CSCI814 IT Project Management
Week 5

In-class exercise: There are two in-class exercises for this week. Complete both exercises.

Exercise 1

The following exercise is a continuation based on the project that you have created in Week 4.

1. Add the following new resources
   Room, type=Material and standard rate = $1500. Then assign this resource to the task Conduct Training.

2. How is material type different from work type in resources?

3. What is the revised project cost?

4. Add the following fixed cost to the following tasks (hint: change the view to Cost Table):
   a. Build request for proposal - $5000
   b. Choose vendor - $1000
   c. Conduct training - $2000

5. What is the revised project cost?

6. Sharon Salavaria is given an increase in salary; her standard rate is now $65/hour, what is the revised project cost?

7. Microsoft Project calculates total task **work** as the sum of the work that all assigned resources are to perform on the task. Before you proceed, make sure that you are at the Task Sheet view. On the **View** tab, in the **Data** group, click **Tables**, and then click **Work**. The Work table appears, replacing the Entry table. What is the total work for the project?

8. From the table, you can see the following columns
   Variance, Actual, Remaining, %W. Comp. (W. Comp. represents work completed)
   Why are the values shown for Work = Variance = Remaining?

Exercise 2

You work as a project manager in a company that has made a contract about planning and conducting a new computerised inventory control system. Scope of the project and work breakdown structure has already been decided. Names of the different tasks and their contents and durations as well as resource requirements are shown in Table 1. Predecessors of tasks imply which tasks are needed to be conducted before the current task can be started.

Table 1: Tasks, durations and the required work resources

Task ID	Task	Duration (days)	Predecessors	Work resources required
1	Start-up planning and design	5		Software planning, Equipment design
2	Equipment determination and planning	8	1	Software planning, Equipment design, Software installation, Equipment assembly
3	Specific software determination	9	1	Software planning, Software development
4	Production line planning and determination	4	2	Equipment design
5	Equipment planning	7	2	Software planning, Software development
6	Software planning	17	3	Software planning
7	Equipment documentation	10	5	Software planning, Documentation
8	Documentation of operational system	13	6	Software planning, Equipment development
9	Detailed hardware blueprints	7	5	Equipment development
10	Hardware component orders	1	9	Procurement
11	Hardware component delivery	6	10	-
12	Integration of phase 1	12	4,7,8,11	Software development, Equipment development, Software installation, Equipment assembly
13	Prototype development	10	12	Software development, Equipment development
14	Prototype introduction	6	13	Software installation, Equipment assembly
15	System evaluation and improvement	9	14	Software installation, Equipment assembly, Equipment development
16	Hardware assembly	18	14	Equipment assembly
17	Computer system installation	7	16	Software development, Software installation
18	Project documentation	4	15, 16	Software development, Equipment development, Documentation
19	Integration of phase 2	12	17, 18	Software development, Equipment development, Software installation, Equipment assembly

The working hours are 40 hours per week with working times as 8.00am to 12.00pm and 1.00pm to 5.00pm. Note that no overtime is expected. As the company is based in Sydney it follows the Australian public holidays. It is expected that the project will commence on 1 May 2017.

Table 2 shows the resources available and their costs:

Department	Weekly rate/employee	Number of employees available
Software planning	$3000	2
Equipment design	$2800	1
Software development	$2600	1

Equipment development	$2400	1
Software installation	$2400	2
Equipment assembly	$2200	1
Documentation	$2600	1
Procurement	$1800	1

a) Use Microsoft Project to prepare a project plan and assign the resources to the project. What are the project cost and project duration? (1.5 marks)

b) Your Finance Director wants you to add the following additional cost:
   - In documentation, you have to use external assistance cost of $5000 per each documentation day.

   Include the above costs to your project plan, what is the revised project budget? (0.5 mark)

Lab exercise due for marking in Week 6 (2 marks)

Exercise 2 will be marked in Week 6. The marking criteria were given in Exercise 2 above.