

NVOS-70: Unifying Visualization

User Story NVOS-70: Unifying Visualization

Name: [Carlos A Bravo Marin](#) [Sheila Alemany](#)

Team Member(s): [Deya Banisakher](#) [Maria E. Presa Reyes](#)

Project: Spring 2019 EnvoScholar v2.0

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

Mentor(s): [Masoud Sadjadi](#)

Instructor: [Masoud Sadjadi](#)



Description

As a user, I would like to see both the treeview and the node graph view of the ontology on the same page so that I can use both visualizations concurrently for ontology browsing.

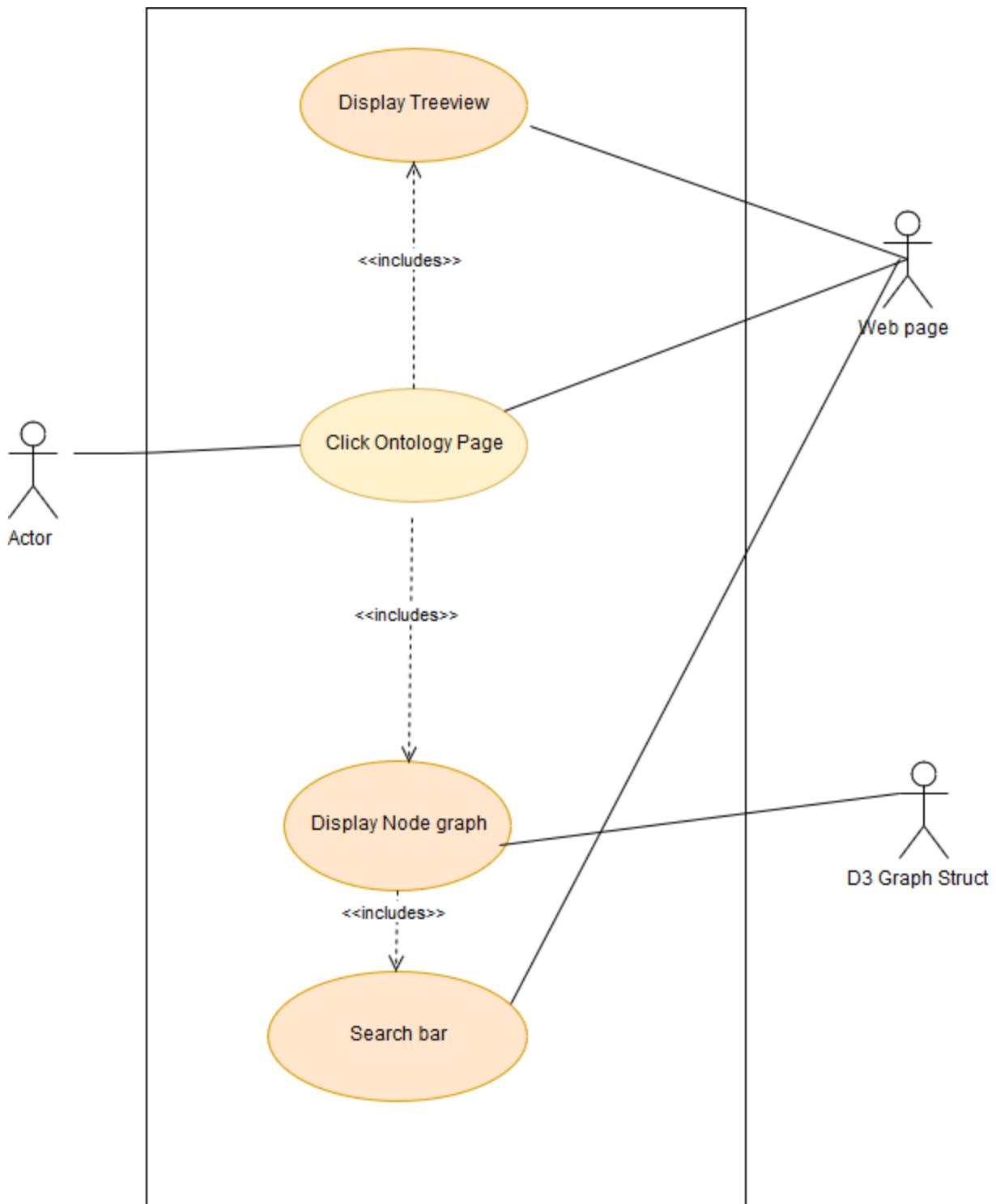
Acceptance Criteria

- The user should be able to see the treeview and the node graph on the same page.
- The user should be able to navigate through both visualization techniques concurrently and both concepts are updated once a concept is selected.

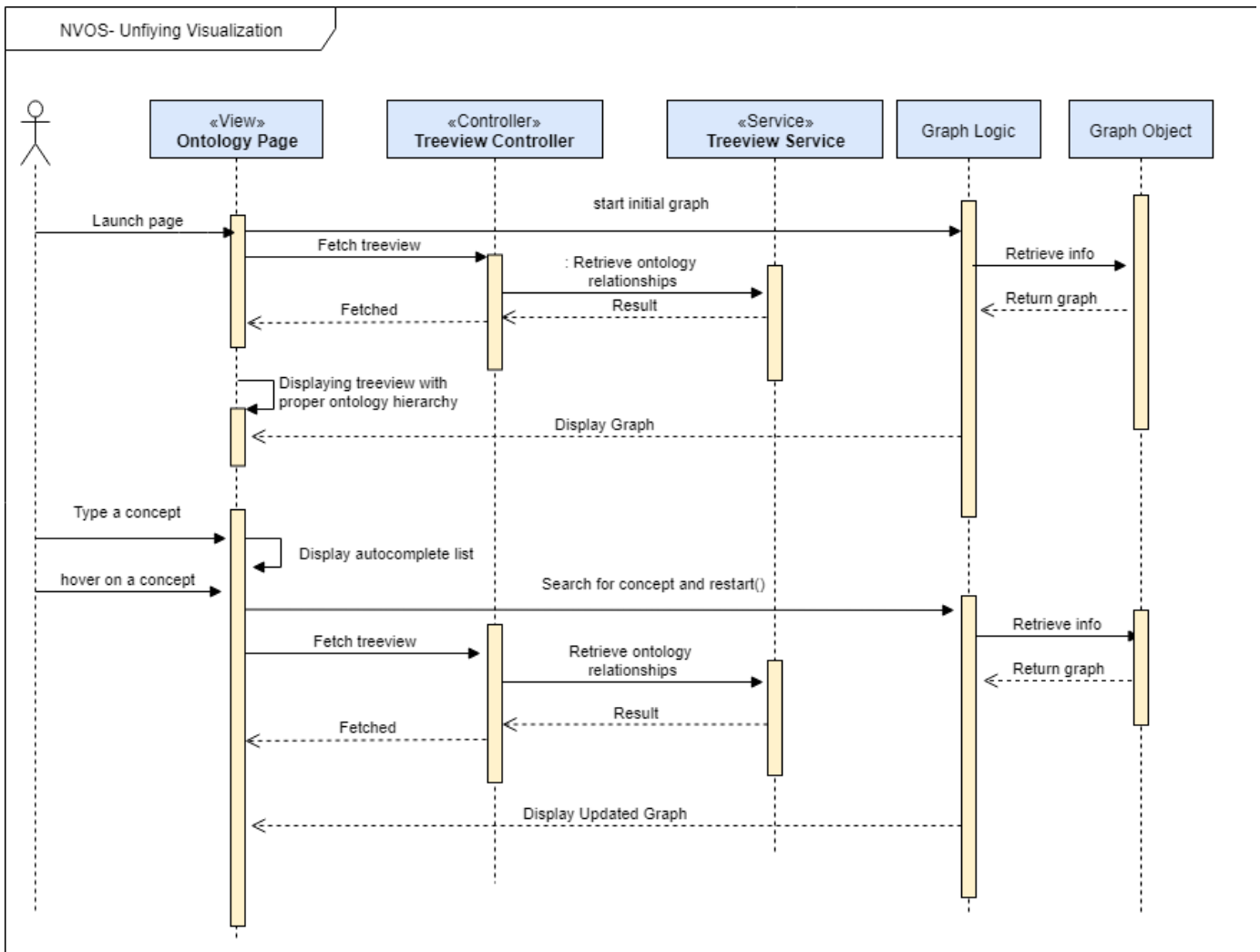
Use Case

- Name: NVOS-70
- Actor: User
- Preconditions: Application must be accessible from a web browser.
- Description <Flow of events>:
 - User should be able to browse to the ontology page.
 - User should be able to see both the treeview and the graph node visualizations on the same page.
 - User should be able to browse those visualizations as desired.

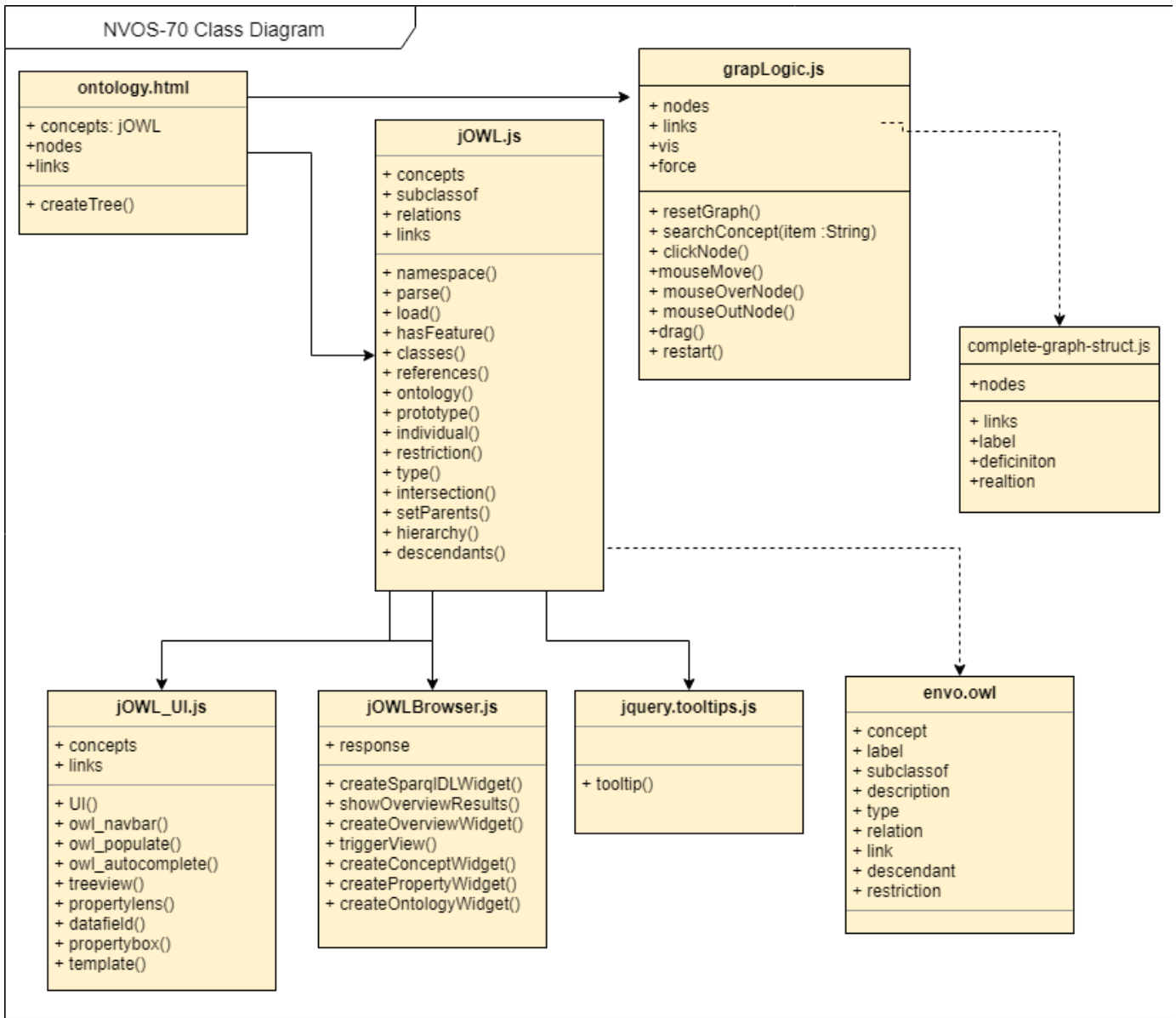
Use Case Diagram



Sequence Diagram



Class Diagram



Unit Test

- 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.

Integration Test

- 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.

Visual User Guide

EnvoScholar v2.0

Ontology Account

Environment Ontology

- ENVO is an ontology which represents knowledge about environments, environmental processes, ecosystems, habitats, and related entities. It interoperates with other ontologies in the OBO Foundry and Library.
- New terms or revisions can be requested at <https://github.com/EnvironmentOntology/envo/issues/>.
- Original file available at <http://www.obofoundry.org/ontology/envo.html>.

Treeview

entity
└─continuant
 └─occurrent

Search

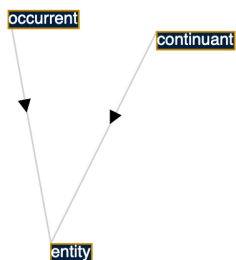
Concept: entity

Description: An entity is anything that exists or has existed or will exist.

Terms: BFO 0000001, entity

Node Graph

Reset



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- Original file available at <http://www.obofoundry.org/ontology/envo.html>.

Treeview

entity

continuant

specifically dependent continuant

quality

information carrier

morphology

mass

organismal quality

Search

quality

id: ENVO_00000019

owl:Class

sand pit quarry

id: ENVO_00000028

owl:Class

aqueduct

id: ENVO_00000072

owl:Class

obsolete aquatic habitat

id: ENVO_00000144

owl:Class

quarry

id: ENVO_00000284

owl:Class

aquatic biome

id: ENVO_00000300

owl:Class

aquarium

id: ENVO_00002196

owl:Class

saline water aquarium

id: ENVO_00002197

owl:Class

Node Graph

Reset

quality

length

organismal quality

mass

information carrier

morphology