



Assignment 5

General

- Purpose: Build an application allowing users to search for information using different search engines
- Total score: 80 points
- Objectives
 - To get familiar with web services
 - To get familiar with AspectJ
- Due: 5/1/2012
- Evaluation method: demonstration
- Team work: team of two students

Search Engines

- Bing: <http://www.bing.com/toolbox/bingdeveloper/>
- Google Custom Search:
http://code.google.com/apis/customsearch/docs/dev_guide.html
 - Use REST service
 - Create a custom search engine
 - Provide an arbitrary URL when registering
 - Choose “Search the entire web but emphasize included sites” to search entire web

Google Custom Search

[Business settings](#)

[Advanced](#)

[Admin accounts](#)

[Audit Log](#)

[Preview](#)

[Statistics](#)

Resources

[Help Center](#)

[Help forum](#)

[Support](#)

[Blog](#)

[Developer documentation](#)

[Terms of service](#)

Google™ Custom Search

Search

Language settings

Search engine language: English

Transliteration phonetically converts words written in one script into another. The query is converted into its phonetic equivalent in the destination script. [Learn more](#).

Note: This feature is not available with the Search element.

Transliteration: ☐ On ☒ Off

Amharic
Arabic
Bengali
Chinese
Greek

Search engine encoding: Unicode (UTF-8)

Save Changes

Cancel

Search Preferences

How to search included sites: ☐ Search only included sites.
☒ Search the entire web but emphasize included sites.

☐ Enable image search.

Save Changes

Cancel

Requirements

- A web application
- Web server: Apache, recommended
- Language: Java, recommended
- Environment: your computer

Requirements

■ Functional requirements

- ❑ Users shall search results on web by entering a query
- ❑ Users shall view a list of search results
- ❑ Users shall click on a result to see detail
- ❑ Each search result should include
 - Title, link, description, source (from which search engine)

■ Non-functional requirements

- ❑ Log all exceptions and user requests using Aspects
- ❑ Number of actions performed should be minimized
- ❑ Web page should be simple and easy to use
- ❑ Different elements in search results should be colored to easy to view
- ❑ Ads should be eliminated
- ❑ Duplicates must be eliminated

Extra credit

- Use Google Translate API to translate all titles into Vietnamese
- Credit: 2% out of total 10% extra credit