Florida International University
School of Computing and Information Sciences

Software Engineering Focus

Feature Document

User Story ID <NVOS-9 Data Structure Retrieved>

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Project: Envo Scholar

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USER STORY NAME: Data Structure Retrieved

- Description: As a user, I want to retrieve the data structure from the database which contains the concepts, so that I can view it in the UI to then enhance my search query.

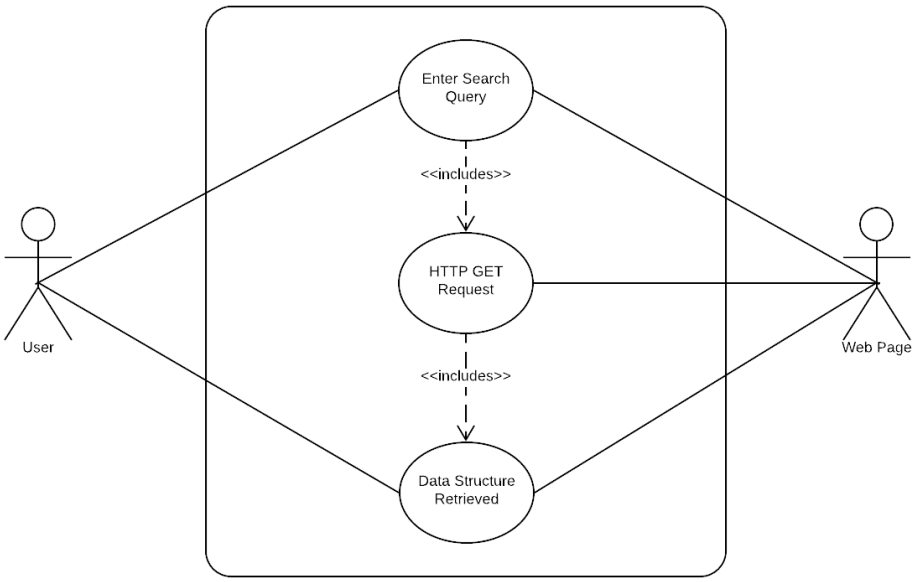
Acceptance Criteria

- User has typed a search query either in the homepage or the displayresults page
- Http GET request will be made to retrieve information from the database

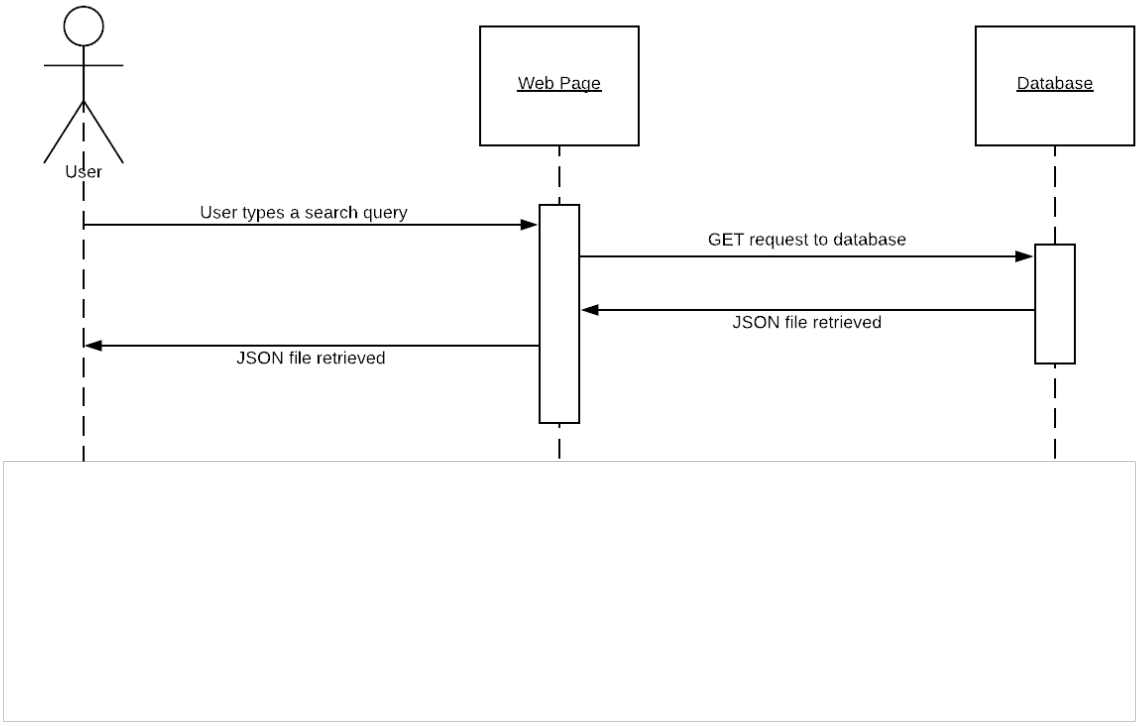
Use Case

- **Name**: Data Structure Retrieved
- **Actor**: User and Web page
- **Preconditions**: User has accessed the Envo Scholar website
  User has entered a search query
- **Postconditions**: Data structure has been retrieved from the database
- **Description** <Flow of events>:
  - User accesses the Envo Scholar website
  - Types a search query
  - Http GET request will be made to retrieve information from the database

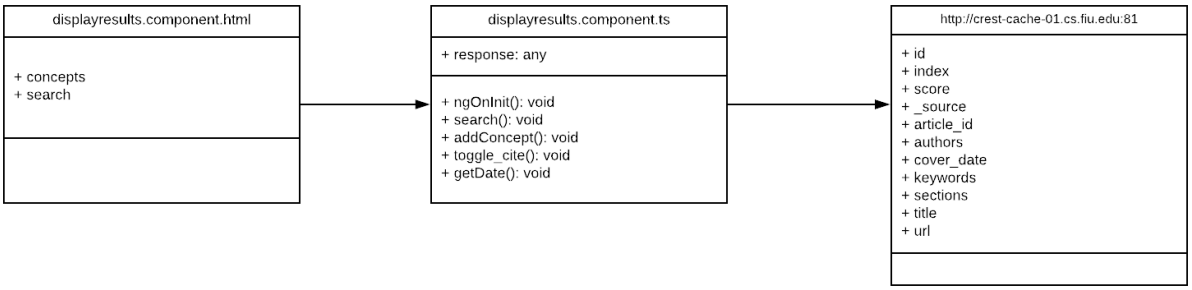
Use Case Diagram



Sequence Diagram



Class Diagram



Unit Test

- Test case ID: NVOS-9-Data-Structure-Retrieved
- Description/Summary of Test: This test was to see if the JSON file was being retrieved from the HTTP GET request
- Pre-condition: A search query has been entered
- Expected Results: JSON file is retrieved
- Actual Result: JSON file is retrieved
- Status (Fail/Pass): Pass

Visual User Guide


```
  _id: "464"
  _index: "articles"
  _score: 13.266509
▼ _source: {…}
    "@timestamp": "2018-10-12T18:50:22.626Z"
    "@version": "1"
    abstract: "Phosphine (PH3) is a natural gaseous carrier of phosphorus in its geochemical cycles, and it might be of importance to the
    phosphorus balance of natural ecosystem. For the first time phosphine levels were investigated in the Earth's coldest, driest, and most
    southerly Antarctic biosphere. Matrix-bound phosphine (MBP) was found in sea animal guanos, ornithogenic sediments and soils. Phosphine
    concentrations varied with different sea animal guanos. Average phosphine concentrations in empire penguin, gentoo penguin, sea lion, skua
    and gull guanos were 2.54±1.28ngkg−1, 6.21±2.15ngkg−1, 9.12±4.66ngkg−1, 11.90±1.29ngkg−1 and 14.55±6.74ngkg−1, respectively. The contents
    of phosphorus in these various matrixes have an important effect on MBP concentrations. The levels of phosphine appeared an increasing
    tendency with the content of TP, IP and OP in sea animal guanos, ornithogenic sediments or soils. The correlation between PH3 and Fe, Mn,
    Al in these matrixes was also analyzed and discussed. Phosphine showed an obviously positive correlation with Fe in sea animal guanos.
    However, excessively high Fe, Al and Mn may inhibit the formation of PH3 in the ornithogenic soils or sediments in the Antarctic
    biosphere"
    article_id: 464
  ▶ authors: Array(7) [ {…}, {…}, {…}, … ]
    cover_date: "2006-08-31T04:00:00.000Z"
  ▶ keywords: Array(5) [ {…}, {…}, {…}, … ]
  ▶ sections: Array(11) [ {…}, {…}, {…}, … ]
    title: "Matrix-bound phosphine in Antarctic biosphere "
    url: "https://www.sciencedirect.com/science/article/pii/S0045-6535(06)00002-6"
```