts clearly highlighted.
- · User has removed all highlight once they no longer wish to view the highlighted sentences.
- **Pre-condition:** User is on the Article Information page.
- **Expected Results:** User should be able to clearly see all the sentences in the abstract where the concept is located.
- Actual Result: The expected results are equal to the actual result.
- Status (Fail/Pass): Pass.

# [NVOS-34] Article Feedback

- Test Case ID: NVOS-34-T01
- Description/Summary of Test:
  - · User clicks arrow UP or arrow DOWN.
  - · Rating is sent to MongoDB.
  - · Arrow changes color to indicating success. Green for UP and red for DOWN.
- **Pre-condition:** User is on the Display Results page.
- **Expected Results:** Arrow changes color accordingly.
- **Actual Result:** The expected results are equal to the actual result.
- o Status (Fail/Pass): Pass.

#### [NVOS-34] Article Feedback

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- Test Case ID: NVOS-34-T02
- Description/Summary of Test:
  - · User clicks arrow DOWN.
  - · Rating is sent to MongoDB.
  - · Arrow changes color to red.
- **Pre-condition:** User is on the Display Results page.
- Expected Results: Arrow changes color to red.
- Actual Result: The expected results are equal to the actual result.
- o Status (Fail/Pass): Pass.

# [NVOS-34] Article Feedback

- Test Case ID: NVOS-34-T03
- Description/Summary of Test:
  - · User clicks arrow UP.
  - · Rating is sent to MongoDB.
  - · Arrow changes color to green.
- **Pre-condition:** User is on the Display Results page.
- Expected Results: Arrow changes color to green.
- Actual Result: The expected results are equal to the actual result.
- **Status (Fail/Pass):** Pass.

# [NVOS-47] Tree Visualization

- o **Test Case ID:** NVOS-47-T01
- Description/Summary of Test:
  - · User has browsed to the treeview page.
  - · User selected a concept.

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• Treeview page displays a dynamic tree structure properly showing the ontology hierarchy.

- **Pre-condition:** User is on another page and selects Treeview from the navigation bar.
- **Expected Results:** User should see the dynamic ontology hierarchy for the specific selected concept.
- o Actual Result: Users sees the dynamic ontology hierarchy for any specific selected concept.
- Status (Fail/Pass): Pass.

# [NVOS-48] Graph Node Visualization

- o **Test Case ID:** NVOS-48-T01
- Description/Summary of Test:
  - · User has browsed to the node graph view page.
  - · User clicked on a concept.
  - · Node graph dynamically updated related concepts when clicking a node.
- **Pre-condition:** User is on another page and selects node graph from the navigation bar and then clicks a node.
- **Expected Results:** User should see the starting dynamic ontology graph and updated graph after clicking.
- Actual Result: User sees ontology graph and its updated when a node is clicked.
- o Status (Fail/Pass): Pass.

# [NVOS-64] Dynamic Search in Tree

- o Test Case ID: NVOS-64-T01
- Description/Summary of Test:
  - · User has entered string in the search bar.
  - · User has hovered over one of the list of resulting concepts.
  - · User can see the treeview hierarchy of the corresponding result.

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- **Pre-condition:** User is on the Treeview page.
- **Expected Results:** User should be able to easily search for terms, hover over terms, and dynamically see the treeview.
- o **Actual Result:** User dynamically sees the treeview of search concepts.
- Status (Fail/Pass): Pass.

# [NVOS-70] Unifying Visualization

- o Test Case ID: NVOS-70-T01
- Description/Summary of Test:
  - · User has browsed to the Ontology page.
  - · User selected a concept or searched for a concept.
  - · User sees a dynamic tree structure and node graph properly showing the ontology hierarchy.
- Pre-condition: User is on another page and selects Ontology from the navigation bar.
- **Expected Results:** User should see the dynamic ontology hierarchy and node graph for the specific selected or searched concept.
- Actual Result: Users sees the dynamic ontology hierarchy for any specific selected concept with the various visualization techniques.
- Status (Fail/Pass): Pass.

# [NVOS-71] Enhance Treeview Search Results

- o Test Case ID: NVOS-71-T01
- Description/Summary of Test:
  - · User has entered a string into the search bar.
  - · User has seen a list of concepts in the ENVO ontology that contain the entered string.
  - · User can see the identification numbers under the bolded concepts.
  - · User can hovered over or clicked a concept and saw the concept reflected in the treeview and node graph.

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- **Pre-condition:** User is on the Ontology page.
- **Expected Results:** User should be able to easily and intuitively search for concepts in the ontology.
- Actual Result: The expected results are equal to the actual result.
- **Status (Fail/Pass):** Pass.

# [NVOS-72] Node Graph Search

- o **Test Case ID:** NVOS-72-T01
- Description/Summary of Test:
  - · User enters concept on search bar.
  - · User hover over a concept.
  - · User can see a new graph in the Node Graph block.
- Pre-condition: User accessed Ontology page and enters a concepts that exists in the ENVO ontology.
- **Expected Results:** User should be able to see node graph containing searched concepts is displayed.
- Actual Result: The expected results are equal to the actual result.
- Status (Fail/Pass): Pass.

#### [NVOS-87] Autocomplete Search

- o Test Case ID: NVOS-87-T01
- Description/Summary of Test:
  - · User double clicks on the search bar and sees a list of concepts from the ENVO ontology.
  - · User has entered a string into the search bar.
  - · User has seen a list of concepts in the ENVO ontology that contain the entered string.
- **Pre-condition:** User in on the Homepage.

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 Expected Results: User should be able to easily and intuitively search for concepts in the ontology.

- Actual Result: The expected results are equal to the actual result.
- Status (Fail/Pass): Pass.

# [NVOS-97] Feedback History Page

- o **Test Case ID:** NVOS-97-T01
- **Description/Summary of Test:** User is able to see their Article Feedback History from user's profile.
- Pre-condition:
  - · MongoDB is properly connected.
  - · User is logged into their account.
  - · User has made at least one search.
  - · User has rated at least one article.
  - · User is on the Feedback History page.
- Expected Results: User should be able to see the Article Feedback History.
- Actual Result: The expected results are equal to the actual result.
- o Status (Fail/Pass): Pass.

#### 0.2 INTEGRATED TESTS

#### [NVOS-10] Visualization of Text

- o **Test Case ID:** NVOS-10-T02
- **Description/Summary of Test:** All the possible sentences are highlighted entirely upon selection of a concept.
- **Pre-condition:** All the relevant concepts are properly displayed on the Article Information page.
- **Expected Results:** The sentences in the abstract are highlighted upon selection of a concept.

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- Actual Result: The Article Information page follows the expected behavior.
- o Status (Fail/Pass): Pass.

# [NVOS-34] Article Feedback

- o **Test Case ID:** NVOS-34-T04
- **Description/Summary of Test:** Feedback is sent to MongoDB and article rating is updated.
- **Pre-condition:** Search results are displayed and arrows for feedback are displayed.
- **Expected Results:** MongoDB is updating with new rating.
- **Actual Result:** The database follows the expected behavior.
- o Status (Fail/Pass): Pass.

#### [NVOS-47] Treeview Visualization

- Test Case ID: NVOS-47-T02
- **Description/Summary of Test:** Validate that the treeview can process and display the correct concepts.
- **Pre-condition:** Ontology is properly retrieved and parsed by the backend.
- Expected Results: The dynamic ontology hierarchy is displayed for any selected concept.
- **Actual Result:** The treeview page follows the expected result and the proper dynamic ontology hierarchy is shown.
- Status (Fail/Pass): Pass.

# [NVOS-48] Graph Node Visualization

- o Test Case ID: NVOS-48-T02
- **Description/Summary of Test:** Validate that the node graph view can process and display the correct concepts.
- **Pre-condition:** Ontology is properly retrieved and parsed by the backend.
- **Expected Results:** The dynamic ontology hierarchy is displayed for any selected concept.

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• **Actual Result:** The node graph page follows the expected result and the proper dynamic ontology graph is shown.

o Status (Fail/Pass): Pass.

# [NVOS-64] Dynamic Search in Tree

o **Test Case ID:** NVOS-64-T02

- **Description/Summary of Test:** Validate that the treeview can process and search for the correct concepts.
- **Pre-condition:** Ontology concepts are properly retrieved and parsed by the backend.
- Expected Results: The dynamic ontology hierarchy is displayed for any concept once the user hovers on the term.
- Actual Result: The treeview page follows the expected result and the proper dynamic ontology hierarchy is shown.
- Status (Fail/Pass): Pass.

# [NVOS-70] Unifying Visualization

- o **Test Case ID:** NVOS-70-T02
- **Description/Summary of Test:** Validate that the treeview and node graph can process and display the correct concepts simulatenously.
- **Pre-condition:** Ontology is properly retrieved and parsed by the backend.
- **Expected Results:** The dynamic ontology hierarchy is displayed for any selected or searched concept in the treeview and node graph.
- Actual Result: The Ontology page follows the expected result and the proper dynamic ontology hierarchy is shown.
- **Status (Fail/Pass):** Pass.

# [NVOS-71] Enhance Treeview Search Results

o **Test Case ID:** NVOS-71-T02

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• **Description/Summary of Test:** All the possible related concepts are shown in the search results and can be accessed using a scrollbar.

- **Pre-condition:** The user is on the Ontology page.
- Expected Results: The corresponding concepts are shown when the user enters a string.
- Actual Result: The search bar follows the expected behavior.
- o Status (Fail/Pass): Pass.

#### [NVOS-72] Node Graph Search

- o Test Case ID: NVOS-72-T02
- Description/Summary of Test: Entered concepts are searched upon hover from autocomplete list and new graph is displayed containing the searched concept along its related concepts.
- **Pre-condition:** Initial graph is properly displaying.
- Expected Results: New graph is displayed containing searched concept.
- **Actual Result:** The search follows the expected behavior.
- o Status (Fail/Pass): Pass.

# [NVOS-87] Autocomplete Search

- Test Case ID: NVOS-87-T02
- **Description/Summary of Test:** All the possible related concepts are shown from the homepage and can be accessed using a scrollbar.
- **Pre-condition:** The user is on the Homepage.
- Expected Results: The corresponding concepts are shown when the user enters a string.
- Actual Result: The autocomplete search bar follows the expected behavior.
- Status (Fail/Pass): Pass.

#### [NVOS-97] Feedback History Page

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- **Test Case ID:** NVOS-97-T02
- **Description/Summary of Test:** Validate that the article feedback is stored, updated, retrieved from MongoDB, and displayed on user's profile.
- o **Pre-condition:** The user is registered and logged in.
- Expected Results: List of articles along with arrow up or down depending on user feedback.
- Actual Result: List of articles are displayed accordingly from information stored in MongoDB.
- Status (Fail/Pass): Pass.

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