"COCOMO (Constructive Cost Model)"

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COCOMO (Constructive Cost Model)

Based on the **Source Line Of Code (SLOC)** characteristic and operates according to the following equations:

- Effort = PM = Coefficient$_{<Effort\ Factor>}$*(SLOC/1000)^P

$$= 2.4 * (7500 /1000)\text{^}1.05$$

$$= 19.9 \approx 20 \text{ person-months}$$

Software Project Type	Coefficient \<Effort Factor\>	P	T
Organic	2.4	1.05	0.38
Semi-detached	3.0	1.12	0.35
Embedded	3.6	1.20	0.32

- Development time = DM = 2.50*(PM)^T

$$= 2.50 * 20\text{^}0.38$$

$$= 7.80 \approx 8$$

Development time is 8 months=176 days=(176*8)hrs=1408hrs

[8hours per working day]

- Required number of people = ST = PM/DM

$$= 20/8$$

$$= 2.5 \approx 3$$

Required number of people is 3

Budgeting:

Number of people = 3

Working hours per month = (5*8*4)hours = 160 hours

[1 week = 5 working days; 1 day = 8 working hours; 1 month = 4 weeks]

Salary per month is 200000tk

Salary per hour is (200000/160)tk = 1250tk

Costs	Amount
Human Resource Salary	(200000*8*3)tk = 4800000 tk
Rent Fee	(30000*8)tk = 240000tk
Hardware Fee	(100000*8)tk = 800000tk
Maintenance	(2500*8*8)tk = 160000tk [8 hours service per month; 4 months advance]
Electricity bill	(60000*8)tk = 480000tk
Transport cost	(12000*8)tk = 96000tk
Profit (25%)	1644000tk
Others	50000tk
Total	5114000tk