

Appendix I: COCOMO constants

System type	A	B	I	J
Organic (broadly, information systems)	2.4	1.05	2.5	0.38
Semi-detached	3.0	1.12	2.5	0.35
Embedded (broadly, real-time)	3.6	1.20	2.5	0.32

Appendix II: Scale factor values

Effort= $A(\text{size})^{(sf)} \times (em1) \times (em2) \times (em3) \dots$

Development time (D) = $i \times (\text{effort})^J$ months

$sf = 1.01 + 0.01 \times \Sigma \text{ scale factors}$

COCOMO II Scale factor values

Driver	Very low	Low	Nominal	High	Very high	Extra high
PREC	6.20	4.96	3.72	2.48	1.24	0.00
FLEX	5.07	4.05	3.04	2.03	1.01	0.00
RESL	7.07	5.65	4.24	2.83	1.41	0.00
TEAM	5.48	4.38	3.29	2.19	1.10	0.00
PMAT	7.80	6.24	4.68	3.12	1.56	0.00

PREC = Precedentedness

FLEX = Development flexibility

RESL = Architecture/risk resolution

TEAM = Team cohesion

PMAT = Process maturity

Appendix III: Table for converting functions points to LOC

Language	SLOC / UFP
Ada	71
AI Shell	49
APL	32
Assembly	320
Assembly (Macro)	213
ANSI/Quick/Turbo Basic	64
Basic - Compiled	91
Basic - Interpreted	128
C	128
C++	29
ANSI Cobol 85	91
Fortan 77	105
Forth	64
Jovial	105
Lisp	64
Modula 2	80
Pascal	91
Prolog	64
Report Generator	80
Spreadsheet	6

Appendix IV: Assessing the Risk to the schedule with PERT

Expected duration of an activity/task: $t_e = (a + 4m + b) / 6$

Standard deviation of an activity/task: $s = (b - a) / 6$

Standard deviation of a project event

$$S = \sqrt{((s_A)^2 + (s_B)^2 + (s_C)^2 \dots + (s_N)^2)} = \sqrt{\sum_{i \in Task} s_i^2}$$

Z value:

$$Z = \frac{Target\ duration - Expected\ duration}{S}$$

Appendix V: Graph of Z-values

