

# NVOS-47: Tree Visualization

User Story NVOS-47: Tree Visualization

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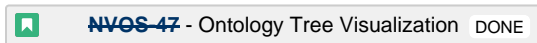
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Project: Spring 2019 EnvoScholar v2.0

Product Owner(s): [Mark Finlayson](#)

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## Description

As a user, I would like a visualization technique using a tree structure so that I could properly see the ENVO ontology terms concepts, and their corresponding descriptions.

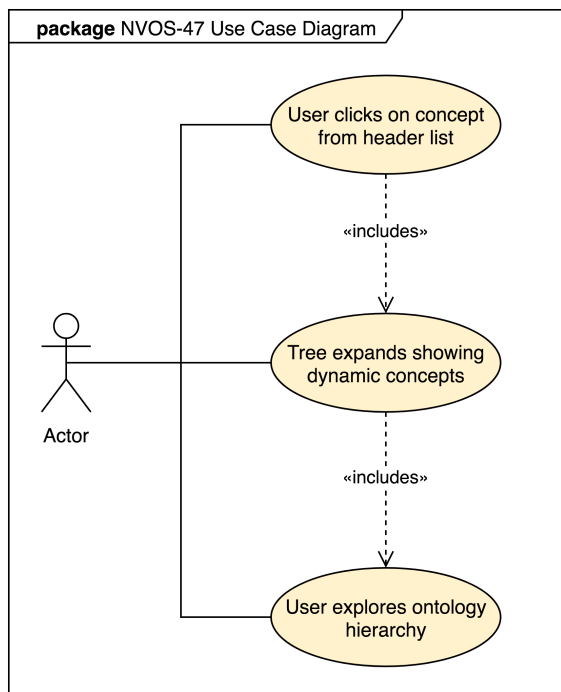
Acceptance Criteria

- The user should be able to navigate to the tree visual from the homepage.
- The user should be able to easily navigate through the tree.

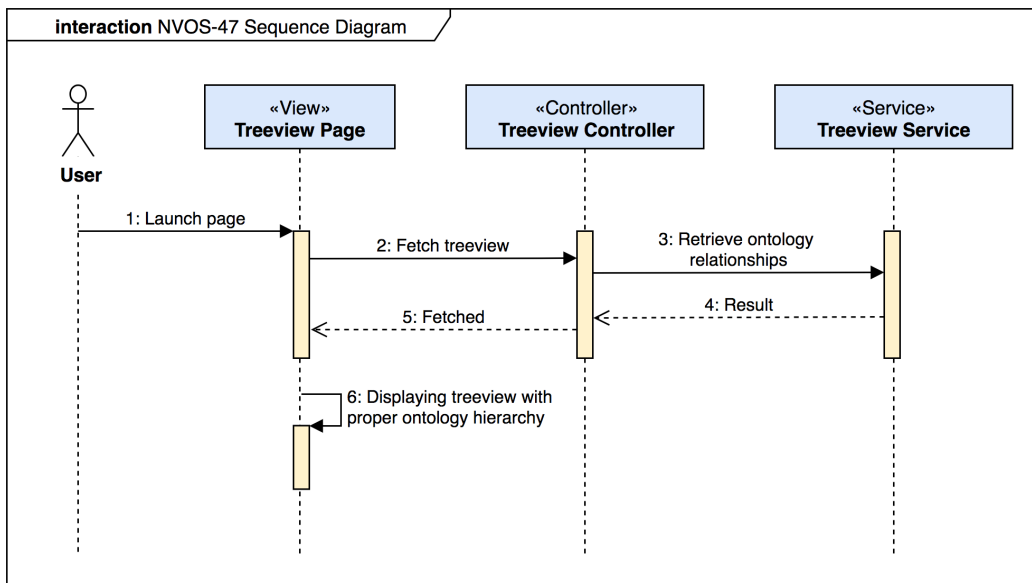
## Use Case

- Name: NVOS-47
- Actor: User
- Preconditions: Application must be on accessible from a web browser.
- Description <Flow of events>:
  - User should be able to see a list of terms from the ontology.
  - User should be able to see an expandable, dynamic tree.
  - User should be able to view details and relationships between different concepts.

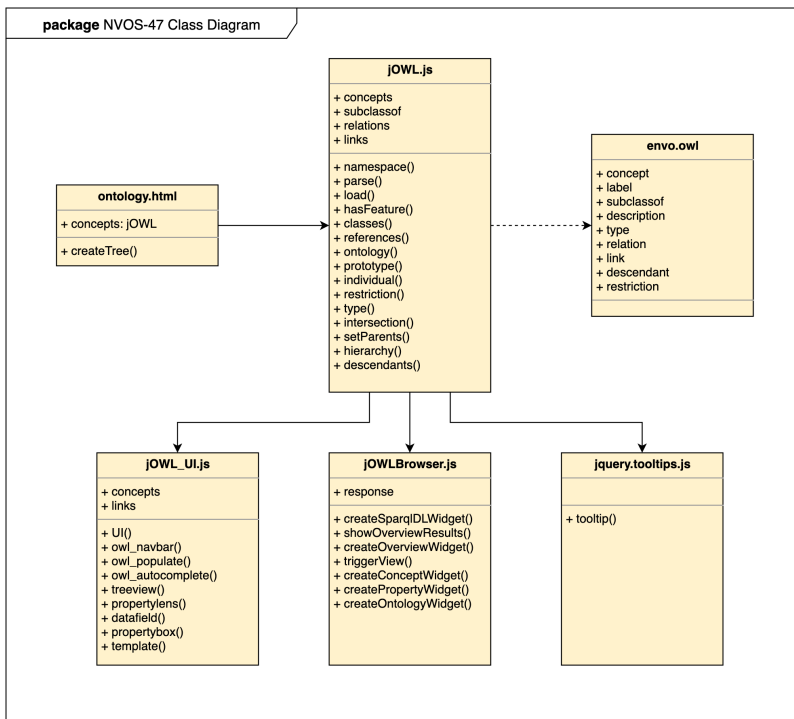
## Use Case Diagram



## Sequence Diagram



## Class Diagram



## Unit Test

- Test case ID: NVOS-47-T01
- Description/Summary of Test:
  - User has browsed to the treeview page.
  - User selected a concept.
  - 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.
- Actual Result: Users sees the dynamic ontology hierarchy for any specific selected concept.
- Status (Fail/Pass): Pass.

## Integration Test

- 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.

## Visual User Guide

EnvoScholar v2.0

Ontology ▾Account

List of available classes from the Environment Ontology:

Available at <https://bioportal.bioontology.org/ontologies/ENVO>

ClassesPropertiesSPARQL-DL

Click on any of the classes below to view its hierarchy:  
  
geographic feature, bedding-plane cave, anthropogenic geographic feature, mine tailing, administrative region, first-order administrative region, second-order administrative region, third-order administrative region, fourth-order administrative region, national geopolitical entity, transport feature, garden, hydrographic feature, cave system, canal, ocean, sea, saline hydrographic feature, obsolete dry river, saline lake, lake, freshwater lake, river, stream, obsolete intermittent stream, reservoir, well, spring, sand pit quarry, watercourse, dead cave, wadi, bay, pond, rapids, marsh, irrigation canal, ditch, lagoon, fjord, waterfall, tidal creek, drainage canal, wetland, peatland, estuary, hedge, canopy, navigation canal  
  
[... \[2768 more\]](#)

Treeview: ☒ Navigation Bar: ☐

Treeview

environmental feature

astronomical body part

geographic feature

water body

lotic water body

watercourse

wadi

physiographic feature

depression

geographic basin

valley

wadi

wadi

Description: The temporality of wadis is problematic in deciding whether they are watercourses or valleys.  
Terms: ENVO 00000031, wadi

Enter Search Terms here

**List of available classes from the Environment Ontology:**Available at <https://bioportal.bioontology.org/ontologies/ENVO>

Classes Properties SPARQL-DL

Click on any of the classes below to view its hierarchy:

geographic feature, bedding-plane cave, anthropogenic geographic feature, mine tailing, administrative region, first-order administrative region, second-order administrative region, third-order administrative region, fourth-order administrative region, national geopolitical entity, transport feature, garden, hydrographic feature, cave system, canal, ocean, sea, saline hydrographic feature, obsolete dry river, saline lake, lake, freshwater lake, river, stream, obsolete intermittent stream, reservoir, well, spring, sand pit quarry, watercourse, dead cave, wadi, bay, pond, rapids, marsh, irrigation canal, ditch, lagoon, fjord, waterfall, tidal creek, drainage canal, wetland, peatland, estuary, hedge, canopy, navigation canal

[... \[2768 more\]](#)Treeview: ☒ Navigation Bar: ☐

## Treeview

environmental feature  
└─ environmental zone  
   └─ vegetated area  
      └─ wetland  
        └─ **peatland**  
          └─ raised mire  
              └─ string mire  
                  └─ tundra mire  
                      └─ palsa mire  
                          └─ peat swamp  
                              └─ fen  
                                  └─ blanket bog  
                                      └─ sphagnum bog

## peatland

## Description:

Terms: ENVO 00000044, peatland

## Relations:

- has part: [clay](#)
- has part: [peat soil](#)
- determines: [environmental system](#)

Enter Search Terms here