Software Requirem
Specification

(SRS)

For

Table of Contents

1.0 INTRODUCTION

1.1 Scope

The project **COCOMO II Simulator** is developed to automate the
of software cost estimation using **COCOMO II** model. Software c
involves determination of estimates of **Effort**(in PM), **Developme**
Development Cost. Project managers in IT industry often estimate
effort and development time to plan further actions.

The simulator calculates Effort using SLOC with the help of 17 Co
Scale drivers rated by user according to the nature of the project. Si
provides feature for function Point estimation and calculation of SL
function and language Factor.

This document gathers all the requirement pertaining to the above v

2.0 GENERAL REQUIREMENTS

2.1 Functionalities

The project "**COCOMO II Simlator**" is supposed to perform the
functionalities:

1. **Function Point Calculation:** User will have to assign a comple
   average, difficult) to 5 function types [Table 4.1]. A set of questi
   asked to assign values to 14 complexity factors. Answers from u
   from 0 (no influence) to 5 (strong influence).

The values of A, B, C and D are as taken as per COCOMO II.20000

$$A = 2.94$$

$$B = 0.91$$

$$C = 3.67$$

$$D = 0.28$$

2.2 Use Case Model Diagram

2.3 Interfaces

N/A

2.4 General Constraints

The software will be tested on following operating systems only:

- Ubuntu 16.04
- Windows 10

Support for other operating system is not guaranteed.

3.0 Definition, Acronyms, and Abbreviations

- COCOMO (Constructive Cost Model): It is a procedural softwa model developed by Barry Boehem.
- SLOC (System Lines of Code)
- DevT (Development time):
- FP (Function Point): A function point is a "unit of measureme amount of business functionality an information system (as to a user.
- PM (Person Month): Denotion of effort.

4.0 Appendices

Table 4.1

S.No	Function Type	Simple	Average
1	Internal Logical File	7	10
2	External Internal File	5	7
3	External Input	3	4

Table 4.3

S.No	Language	
1	Ada	
2	Assembly	
3	Basic	
4	C	
5	C++	
6	Java	
7	HTML 3.0	
8	Pascal	
9	Perl	
10	Spreadsheet	

Table 4.5

S.No	Software Cost Driver
	Product
1	Required Software Reliability
2	Data Base Size
3	Product Complexity
4	Developed for Reusability
5	Documentation Match to Lifecycle Nee
	Personnel
6	Analyst Capability

5.0 References

- https://en.wikipedia.org/wiki/COCOMO
- https://www.researchgate.net/publication/315741509_Softwa
  Estimation_Using_COCOMO_II_Model
- https://www.geeksforgeeks.org/software-engineering-cocomo
- Roger S.Pressman *Software engineering : a practitioner's app*