

NVOS-72: Node Graph Search

User Story NVOS-72: Node Graph Search

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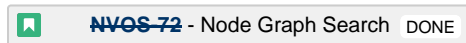
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Description

As a user, I would like to be able to search concepts in the ontology so that I can see specific concepts in the node graph visualization and further explore concepts in the ontology.

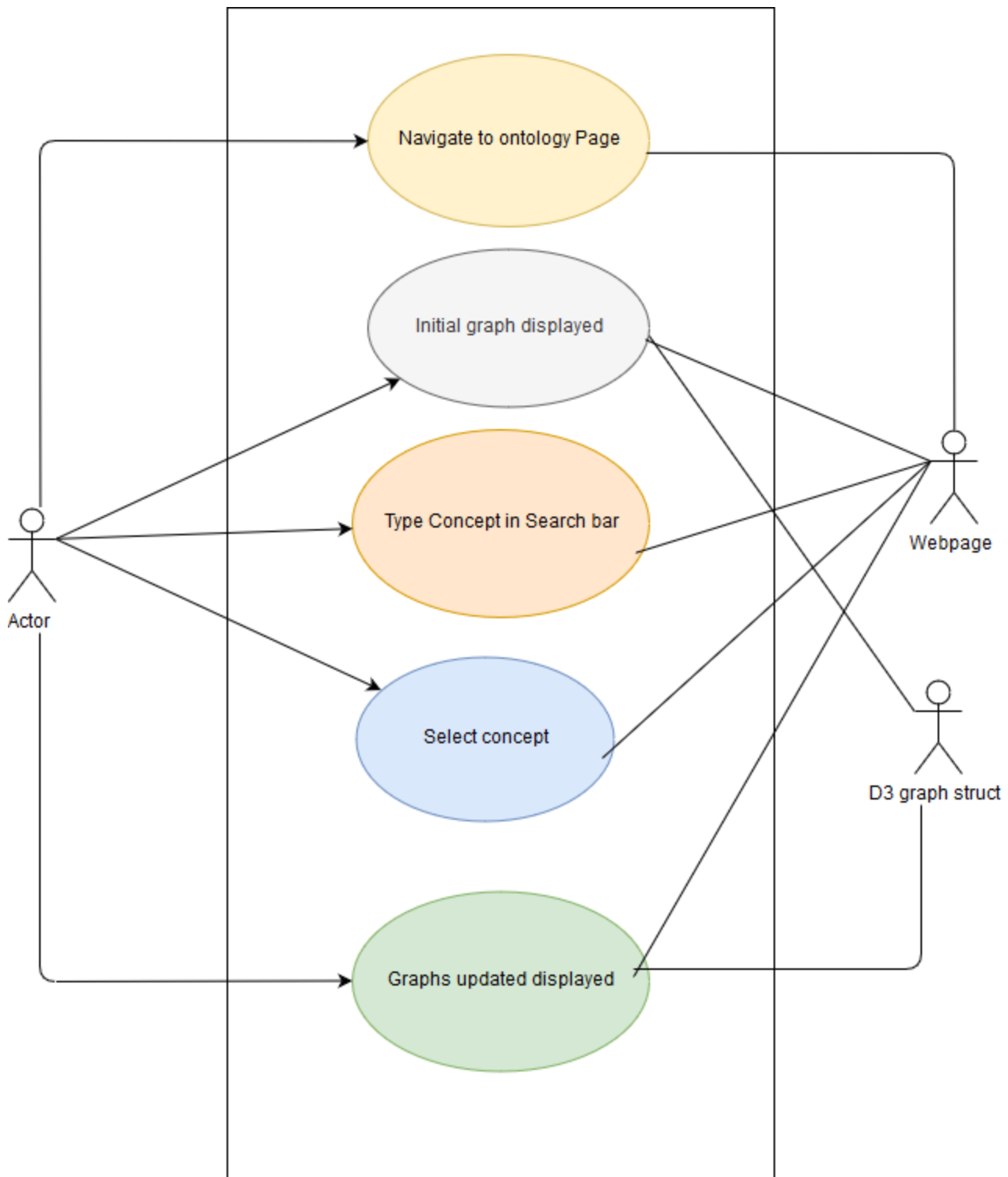
Acceptance Criteria

- Search tool is displayed
- User is able to type concept
- User is able to click search
- Concept is searched and added to visualization
- Newly added concept can be expanded by clicking on it.

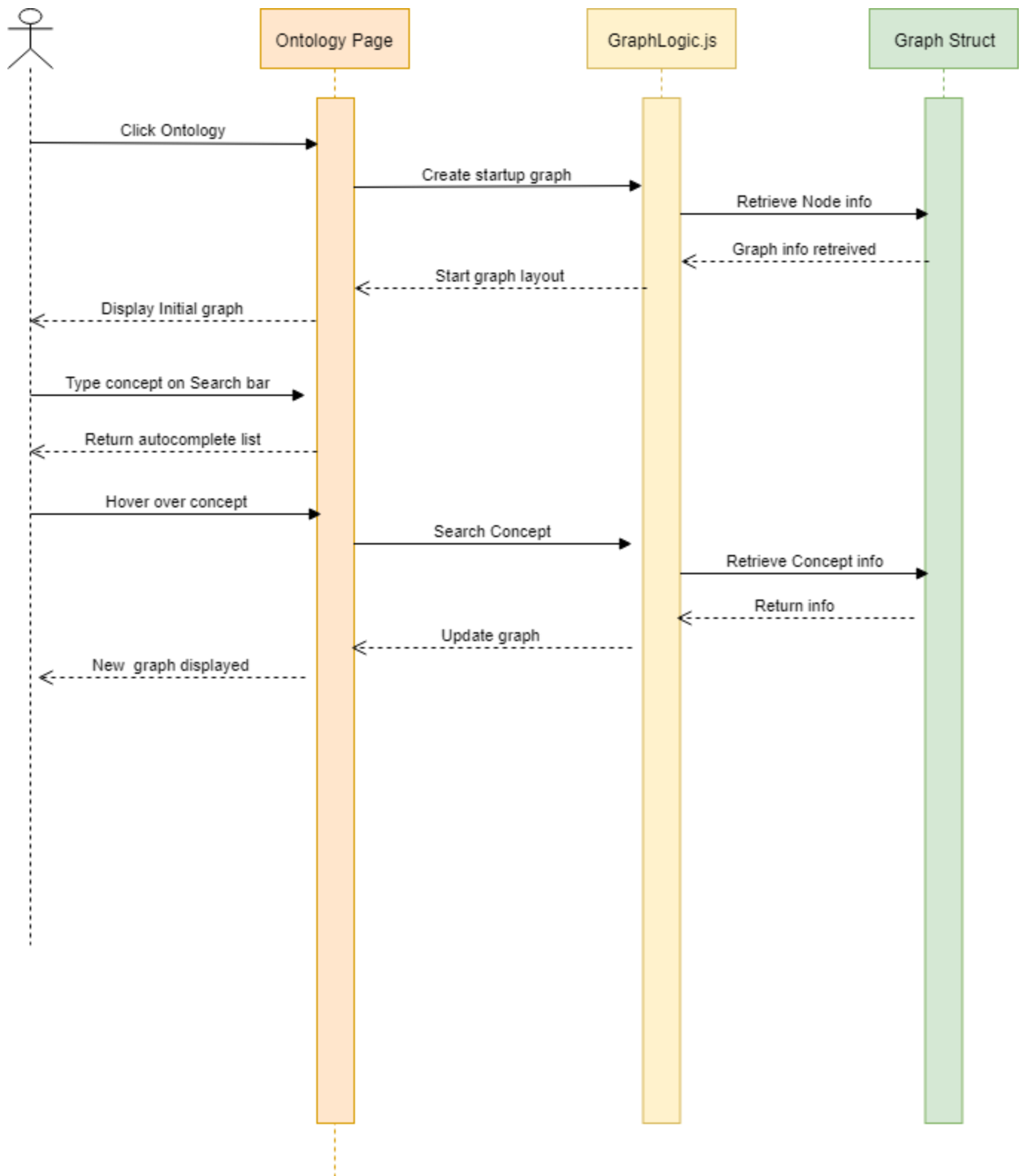
Use Case

- Name: NVOS-72
- Actor: User
- Preconditions: User is able to access Ontology page by clicking Ontology in the navigation bar.
- Description <Flow of events>:
 - User clicks Ontology from navigation bar.
 - Page is loaded and displays both tree and graph visualization of the Ontology.
 - User inputs a word and click on it.
 - Graph is updated displaying searched word and related concepts.

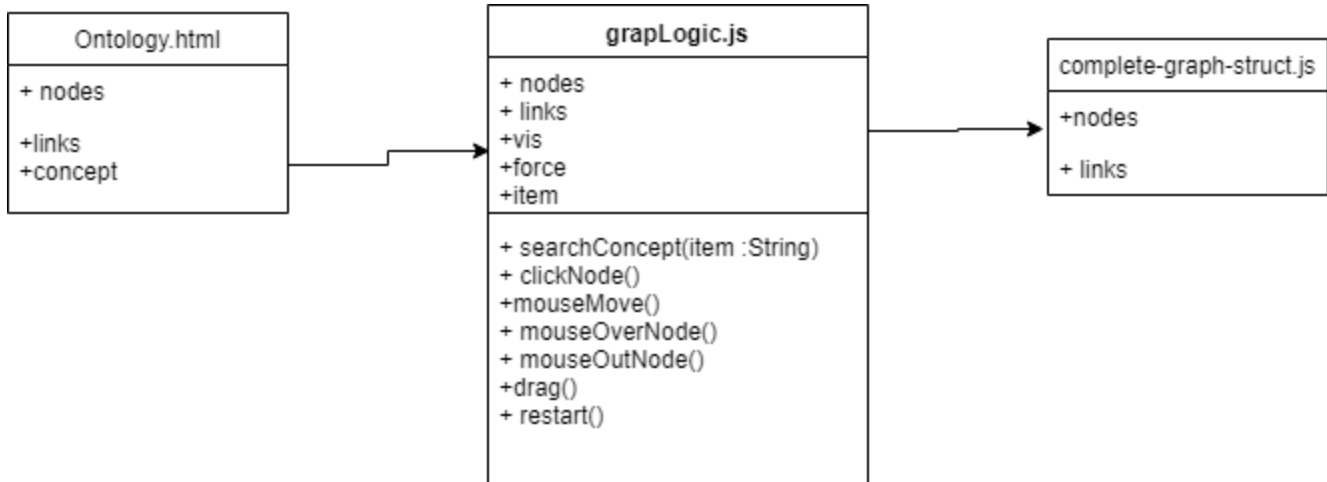
Use Case Diagram



Sequence Diagram



Class Diagram



Unit Test

- Test case ID: NVOS-72-T01
- Description/Summary of Test: To validate entered concepts is Searched and updated graph with searched concepts is displayed.
 - User enters concept on search bar
 - User hover over a concepts
 - Concept word is passed to `searchConcept()` function in `GraphLogic.js`
 - Concept info is retrieved from graph structure.
 - New graph is returned.
- Pre-condition: User accessed ontology page.
 - User enters a concept that exists in the ontology
- Expected Results: New graph containing searched concepts is displayed.
- Actual Result: New graph containing searched concept is displayed.
- Status (Fail/Pass): Pass

Integration Test

- Test case ID: NVOS-72-T02
- Description/Summary of Test: Entered concepts is searched once you hover on it 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: New graph was displayed.
- Status (Fail/Pass): Pass.

Visual User Guide

Hover over a concept and new graph is displayed.

The screenshot displays the Ontology Treeview application in a web browser. The browser's address bar shows the URL `localhost:4200/src/ontology-treeview.html`. The application interface is divided into three main sections:

- Entity Hierarchy (Top Left):** A tree view showing the classification of the `quality` class. The hierarchy is as follows:
 - `entity`
 - `continuant`
 - `specifically dependent continuant`
 - `quality`
 - `IAO 0000015`
 - `PATO 0000051`
 - `PATO 0000125`
 - `PATO 0001237`
 - `PATO 0001238`
 - `PATO 0001995`

- Class Information (Top Right):** A panel for the selected `quality` class (BFO 0000019). It displays:
- Class Name:** `quality` (BFO 0000019) *owl:Class*
- Definition:** `environmental system determined by a quality` (BFO 0000297) *owl:Class*
- Subclass:** `environmental system process quality` (BFO 0000302) *owl:Class*
- Description:** `environmental system process quality` is `environmental system process quality` (BFO 0000302) *owl:Class*
- Text:** `environmental system process quality` is a `specifically dependent continuant` that, in contrast to `roles and dispositions`, does not require any further process in order to be realized.
- Terms:** BFO 0000019, `quality`
- Relations:**
- Node Graph (Bottom):** A graph visualization showing the relationships between classes. The central node is `quality`. It has incoming arrows from `organismal quality`, `mass`, `length`, `information carrier`, and `morphology`. There is also a `Reset` button in the top left of the graph area.

The Windows taskbar at the bottom shows the system time as 11:07 AM on 4/14/2019.