

**Elephant Learn**

**A sentimental analysis system for Thai stock market**

Traceability Record

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# **Chapter I | Introduction**

## **1.1 Purpose**

Traceability refers to the ability to link product requirements back to stakeholders’ rationales and forward to corresponding design artifacts, code, and test cases. The purpose of the traceability record document is to show the relationship between user requirement specification, system requirement specification, use case, activity diagram, user interface, sequence diagram and test cases.

## **1.2 Project Scope**

“Elephant Learn” is a web application, which only has admin as single type of user of system, that be able to log in to the system. Admin can see the comments that has been scraped, the result of the sentiment analysis system, delete negative comments of the system. Admin is the highest privilege of the system which can access most of features of system.

## **1.3 Acronyms and Definitions**

**1.3.1 Acronyms**

**URS** User Requirement Specification

**SRS** Software Requirement Specification

**UC** Use Case

**AD** Activity Diagram

**SD** Sequence Diagram

**UI** User Interface

# **Chapter II | Traceability Record Table**

## **2.1 Table: URS-SRS-UC-AD-UI**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **URS** | **Description** | **SRS** | **UC** | **AD** | **UI** |
| 1 | URS-01 | Admin can view the retrieved comments from Pantip blog. | SRS-01, SRS-02, SRS-03 | UC-01 | AD-01 | UI-01, UI-02 |
| 2 | URS-02 | Admin can view the result of sentimental analysis of each comment in the topic. | SRS-04, SRS-05, SRS-06, SRS-07, SRS-08, SRS-09, SRS-10, SRS-11, SRS-12, SRS-13, SRS-14, SRS-15 | UC-02 | AD-02 | UI-03 |
| 3 | URS-03 | Admin can view the statistic of information, which is the number of users, date, and time of the comments. | SRS-16, SRS-17, SRS-18, SRS-19 | UC-03 | AD-03 | UI-04 |

## **2.2 User Requirement Specification (URS) – Software Requirement Specification (SRS)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **URS** | | | |
| **SRS** |  | 1 | 2 | 3 |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
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| 19 |  |  |  |

## **2.3 Table: URS-SD-CD-UTC-STC**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **URS** | **Description** | **SD** | **CD** | **UTC** | **STC** |
| 1 | URS-01 | Admin can view the retrieved comments from Pantip blog. | SD-01 | CD-01, CD-02, CD-03, CD-04, CD-05 | UTC-15, UTC-16 | STC-01 |
| 2 | URS-02 | Admin can view the result of sentimental analysis of each comment in the topic. | SD-02 | CD-06, CD-07, CD-08, CD-09, CD-10, CD-11, CD-12, CD-13, CD-14, CD-15 | UTC-1, UTC-2, UTC-3, UTC-4, UTC-5, UTC-6, UTC-7, UTC-8, UTC-9, UTC-10, UTC-11, UTC-12, UTC-13, UTC-14 | STC-02 |
| 3 | URS-03 | Admin can view the statistic of information, which is the number of users, date, and time of the comments. | SD-03 | CD-06, CD-16, CD-17, CD-18, CD-19 | UTC-17 | STC-03 |

# **Chapter III | Appendix**

**User Requirement Specification (URS)**

URS-01: Admin can view the retrieved comments from Pantip blog.

URS-02: Admin can view the result of sentimental analysis of each comment in the topic.

URS-03: Admin can view the statistic of information, which is the number of users, date, and time of the comments.

**Software Requirement Specification (SRS)**

SRS-01: The system shall be able to scrap comments from Pantip blog.

SRS-02: The system shall be able to save scraped comments as CSV file.

SRS-03: The system shall be able to open CSV file.

SRS-04: The system shall be able to receive the text data.

SRS-05: The system shall be able to do noise removal from text data.

SRS-06: The system shall be able to tokenize word from text data.

SRS-07: The system shall be able to do stop word processing from text data.

SRS-08: The system shall be able to do slang and apprehensive converting from text data.

SRS-09: The system shall be able to do word spelling correction from text data.

SRS-10: The system shall be able to do word stemming from text data.

SRS-11: The system shall be able to do word lemmatization from text data.

SRS-12: The system shall be able to build a model from text data.

SRS-13: The system shall be able to analyze data from the model.

SRS-14: The system shall be able to store the result of sentimental analysis in the database.

SRS-15: The system shall be able to provide a descriptive and predictive analysis result.

SRS-16: The system shall be able to receive the information.

SRS-17: The system shall be able to analyze the information.

SRS-18: The system shall be able to store the result of statistic information in the database.

SRS-19: The system shall display the result of the statistic on view statistic page.

**Usecase (UC)**

UC-01: View the retrieved comments from Pantip blog

UC-02: View the result of sentimental analysis

UC-03: View the statistic of information

**Activity Daigram (AD)**

AD-01: View the retrieved comments from Pantip blog

AD-02: View the result of sentimental analysis

AD-03: View the statistic of information

**User Interface (UI)**

UI-01: Home page

UI-02: View Result page

UI-03: View Statistic