



## INTERNATIONAL

# **UNIVERSITY-BANGLADESH**

Assignment Title:	Activity Scheduling and Resource Allocation			
Assignment No:	08		Date of Submission:	2 May 2024
Course Title:	Software Engineering			
Course Code:	CSC3112		Section:	J
Semester:	Spring	2023-24	Course Teacher:	TONNY SHEKHA KAR

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## **Earned Value Analysis**

```
Effort estimated = 15.74 * 22
= 346 person-day
Total task = 51
EVA conduct date: 12/02/2023
```

8 tasks have been completed but the project schedule indicates that 11 tasks should have been completed in that time.

#### **Task Planned effort Actual effort**

```
1 11.0 12.5
2 12.0 16.0
3 17.0 11.8
4 8.6 10.2
So here, BAC = 346 BCWS = 110.4
BCWP = 84.4 ACWP = 88
BCWP ACWP
5 5.8 5.0
6 14.0 BCWS 16.0
7 9.0 10.0
8 7.0 6.5
9 12.8
10 4.6
11 8.6
SPI = BCWP / BCWS = 84.4 / 110.4 = 0.76449
SV = BCWP - BCWS = 84.4 - 110.4 = -26 person-day
CPI = BCWP / ACWP = 84.4 / 88 = 0.95909
CV = BCWP - ACWP = 84.4 - 88 = -3.6 person-day
% Schedule for completion = BCWS / BAC
= 110.4 / 3
= 31.90\%
[ % of work schedule to be done at this time]
% Complete = BCWP / BAC
= 84.4 / 346
= 24.39\%
[ % of work completed at this time]
```

### **Risk Estimation**

Risks	Category	Probability	Impact
Size estimated might be lower than expectation	PS	55%	2
Number of users might be higher than expectation	PS	25%	3
Larger number of users than planned	PS	35%	3
Less reuse than planned	PS	70%	2
Deviation from define software development process	PR	40%	2
Delivery might exceed deadline	BU	45%	2
Funding will be lost	CU	40%	1
Project budget might exceed expectation	CU	40%	1
Unavailability of necessary tools	DE	70%	1
Personnel shortfalls	ST	20%	4
Developing the wrong software functions	TE	5%	1
Developing the wrong user interface	TE	5%	1
Late changes to requirements	BU	30%	3
Development technically too difficult	ST	10%	2
Security Vulnerabilities	TE	30%	2

Inexperienced Staff	ST	35%	2
Important staff are present on development site parttime	ST	10%	4
Interface design might not be user friendly	DE	25%	3
Ethical Dilemma	BU	30%	2
Evolving Landscape	CU	40%	4

# Impact values:

1— catastrophic

2—critical

3—marginal

4—negligible