

**AMERICAN INTERNATIONAL
UNIVERSITY-BANGLADESH**
Faculty of Science & Technology



Project Title:	MEDICARE		
Project No:	01	Date of Submission:	7 April 2021
Course Title:	SOFTWARE ENGINEERING		
Course Code:	CSC3112	Section:	F
Semester:	Spring 2021-2022	Degree Program:	CSE
Course Teacher:	DR. MD. RAZIB HAYAT KHAN		

Group No: 04

ID

NAME

19-41168-2	Md. Mehedi Hasan
19-41178-2	Sadika Afrin Meen
19-41191-2	Ashiqur Rahman
19-41212-2	Md. Ahsan Nayeem

Constructive Model, CoCoMo, For Medicare System:

Project type: Semi-detached

SLOC = 10000

Coefficient<effort factor> =3

P= 1.12

Effort= PM= Coefficient<effort factor> *(SLOC/1000)^P

$$=3*(10000/1000)^{1.12}=39.54$$

Development Time= DM= 2.50*(PM)^T

$$=2.50*(39.54)^{0.35}=9.05$$

Required number of people =ST= PM/DM = 39.54/9.05=4.36

Budgeting:

- **Development salary 9 month : Considering 600 taka per developer**

$$600*1584=950400 \text{ taka}$$

- **Requirement analysis : Hourly=400 taka**

$$\text{Analysis expense}=400*176=70400 \text{ taka}$$

- **Traspotation cost : 15500 taka**
- **Training and hardware cost : 150000 taka**
- **Rent expense : 18000*9=162000 taka**
- **Total utilities : 60000 taka**
- **Maintenance cost : Expense per hour =1500 taka**

Extraa hour need for maintenance 80 hours

$$\text{Total maintenance} = 80 * 1500=120000 \text{ taka}$$

- **Other human resource : Project manager = $1 * 28000 * 9 = 252000$ taka**

Accountant = $1 * 22000 * 9 = 198000$ taka

Technical staff = $2 * 15000 * 9 = 270000$ taka

Total cost = $252000 + 198000 + 270000 = 720000$ taka

- **Total estimate expense:**

**$950400 + 70400 + 15500 + 150000 + 162000 + 60000 + 120000 + 720000 = 2248300$
taka**

- **Profit : $2248300 * 25\% = 562075$ taka**

- **Final project budget: $2248300 + 562075 = 2810375$ taka**