

Software Requirements Specification for

Re-Exam DIT029

News screening system

Name: Ziyu Liu

Email: zyliu810@gmail.com

Personal Number: 19880810-2357

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1. Introduction

1.1 Purpose

The purpose of this document is to present a detailed description of the News Screening System. It will explain the purpose and features of the system, the the architecture and design of the system, what the system will do. This document is intended for both the stakeholders and the developers of the system and will be proposed to the Regional Historical Society for its approval.

1.2 Scope of Project

The system will be a News Screen System for a news reader to pickup the important news. The system will be designed to monitors two new sites and tries to identify important pieces of news. It compared the headline from the two site against each other and determine whether they are the same piece of news. If so the news will be presented to the user.

1.3 References

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications*.
IEEE Computer Society, 1998.

1.4 Overview of Document

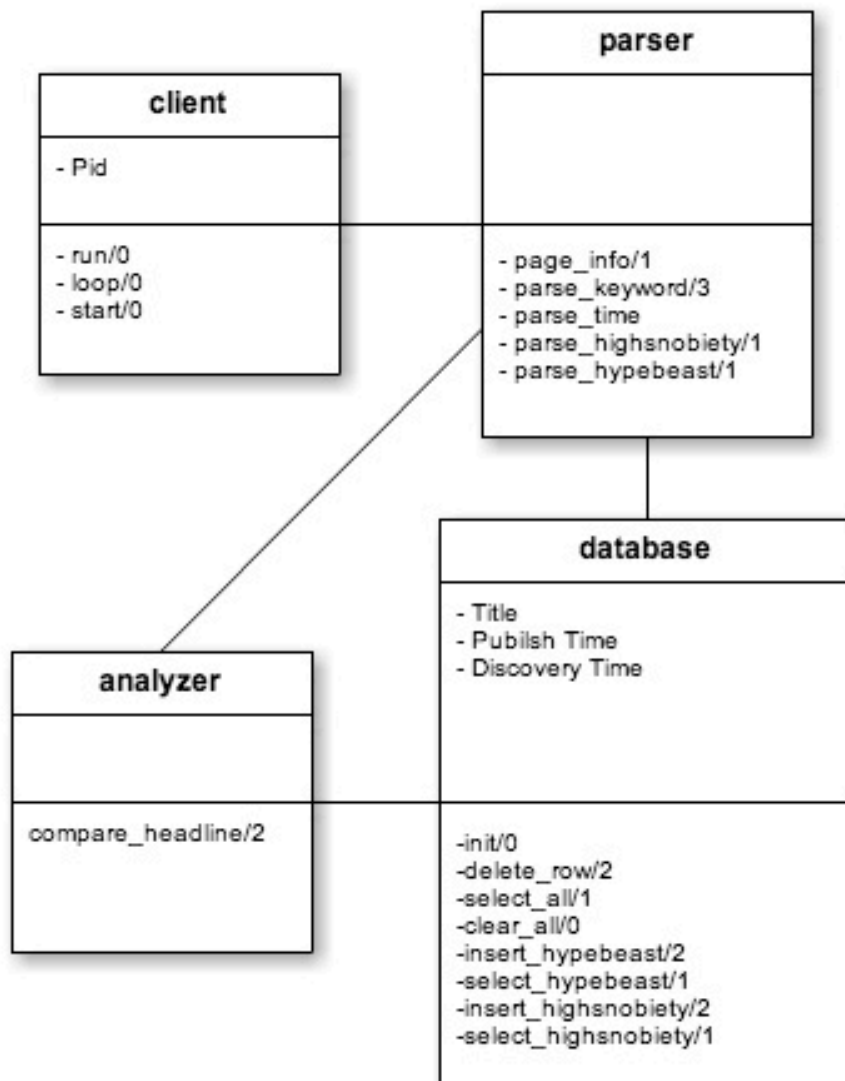
The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

2. Overall Description

2.1 System Architecture



The News Screening System include four modules which is client, parser, analyzer and database. It use page_info function to get the data from both website (hypebeast.com and highsnobiety.com).

Then extract the headline separately by using the function parse_highsnobiety and parse_hypebeast.

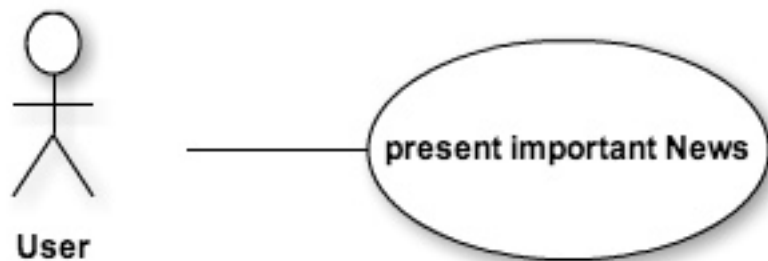
After that, the system store the headline and time to the database. Finally, we implement analyzer module to get the marching data.

2.2 *Functional Requirements Specification*

User Use case

Use case : **Present important News**

Diagram:



Brief Description

The User accesses the system, present the news that has been deemed to appear on both new sites as text in the console.

Initial Step-By-Step Description

Before this use case can be initiated, the User has already accessed the Internet.

1. The User compiles the whole system.
2. The User start the system by using command `client:run()`.
3. The system presents the matching news , publish time and discovery time to the user once a minute. The system will end atomically in 24 hours.

3. Requirements Specification

3.1 *Programming Language*

The system is implemented in Erlang.

3.2 *Data Sources*

The system use two fashion news site hypebeast and highsobiety as sources. They will update their news every few hours. Both news sites are accessed through html.

3.3 *Database*

The system use mnesia to store the headlines of each news item, the publish time and what time they were discovered by the system. Mnesia is a distributed, soft real-time database management system written in the Erlang programming language.

3.4 *Parser*

The system extract the information of each html page by parse the keyword around the headline and publish time

3.5 *Analyzer*

The matching mechanism of the analyzer is by counting the number of matching words of the two headline. There is no guarantee the result presented by the system is 100% correct.