

EXPERIMENT 5

Experiment Name: Estimating Project Cost Using COCOMO Model in Software Engineering

Objective: The objective of this lab experiment is to introduce students to COCOMO (Constructive Cost Model) estimation technique for estimating software project cost and effort. Students will gain practical experience in using the COCOMO model to estimate the development effort, duration, and resources required for a sample software project

Introduction: COCOMO is a widely used algorithmic cost estimation model in software engineering. It helps quantify the effort and resources needed for software development, on project size, complexity, and other factors.

Below is the COCOMO model:

	A	B	C	D
Organic	2.4	1.05	2.5	0.38
Semi- Detached	3	1.12	2.5	0.35
Embedded	3.6	1.2	2.5	0.32
KLOC ==>	0.046			
Basic COCOMO				
	E	D	People Required = E/D	Productivity of Software
Organic	0.09464702445	1.020611965	0.09273556229	0.4860163356
Semi- Detached	0.09536961429	1.098331699	0.08683134103	0.4823339209
Embedded	0.08945649927	1.154664507	0.07747401842	0.5142164111
Intermediate COCOMO				
Application Experience	1.13		Programming Experience	1.07
Effort Adjustment Factor ==>	1.2091			
	E	D	People Required = E/D	Productivity of Software
Organic	0.1144377173	1.096973912	0.1043212751	0.4019653756
Semi- Detached	0.1153114006	1.173803217	0.09823742091	0.3989197924
Embedded	0.1081618533	1.226997639	0.08815163928	0.4252885709