Software Project Management

INF3708

Assignment 04: Due date 28 April 2017 Compulsory

ASSIGNMENT 04 - SEMESTER 1

Total Mark: 55 Marks = 100%

Mark weight: 30%

ASSIGNMENT 04	
Due date	28 April 2017
Study material	Hughes & Cotterell: Chapters 8 and 9
Total marks	55 marks

If your assignment is late, please DO NOT PHONE OR E-MAIL asking for an extension but include a note in your assignment stating the reason for the late submission and we will decide whether or not it will be marked.

Instructions:

1. **Download and complete** this assignment and submit online in a .pdf format by performing the calculations.

2. The following unique number has to be assigned to the assignment:

UNIQUE NUMBER:
716909

3. Show all your working (calculations).

4. This assignment consists of 4 questions.

Questions from Chapter 8 and 9

Question 1 **[10 Marks]**

A resource is any item or person required for the execution of the project. As a developing project manager involved in a team of software development project in your organization (Right solution), you understand the important of allocating individual members of staff to activities as early as possible, as it can lead your team to revise estimate of their duration. Your team has mandated you to list and discuss possible factors that need to be considered when allocating individuals to tasks. (10)

Question 2 **[20 Marks]**

Calculating the cost of Right Solution software development project should be straightforward because the organization has standard cost figures for their staff and other resources. The project is scheduled to be finished in four months (120 days including installation and training of staff) since it is a big project. The staff cost for the Right Solution Project is shown in table 1 below. Peter is the main project manager. Due to planning and other post project review he spends 17 days extra on the project. "You" (call yourself anything) are the developing project manager assisting Peter in the Right Solution project and you only spent 5 day extra. The project overhead cost amount to R500 each day. Emma is scheduled to work daily for the duration of the project. Bester and Steve are training and support specialist so their services would only be needed for only the fourth month (the last 30 days). The remaining project teams members like John (System Design), Ana (Programmer) and Khumo (System tester) will work for three months (90 days) after the first month (30 day) of requirement analysis by Smith.

Staff member	Daily cost
Peter	R1000
"You" (the name here depends on what you call yourself)	R450
John	R500
Ana	R550
Emma	R550
Bester	R200
Steve	R200
Khumo	R400
Smith	R400

Table1 for Question 2

Based on the information in table 1, calculate the total cost for the Right Solution software development project. Show all your calculation. (20)

QUESTION 3 [16]

With the information on the table 2, Draw an activity-on-node network. Calculate earliest start (ES) and Latest finish (LF).

Activity	Description	Resources	Duration (working days)	Precedents
A	Requirement analysis	System analyst	5	None
B	System design	System Designer	9	A
C	Programming	Programmer	4	None
D	Hardware installation	Hardware Installer	2	A
E	System testing	Tester	5	C
F	Training and Support	Trainer and supporters	6	B

Table 2 for question 3

3.1 One of the final results of resource allocation is "Resource Schedule" which shows the dates each resource will be required and the level of the requirement. Table 2 has activity description and resources that are needed per activity. Use the information on table 2 to draw **activity-on-node network,** include all the node calculates. Using a bar chart schedule the resources of this project to the activities plan drawn (i.e map out the resources indicated in column 3 of table 2 to the activity plan you draw). Other thing being equal, assume all resources are required only once and each activity has been scheduled to start at its earliest start date.

(10)

3.2 Why is it important to prioritize activities in projects? (2)

3.3 Discuss at least two ways of prioritizing activities. (4)

QUESTION 4 [9 Marks]

4.1 Differentiate between the various visualization methods discussed in Chapter 9 of your textbook.