Software Requirements Specification

Emotion Detection Through Text

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**SOFTWARE REQUIREMENT SPECIFICATIONS**

**1.1 Software Requirements and Specification**

A software requirements specification(SRS) for a software system is a complete description of the behavior of a system to be developed. In addition to a description of the software functions, the SRS also contains non-functional requirements. Software requirements are a sub-field of software engineering that deals with the elicitation, analysis, specification, and validation of requirements for software.

**1.1.1 Purpose**

The purpose of this document is to provide Software Requirement Specification for Emotion Finder: Detecting Emotion From Twitter, Audio and Textual Documents. The software requirement specification document enlists all necessary requirements for project development.

**1.1.2 Scope**

The software product produced is an application by name Emotion Finder: Detecting Emotion from Twitter, Audio and Textual Documents".

Emotion Detection is one of the most emerging issues in human machine interaction. Detecting emotional state of a person from textual data is an active research field along with recognizing emotions from facial and audio information. Several methods were given to recognize emotion from text in previous years. This project proposed a new architecture (a keyword based approach) to recognize emotions from text. In case of recognizing emotion from a piece of text document or a blog, any human can do this better than a machine only problem is he/she takes time.

Proposed emotion detector system takes a text document and the emotion word ontology as inputs and produces one of the six emotion classes (i.e. love, sadness, joy, fear and surprise, anger) as the output. Every input text contains some short stories which are firstly read and assigned an emotion class manually.

**1.1.3 Software Requirements**

* Operating System: Windows XP or higher
* JDK 1.6 or above
* Windows builder plug-in
* Eclipse

**1.1.4 Hardware Requirements**

* Processor: Intel Pentium 4 or higher
* RAM: Min 512MB
* Hard Disk: 40GB

**1.1.5 Functional Requirements AND Non-Functional Requirements.**

**Functional Requirements**

* The tool should build the emotion word ontology efficiently and effectively.
* The tool should allow the user to analyze the text for emotion in various form of input (Like file input, directory input etc).
* The user should be able to analyze the speech input for emotion.
* The user should also be able to pull the tweets from the specified twitter handle and the tool should be categorizing them into positive, negative, or neutral tweets.

**Non-Functional Requirements**

* The tool should be easy to access.
* The tool should provide an interactive user interface.
* The tool should never fail in the middle of operation.
* The tool should work consistently across the platforms.
* The response time of the tool should be acceptable.
* Each user’s activity should be separated from the other user’s activities**.**