COM1028 Software Engineering

Revised Requirements Part 2 Jamie Munro

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1. Introduction

This document presents a revised list of non-functional and functional requirements for my Code Snippet Manager project.

2. Revised Non-Functional Requirements

2.1 Portability

The system must be compatible with Windows, Linux and Macintosh OS X as these are the most popular development platforms.

3. Revised Functional Requirements

Mandatory Requirements

3.1 Functional Requirement 1

The system shall allow users to create code snippets by clicking the new snippet button.

3.2 Functional Requirement 2

Each snippet will have associated with it a title, description, programming language, date created and a set of tags.

3.3 Functional Requirement 3

The system will automatically set the date created field, but all other metadata fields and the code snippet itself must be set by the user.

3.4 Functional Requirement 4

The data must be stored permanently in a database.

3.5 Functional Requirement 5

All the code snippets must be displayed in the left most pane of the user interfaces, unless a search term has been entered.

3.6 Functional Requirement 6

The left most pane will be sorted by title, date created or programming language in ascending or descending order.

3.7 Functional Requirement 7

A drop-down list will be provided so the user can select which sorting option they want to use. Two buttons will be provided so the user can choose between ascending or descending order.

3.8 Functional Requirement 8

The user must be able to search for code snippet by title, description, programming language or tag. The results of the search will be displayed in the left most pane. The user will be able to clear the search by clicking a button.

3.9 Functional Requirement 9

The user will be able to select a snippet by clicking it in the left most pane.

3.10 Functional Requirement 10

Once selected, a snippet can be deleted by clicking the delete button.

3.11 Functional Requirement 11

Once selected, the title of the snippet along with the date it was created will be displayed above the upper right pane. The user will be able to edit the title, and any changes will be saved automatically, however the system will not allow the user to leave the title blank. The date of creation field will not be mutable.

3.12 Functional Requirement 12

Once selected, the code of the snippet will be displayed in the upper right pane.

3.13 Functional Requirement 13

Code in the upper right pane will be editable, and changes will be saved automatically.

Optional Requirements

3.14 Functional Requirement 14

Editing tools will include text highlighting and find and replace tools.

3.15 Functional Requirement 15

The code in the upper right pane might be highlighted according to the syntax of the programming language.

3.16 Functional Requirement 16

Syntax specifications for each supported programming language will be supplied in text files. Users might be able to create and use their own specifications.

3.16 Functional Requirement 16

The description, programming language and any tags will be displayed in the lower right pane. These details will be editable by the user, and any changes will be saved automatically.

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1. Justification of Requirements

Non-Functional Requirement "Logical Database Requirements" was removed from the requirements specification as all the data operations that the program executes are performed whilst the data is kept within a List in the program memory. This means that it is more efficient to write a representation of this list to the disk when the program closes, and to read from this representation when the program starts. In addition to efficiency gains, this is also beneficial as the program does not have to include a database engine.

Functional Requirement 13 in the original software requirement specification was divided into two separate requirements to reflect the separation of saving and editing tools. The functional requirements were then divided into two groups, optional and mandatory requirements. Mandatory requirements are deemed to be vital to the operation of the program. Find and replace tools and syntax highlighting were deemed less important then the other requirements and so were made optional. This is because the program still performs its function well without these features.