# **Use Cases Document for WSS08 – A semantic searcher**

# Introduction

This document will provide the use cases for a program that will perform semantic searches. This program will be referred to WSS08 (Waikato Semantic Searcher 2008) for the remainder of this document.

# Assumptions (used throughout document)

User sitting at a typical desktop computer.

For detailed assumptions on the use of WSS08 please see the requirements document.

Through out this document there will be a specific example that will be worked with. This example is that the user wants to use the program to find and browse wikipedia pages that are related to older model Jaguar motor vehicles.

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# The Use Cases

**1. Use Case:** The user wants to start a new query about a keyword.

Example: The user wants see results about the key word "Jaguar".

# Assumptions: N.A.

Steps:

- 1. User types the keyword "Jaguar" into WSS08 and a node is added for this.
- 2. This is something the user is interested in searching for so they select the node that was added for the keyword "Jaguar" and put this into a positive category for the query.
- 3. The user submits this query.
- 4. The user browses the results.

# Other: Exception:

1. There are no results for the search, so the user is informed of that outcome.

# 2. Use Case: The user wants to search for result related to a wikipedia page.

**Example:** The user wants to see results about the wikipedia page that has the title "Jaguar".

Assumptions: The user has previously found this page and knows the title.

# Steps:

- 1. User enters "Jaguar" into WSS08.
- 2. They select an option so that the program knows that this is a wikipedia page title, and a node is added for this.
- 3. This is something the user is interested in searching for so they select the node that was added for the wikipedia page "Jaguar" and put in this into a positive category for the query.
- 4. The user submits this query.
- 5. The user browses the results.

# Other: Exceptions:

- 1. There are no results for the search, so the user is informed of that outcome.
- 2. The wikipedia page does not exist, so the user is informed of that outcome.

**3. Use Case:** The user wants to do a search on multiple search types that they would like to contribute to the search results.

Group: Semantics

**Example:** The user knows that car is relevant to their search.

**Assumptions:** The user has already started building the query and a "Jaguar" word node is already in the positive category.

#### Steps:

- 1. The user enters "car" into WSS08 and a node is added by the program for this part of the query.
- 2. The user puts this into the positive category (so there are now two nodes in the positive category).
- 3. The user submits this query.
- 4. The user browses the results created by this search.

#### Other: Exception:

1. There are no results for the search, so the user is informed of that outcome.

**4. Use Case:** The user wants to do a search where they have key words which they know they do not want included in the results.

**Example:** The user is aware that the word "Jaguar" is also a name for a group of large cats, so they want the search to use this information so that search results are more in line with what they want.

**Assumptions:** The user has already started the searching process and a "Jaguar" word node is already in the positive category.

#### Steps:

- 1. The user enters "cat" into WSS08 and a node is created by the program for this part of the query.
- 2. The user puts this into the negative category.
- 3. The user submits this query.
- 4. The user browses the results created by this search.

#### Other: Exception:

- 1. There are no results for the search, so the user is informed of that outcome.
- 2. There are two identical nodes but one is in the positive category and one in the negative category (i.e. a contradiction), the user should be informed of this.

5. Use Case: The user wants to view a previous search result.

**Example:** The user wants to view results of a search on older Jaguar cars.

Assumptions: This search has been already done by the user in the past.

# Steps:

1. The user selects a previous search.

- 2. This search is added to the query.
- 3. The user submits this query.
- 4. The user browses the results created by this search.

#### Other: Limitation:

1. There will be some restriction on how many results are kept in the memory.

6. Use Case: The user wants to view an actual wikipedia page from the search results.

**Example:** The user sees a wikipedia page on Jaguar cars that they would like to view.

**Assumptions:** The search has already been performed and the user is viewing the results.

#### Steps:

- 1. The user hovers over a wikipedia document node and a description of the page is shown.
- 2. The user actions on this node and that wikipedia page is displayed.
- 3. The user is able to close this page and go back to the WSS08 program which will still be displaying that search.

Other: N.A.

**7. Use Case:** The user wants to view a word definition in WordNet (the word is found from the results).

**Example:** The word "luxury" comes up as one of the results and the user would like to know what this means.

**Assumptions:** The search has already been performed and the user is viewing the results.

#### Steps:

- 1. The user hovers over a word node and that word is shown.
- 2. The user actions on this node and WordNet is displayed.
- 3. The user is able to close this page and go back to the WSS08 program which will still be displaying that search.

#### Other: Exception:

1. WordNet does not have a definition for the word.

8. Use Case: The user wants to view a node result as a new query.

**Example:** The user wants to see results about a wikipedia page (about Jaguar cars) that has come up in the results.

**Assumptions:** The user has already performed the search and the user is viewing the results.

#### Steps:

- 1. User selects the page that they want to perform another query about and choose an option to make this a new query.
- 2. The user submits this query.
- 3. The user browses the results.

# Other: Exceptions:

1. There are no results for the search, so the user is informed of that outcome.

9. Use Case: The user has found results that they are not interested in.

**Example:** The user is interested in Jaguar cars, however results about Jaguar cats have came up and they do not want these.

**Assumptions:** The user has already performed the search and the user is viewing the results.

#### Steps:

- 1. The user selects the nodes that they do not want.
- 2. The user actions to put these selected results into a negative category.
- 3. The search results are updated to reflect these changes.

# Other: Exception:

1. There is nothing left to display after too many things in the negative category.

**10. Use Case:** The user wants to narrow the results into what they are interested in.

**Example:** The user has found good results about Jaguar cars and want to use these results to help refine the search.

**Assumptions:** The user has already performed the search and the user is viewing the results.

# Steps:

- 1. The user selects the nodes that they do want.
- 2. The user actions to put these selected results into a positive category.
- 3. The search results are updated to reflect these changes.

# Other: N.A.

**11. Use Case:** The user would like to get rid of some results but they do not want to influence the rest of search.

**Example:** The user would like it so that certain nodes about 1972 XJ6 Jaguars are not displayed, but would still like results about other 1972 Jaguars.

**Assumptions:**The user has already performed the search and the user is viewing the results.

#### Steps:

- 1. The user actions to get rid of the 1972 XJ6 Jaguar results.
- 2. These results are removed from the screen.
- 3. The results are updated.

#### Other: Exception:

1. There is nothing left to display.

**12. Use Case:** The user wants to abandon a search so that it is not kept in memory.

**Example:** The user has performed a complex search but realize that they have gone down the wrong path and are now way off track. They decide to abandon this search and don't want the program to remember these results.

#### Assumptions: See above.

Steps:

- 1. The user actions to choose an option that aborts this search without saving the results.
- 2. The user is returned to the starting state.

**13. Use Case:** The user wants to save a search manually.

**Example:** The user has performed a complex search about 1972 Jaguars and would like to review this at a later stage. They would also like to continue modifying this search, meaning that they can not rely on the programs auto save. **Assumptions:** See above.

#### Steps:

1. The user selects an option to manually save this search.

**14. Use Case:** The user wants to delete their previous search history.

**Example:** The user has performed many searches and would like to free up some space.

Assumptions: See above.

# Steps:

- 1. The user actions to choose an option that deletes the history.
- 2. The user actions to confirm this choice and the history is deleted.

**15. Use Case:** The user only wants to view nodes of a certain type.

**Example:** The user wants to view wikipedia pages (and only wikipedia pages) on Jaguars. **Assumptions:** N.A.

#### Steps:

- 1. User types the keyword "Jaguar" into WSS08 and a node is added for this.
- 2. The user selects and option so that only wikipedia pages will be displayed.
- 3. The user submits this query.
- 4. The user browses the results (which are only wikipedia pages).

#### Other: Exception:

1. There are no results for the search, so the user is informed of that outcome.

# **16. Use Case:** The user wants help.

**Example:** The user is unfamiliar with this program and needs help with the program.

# Assumptions: N.A.

# Steps:

1. The user selects help and is provided with some text that will help them.