

Institute of Technology, Carlow
B.Sc. in Software Engineering

CW228

Project Plan

C Maintenance Tool

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1. Plan

No	Task Name	Duration in days	Start	Finish
1	Research Manual	42	05.10.09	01.12.09
2	Functional Specification	8	02.12.09	11.12.09
3	Project Plan	4	08.12.09	11.12.09
4	Design Manual	10	04.01.10	15.01.10
5	Web Page	7	07.01.10	15.01.10
6	CMT-Version 1	31	14.12.09	25.01.10
7	find and implement datastructure	10	14.12.09	25.12.09
8	adjust grammar/ANTLR handling	7	28.12.09	05.01.10
9	implement output in textfile	7	06.01.10	14.01.10
10	implement testing function/ rename all	7	15.01.10	25.01.10
11	Project Presentation	0	15.02.10	15.02.10
12	CMT-Version 2	24	26.01.10	26.02.10
13	adjust grammar to handle inclusion	10	26.01.10	08.02.10
14	implement handling of several input files	10	09.02.10	22.02.10
15	implement output in html file	4	23.02.10	26.02.10
16	CMT-Version 3	23	01.03.10	31.03.10
17	adjust grammar to handle macros and conditional directives	16	01.03.10	22.03.10
18	testing	7	23.03.10	31.03.10
19	CMT-Plugin-Version	10	01.04.10	14.04.10
20	get to know PDE for eclipse	5	01.04.10	07.04.10
21	implement plugin for eclipse	5	08.04.10	14.04.10
22	User Manual	7	01.03.10	09.03.10
23	Project Report	7	01.03.10	09.03.10
24	Project installation disks/CD	2	15.04.10	16.04.10
25	Demo	0	16.04.10	16.04.10

2. Description of Tasks

2.1 Versions

CMT- Version 1:

- analyse sourcefile: one C-File to be crossreferenced, no preprocessing, has to handle scope, just variables to be referenced
- output just as textfile
- rename all: facility of renaming all identifiers for testing functionality of the tool

CMT- Version 2:

- analyse sourcefile: has to handle several C-Files (preprocessing: #include), also functionnames to be referenced
- create html: output also as html file
- rename identifier: renaming of certain identifiers

CMT- Version 3:

- final version
- analyse sourcefile: has to handle preprocessing: macros and conditional directives, renaming of those

CMT-Plugin-Version:

- realisation depends on whether the project is in time
- plugin for eclipse

2.2 Detailed Task Descriptions

2.2.1 CMT-Version 1

find and implement datastructure

A suitable datastructure must be found to store all identifier efficiently.

adjust grammar/Antlr handling

The handling of the parser generator Antlr and its interface AntlrWorks will be practiced and how to use the given C grammar. Also check whether the grammar is false.

implement output in textfile

Each identifier stored in the datastructure will be written in a textfile, so that the information is persistent.

implement testing function/ rename all

To check if the tool works fine, the facility of automatically renaming each identifier needs to be implemented.

2.2.2 CMT-Version 2

adjust grammar to handle inclusion

A rule must be added to handle file inclusion with '#include'.

implement handling of several input files

The tool has to work with several '#include' statements, therefore the rule to handle one '#include' statement has to be expanded.

implement output in html file

An easier to read and nicer output for the user will be given by using html format. Therefore the textfile has to be translated into an html file.

2.2.3 CMT-Version 3

adjust grammar to handle macros and conditional directives

A rule must be added to handle macros introduced by '#define' and conditional directives introduced by '#if'

testing

The entire Version is tested with different input files. The testing part is also meant to be a buffer, if the project isn't in time anymore.

2.2.4 CMT-Plugin-Version

get to know PDE for eclipse

PDE is a development kit to create plugins for eclipse.

implement plugin for eclipse

A further implementation of the tool will be provided as a plugin for eclipse. This section is also meant to be a buffer, if the project is not in time anymore.

3. Gantt Chart

