**Software Requirements Specification**

1. **Introduction**

The goal of this project is to create SimpleMerge of which main functionality is to compare and merge the files. This document describes the requirements of this program.

1. **Use Cases**

UC1 Displaying at start-up

UC2 Loading

UC3 Editing

UC4 Saving

UC5 Comparing

UC6 Merging-Copy to Right

UC7 Merging-Copy to Left

**UC1 Flow of Events for the *Displaying at start-up***

* 1. Preconditions:

None.

* 1. Main Flow:

At start-up, a main window with two edit panels (side-by-side) is displayed. On top of each edit panel, there are buttons labeled with “Load”, “Edit”, “Save”.

* 1. Subflows:

None.

* 1. Alternative Flows:

None.

**UC2 Flow of Events for the *Loading***

* 1. Preconditions:

The user pressed a “Load” button.

* 1. Main Flow:

The program allows the user to choose a file in the file system, load the contents of the file, and displays the contents in the corresponding edit panel.

* 1. Subflows:

None.

* 1. Alternative Flows:

None.

**UC3 Flow of Events for the *Editing***

* 1. Preconditions:

The user pressed a “’Edit” button.

* 1. Main Flow:

The program allow the user to edit the strings shown in the edit panel.

* 1. Subflows:

None.

* 1. Alternative Flows:

None.

**UC4 Flow of Events for the *Saving***

* 1. Preconditions

The user pressed a “Save” button.

* 1. Main Flow:

The program save the edited content into the file.

* 1. Subflows:

None.

* 1. Alternative Flows:

None.

**UC5 Flow of Events for the *Comparing***

* 1. Preconditions

The user pressed a “Compare” button.

* 1. Main Flow:

The program displays the different lines with a colored font/background. The comparison is done line by line. Your comparison result should be same as the one generated from “diff” program. The “diff” program is a utility comparing two files using “Longest common subsequence(LCS)” algorithm.

* 1. Subflows:

None.

* 1. Alternative Flows:

None.

**UC6 Flow of Events for the *Merging-Copy to Right***

* 1. Preconditions

The user pressed a “Copy to Right” button after comparing.

* 1. Main Flow:

Copy the selected block in the left panel to the file shown in the right panel.

* 1. Subflows:

None.

* 1. Alternative Flows:

None.

**UC7 Flow of Events for the *Merging-Copy to Left***

* 1. Preconditions

The user pressed a “Copy to Right” button after comparing.

* 1. Main Flow:

Copy the selected block in the right panel to the file shown in the left panel.

* 1. Subflows:

None.

* 1. Alternative Flows:

None.

1. **Nonfunctional Requirements**

NR1. Usability

NR2. Reliability

NR3. Performance

NR4. Supportability

Constraints

All code development shall be done with the Java programming language.