GUI Thai-SEU

SimpleSpecification V0.3

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1 Introduction

1.1 Purpose

Expected Result is a graphical user interface (GUI), which offers the possibility to enter search terms and to get a structured result with clusters and a result set.
The user should get offered best satisfying results, which are

- ranked in a challenging way
- as fresh as possible (there should be an intelligent synchronization)

A speciality is, that search terms could be entered in Thai, and that only Thai web pages get searched and given back.
The duration of the project is from November 2007 to March 2008.

1.2 Document Conventions

Have to be defined by the project.

1.3 Intended Audience and Reading Suggestions

This documentation is basic for the project and should be read by each participant student.

1.4 Project Scope

It should be possible to allow the user to enter different search terms and to get an appropriate set of results.
Additionally the results should be clustered.

1.5 References

One possible idea of realization is shown by Carrot Clustering Engine at http://project.carrot2.org/
This document follows the Software Requirements Specification template by Karl E. Wiegers.

2 Overall Description

2.1 Product Perspective

GUI Thai-SEU is part of a new product “Thai-SEU”, combining the work of different MasterThesis- and PhD-Students in MIKE-lab at Department of Computer Engineering at Kasetsart University.

2.2 Product Features

Important features are

1. a comfortable easy-to-use search entry field
2. he possibility to enter Thai search terms, and
3. a well-structured feed back,
4. additionally with clustering-information to have easy access to the requested information.
5. Differentiation of regular search and expert search.

2.3 User Classes and Characteristics

- User: Regularly User
- Developer: .Developer, who gets more information for optimizing research (like system configuration etc.)

2.4 Operating Environment

The software should work on PCs and Laptops using Microsoft Operation Systems like XP or Vista, and Linux, and on Workstations using UNIX-Derivatives.

For testing purposes we use mainly the XP or Vista (or better) operating system, but it should be tested on Linux and UNIX-systems as well.

2.5 Design and Implementation Constraints

The software should be easy accessible in the Internet as a webpage, it should follow GUI-guidelines to guarantee an user friendly access.
For testing purpose a stand-alone-application is possible without internet connection.

2.6 User Documentation

A user manual and help should be available. Help and Guidelines should be available via a Link from the website.

2.7 Assumptions and Dependencies

There should be no dependency to other programs.

3 System Features

This chapter describes the Business Processes and the Use Cases of the systems.

3.1 Basic search

3.2 Thai basic search

3.3 Expert search

3.4 Request to restructure cluster

3.5 Choosing a proposed cluster

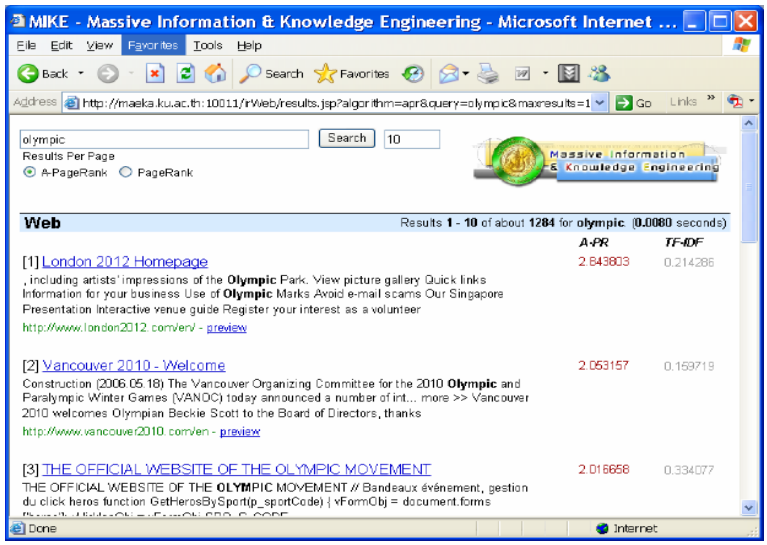
3.6 Help

3.7 (Information) request / Bug report

4 External Interface Requirements

4.1 User Interfaces

Suggestion:



4.2 Hardware Interfaces

Not defined.

4.3 Software Interfaces

Connection to package “Search-Service” of Thai-SEU.

4.4 Communications Interfaces

Http-Connection to Thai-SEU.

5 Nonfunctional Requirements

5.1 Performance Requirements

Maximum 4 seconds processing time of an user request.
No significant performance difference because of number of users who use the application parallel (Limit 5,000 User).

Client environment is not considered.

5.2 Safety Requirements

No side effects, should not damage anything on a computer.

5.3 Security Requirements

Respect of the privacy of an user.

5.4 Software Quality Attributes

Adaptability	it should be usable for other software projects
Availability	Website should be accessible at least 23 hours a day
Correctness	The shown results should fit in the best way to the search request.
Flexibility	New requirements should be easily realized
Interoperability	Communications with Thai-SEU specific services must work.
Maintainability	Configuration should be done easily and repeatable, even after shut-down of the application
Portability	It should be possible to run the system standalone (optional)
Reliability	It should not be possible to crack the website.
Reusability	The code should be programmed in the way, components could be reused by other applications
Robustness	The application should not generate a core dump.
Testability	The application must be testable.
Usability	Easy to use instead of easy to learn.

6 Other Requirements

The software should be written as open source.

Programming language to use is Java.
Development Environment is Eclipse.

Appendix A: Glossary

GUI = Graphical User Interface

Appendix B: Analysis Models

to be defined

Appendix C: Issues List

to be defined