# Waste Control System

***Effort Estimation & Budgeting***

Our Project model is an Organic model. In Organic model,

|  |  |  |  |
| --- | --- | --- | --- |
| **Software Project type** | **Coefficient**  **<Effort factor>** | **P**  **(Project Complexity)** | **T**  **(SLOC-dependent coefficient)** |
| Organic | 2.4 | 1.05 | 0.38 |

Here,

SLOC (Source lines of code) = 12000 12000 SLOC/1000 = 12k SLOC

Now,

Effort =PM= Coefficient <Effort Factor> \*(SLOC/1000) ^P

=2.4\*(12) ^1.05

=**33** person

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

= 2.50\* (33) ^0.38

= **9** months Required number of people = ST = PM/DM

= 33/9

= 3.6 members

= **4 members** (approx.)

For a person,

Working hours per day = **6** hours Salary per month = **80,000** BDT

In a month working days = **20** days

So, working hours in a month = 20\*6 = **120** hours

Now, Per hour salary in a month = 80000/120 = **670** BDT In 9 months working hours= 120\*9 = **1080** hours

For the project = 1080\*670 = 7,23,600 = **7,25,000** BDT (approx.)

Requirement analysis = 20 days \* 9 hours = **180** hours Expense for requirement analysis = 180\*500 = **90000** BDT Expense for travel = **30000** BDT

Expense for office rent = **1,50,000** BDT Expense for electricity & gas bill = **35000** BDT

Expense for training and hardware = **1,50,000** BDT Total hours for 6-month maintenance= 6\*18 = **108** hours Expense for Maintenance = 108\*1500 = **1,62,000** BDT

Total cost = 725000+90000+30000+150000+35000+150000+162000

=13,42,000 = 13,50,000 BDT(approx.)

Bill = Total cost + 20%

= 1350000 + 270000

= 16,20,000 BDT (approx.)