

*Florida International University*  
*School of Computing and Information Sciences*

Software Engineering Focus

# Feature Document

User Story ID <NVOS-40 View PDF>

**Name:** Bryan Bastida

**Team Member(s):** Bryan Bastida  
Andrew Castillo

**Project:** Envo Scholar

**Product Owner(s):** Mark Finlayson

**Mentor(s):** Masoud Sadjadi

**Instructor:** Masoud Sadjadi

## USER STORY NAME: VIEW PDF

Description: As a user, I want to click a button that links to the PDF result, so that I can view the PDF.

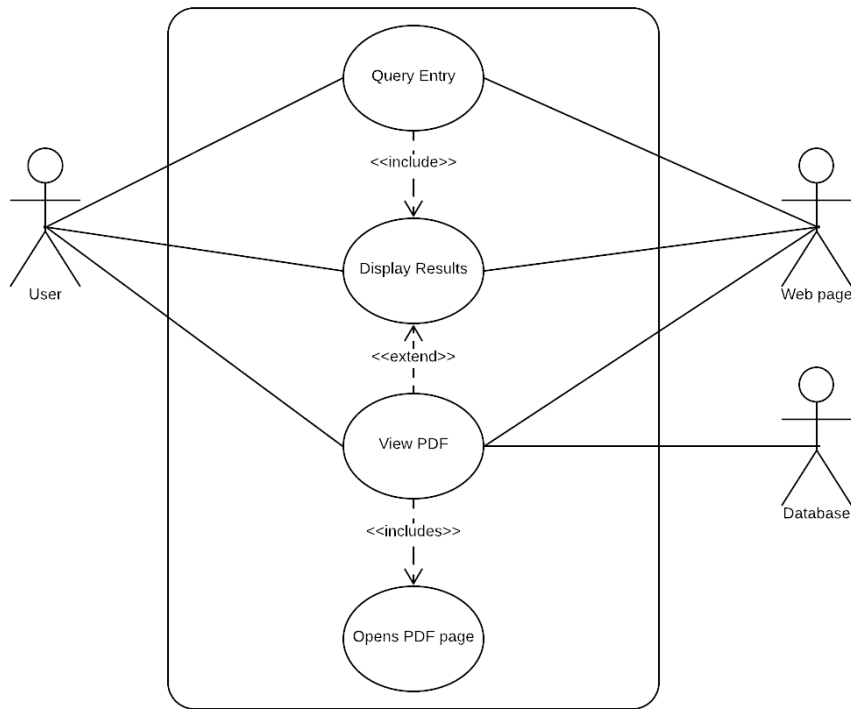
### Acceptance Criteria

- User entered a search query
- Database successfully returned articles related to the search
- Article links are displayed on the screen
- User pressed button to view PDF
- PDF file opens on a new page

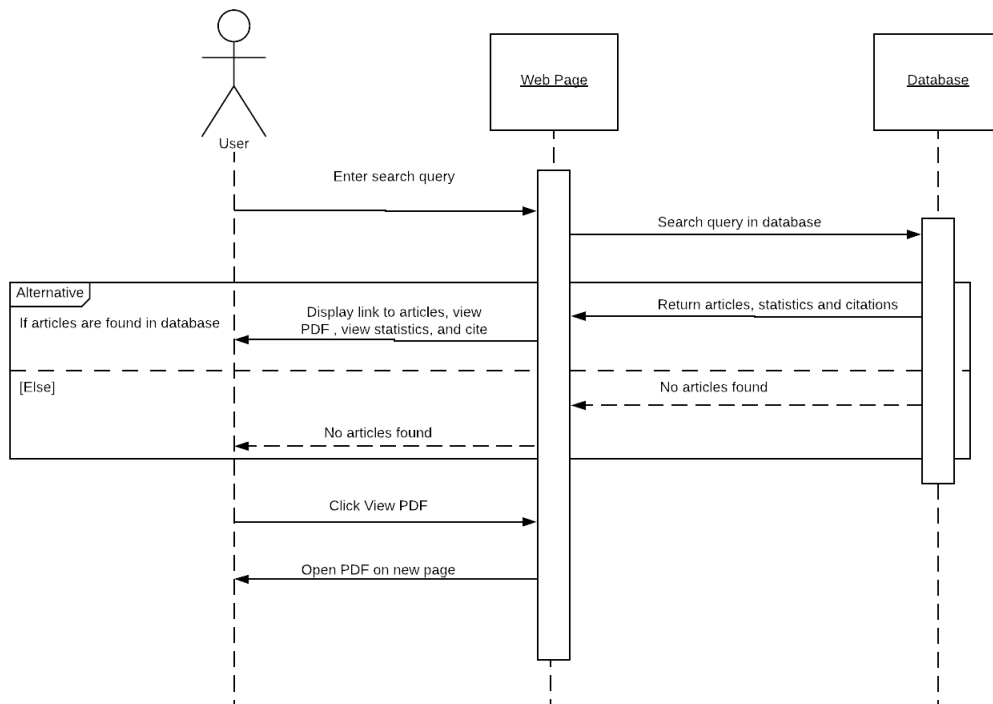
### Use Case

- **Name:** View PDF
- **Actor:** User and web page
- **Preconditions:** Article links are displayed on web page as well is link for View PDF
- **Description** <Flow of events>:
  - o User types a search query and hits the Search button
  - o Search query is sent to the database
  - o Database returns articles
  - o Web page displays article links and link for View PDF
  - o User hits the View PDF link
  - o The PDF opens on a new window

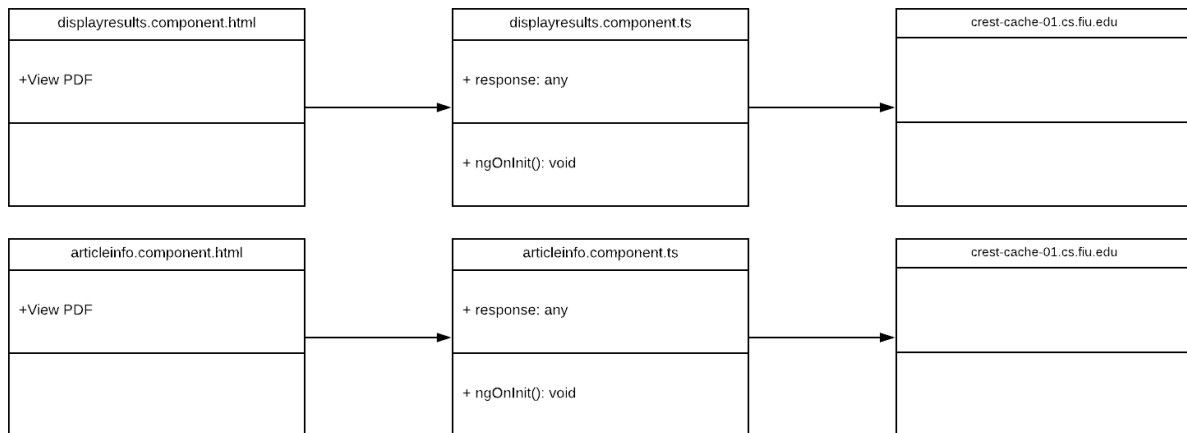
## Use Case Diagram



## Sequence Diagram



## Class Diagram



## Unit Test

- Test case ID: NVOS-40-View-PDF
- Description/Summary of Test: This test was to check that a PDF page will open when the user clicks on View PDF.
- Pre-condition: User has searched for an article. User is now on the displayresults page and is hovering over the View PDF link on an article. User clicks on the View PDF.
- Expected Results: Science Direct page with PDF of that article opens on a new tab.
- Actual Result: Science Direct page with PDF of that article opened on a new tab.
- Status (Fail/Pass): Pass

# Visual User Guide

The image shows a visual user guide for the Envo Scholar interface, presented as a screenshot of a web browser. The browser window displays the Envo Scholar homepage with a search bar and navigation links. Below the search bar, there are filters for various topics like carbon dioxide, sand sized, fluoranthene, colombia, arsenic, and cypress swamp. A list of search results is shown, including articles about soil carbon and nitrogen fluxes from North Sulawesi mangrove swamps and spatial variation of heavy metals in Hong Kong mangrove swamps. The interface includes a 'Date Range' filter and a 'Sort' dropdown menu. The bottom section of the image shows a detailed view of a ScienceDirect article titled 'Rich soil carbon and nitrogen but low atmospheric greenhouse gas fluxes from North Sulawesi mangrove swamps in Indonesia'. The article page includes a table of contents, a list of authors, a 'Download PDF' button, and a 'Citing articles' section. The browser's address bar shows the URL 'https://www.sciencedirect.com/science/article/pii/S0048969714000492-6'.

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Envo Scholar

localhost:4200/displayresults?search=swamps

Envo Scholar Ontology Search Peer Reviewed Articles Search Account

carbon dioxide sand sized fluoranthene colombia arsenic cypress swamp

View Results In Microsoft Academic View Results In Semantic Scholar

Feedback

Rich soil carbon and nitrogen but low atmospheric greenhouse gas fluxes from North Sulawesi mangrove swamps in Indonesia

Jing K. Wang -2014-07-15

The soil to atmosphere fluxes of greenhouse gases N<sub>2</sub>O, CH<sub>4</sub> and CO<sub>2</sub> and their relationships with soil characteristics were investigated in three tropical oceanic mangrove swamps (Teremaal, Likupang and...

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Spatial variation of heavy metals in surface sediments of Hong Kong mangrove swamps

Y.S. Wong -2000-11-30

The degree of heavy metal contamination in the fine-grained (<63 µm) and sand-sized (2 mm-63 µm) fractions of surface sediments in 18 different mangrove swamps (144 random samples) in Hong Kong was ex...

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Outline

Highlights

Abstract

Keywords

1. Introduction

2. Materials and methods

3. Results and discussion

4. Conclusions

Acknowledgments

Appendix A. Supplementary data

References

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Figures (2)

Fig. 1. Geographical location of

Fig. 2. Fluxes of three

Science of The Total Environment

Volume 487, 15 July 2014, Pages 91-96

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Short Communication

Rich soil carbon and nitrogen but low atmospheric greenhouse gas fluxes from North Sulawesi mangrove swamps in Indonesia

Guang C. Chen <sup>a, \*</sup>, Yaya I. Ulumuddin <sup>b</sup>, Sastro Pramudji <sup>b</sup>, Shun Y. Chen <sup>a</sup>, Bin Chen <sup>a</sup>, Yong Ye <sup>c</sup>, Dan Y. Ou <sup>a</sup>, Zhi Y. Ma <sup>a</sup>, Hao Huang <sup>a</sup>, Jing K. Wang <sup>a</sup>

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https://doi.org/10.1016/j.scitotenv.2014.03.140

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Highlights

- North Sulawesi mangrove swamps are rich in soil organic carbon and nitrogen.

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Science of The Total Environment, Volume 487,...

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Summer fluxes of atmospheric greenhouse ...  
Science of The Total Environment, Volume 408,...

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Coastal vegetation invasion increases gree...  
Science of The Total Environment, Volume 526,...

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91 (1 of 6) Automatic Zoom

Science of the Total Environment 487 (2014) 91–96

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Short Communication

**Rich soil carbon and nitrogen but low atmospheric greenhouse gas fluxes from North Sulawesi mangrove swamps in Indonesia**

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<sup>b</sup> Research Centre for Oceanography, Indonesian Institute of Sciences, Jakarta 14430, Indonesia  
<sup>c</sup> Key Laboratory of the Ministry of Education for Coastal and Wetland Ecosystem, College of the Environment and Ecology, Xiamen University, Xiamen 361102, China

CrossMark

HIGHLIGHTS

- North Sulawesi mangrove swamps are rich in soil organic carbon and nitrogen.
- N<sub>2</sub>O, CH<sub>4</sub> and CO<sub>2</sub> fluxes from North Sulawesi mangrove soils are low.
- CO<sub>2</sub> flux is negatively correlated with soil water content and organic carbon.
- High porewater salinity decreases N<sub>2</sub>O flux.

ARTICLE INFO ABSTRACT