Laboratory 7: Microsoft Project

Name : _____

Student Number : _____

Laboratory Time : _____

Objectives

- Familiarize with the use of a Gantt chart using MS Project
- Enter tasks and allocate work on the project plan

Preamble

Microsoft Project is a tool for creating project plans. It is both widely used and easy to use. The main visualization or form in MS Project is the Gantt chart. This chart was created in 1917 by Henry L. Gantt, an American engineer and social scientist[1]. The Gantt chart is a horizontal bar graph that provides a graphical illustration of a schedule that helps to plan, coordinate, and track specific tasks in a project.

Grading Checklist

By the end of the laboratory session, you need to demonstrate to the TA that you can do the following tasks. The TA will check off the items below that you have completed and collect this cover page from you.

- ☐ Familiarize with the case study
  - ☐ What is the estimated delivery date for the project?_____
  - ☐ What is the deadline that has been set for Delivery?_____
  - ☐ On Which tasks does the 'Final Integration and Testing' task depend?
    _____
- ☐ Tasks with duration added to project plan
- ☐ Task dependencies set
- ☐ Task assigned to team members
  - ☐ What is the new delivery date? Does it fall before or after the deadline?_____
- ☐ Re-assignment of tasks to meet deadline
  - ☐ What is the delivery date now? How does it relate to the deadline?
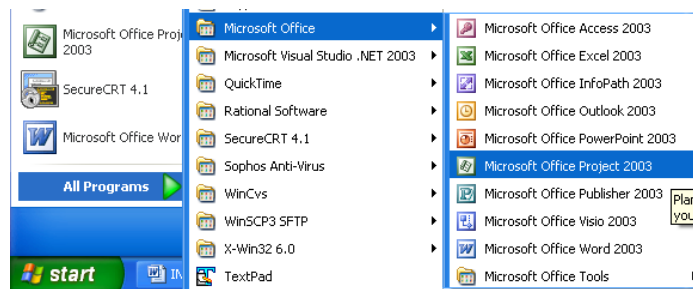   _____

TA Initials: _____

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[1] http://whatis.techtarget.com/definition/0,,sid9_gci331397,00.html

Instructions for the Laboratory

Task 0: Familiarize with the Case Study

You will be working with a project plan for a fictional internal project for 'Acme Inc.' As part of database modernization efforts, a department has requested the development of a custom application to port data from an existing, hard-to-use legacy database system into Acme's more modern, integrated customer database. Two Acme developers, 'Kate' and 'Connor' have been assigned to the task. A preliminary project plan has been drawn up.

a) Download the Laboratory 7 MS Project plan from the instructor's webpage (http://www.ics.uci.edu/~michele/INF111/Informatics.html#Labs).

b) Open it in MS Project. This plan shows the proposed development of the conversion system.
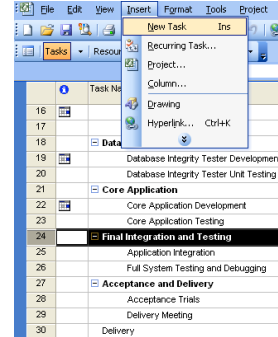

c) Answer the following questions in the cover page:
   - What is the estimated delivery date for the project?
     (Hint: Look for the 'Finish' date of the 'Delivery' task)

   - What is the deadline that has been set for Delivery?
     (Hint: Select 'Delivery' task, double click on it to see the Task Information, and look for the deadline in one of the tabs)

   - On which tasks does the "Final Integration and Testing" task depend?
     (Mention the task numbers)

There has been a last-minute feature requested. The department wants to extend the application to read and convert data from some archived flat files. The project plan needs to be modified to reflect the additional tasks.
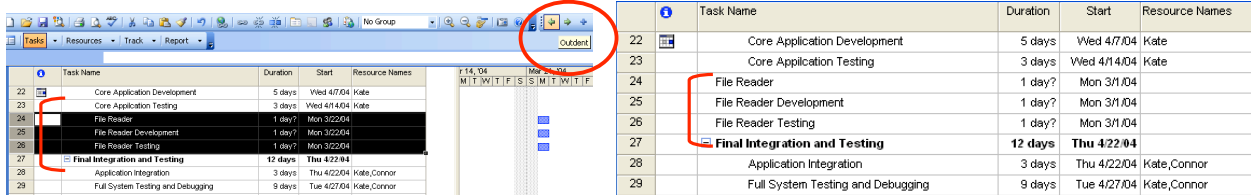
Task 1: Create new tasks

a) Add three new tasks to the project, named 'File Reader', 'File Reader Development', and 'File Reader Testing', in that order and before 'Final Integration and Testing'.

    i.   To insert a new task after 'Final Integration and Testing,' select this task and go to Insert -> New Task.

    ii.   After you created the three tasks, select the three tasks and outdent them.

b) Set the duration of the 'File Reader Development' task to 3 days, and the 'File Reader Testing' task to 2 days.
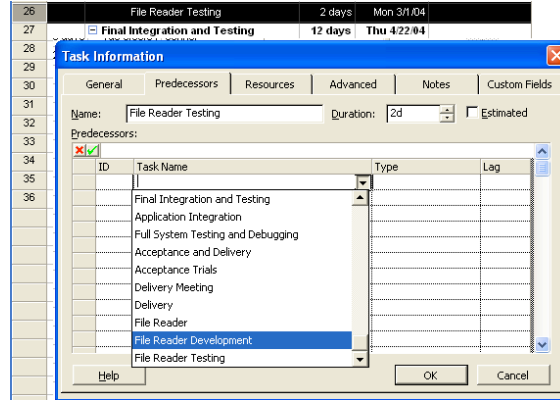
c) Indent 'File Reader Development' and 'File Reader Testing' so that 'File Reader' becomes a phase, which encapsulates both.
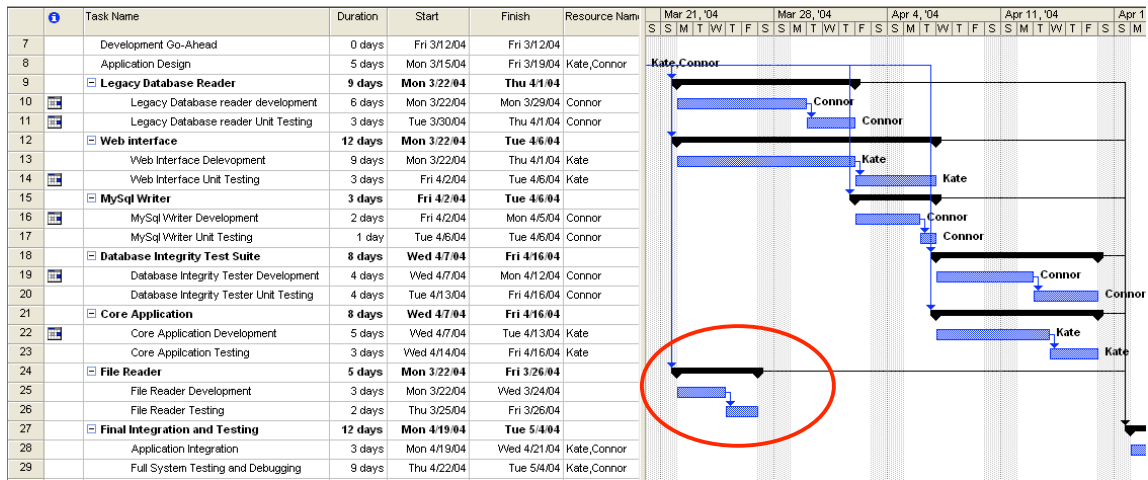
The tasks you just created should look similar to:

		Task Name	Duration	Start	Finish	Resource Name
22		Core Application Development	5 days	Wed 4/7/04	Tue 4/13/04	Kate
23		Core Appilcation Testing	3 days	Wed 4/14/04	Fri 4/16/04	Kate
24		File Reader	3 days	Mon 3/1/04	Wed 3/3/04	
25		File Reader Development	3 days	Mon 3/1/04	Wed 3/3/04	
26		File Reader Testing	2 days	Mon 3/1/04	Tue 3/2/04	
27		Final Integration and Testing	12 days	Mon 4/19/04	Tue 5/4/04	
28		Application Integration	3 days	Mon 4/19/04	Wed 4/21/04	Kate,Connor
29		Full System Testing and Debugging	9 days	Thu 4/22/04	Tue 5/4/04	Kate,Connor

Task 2: Set dependencies among tasks

a) Unit testing can only begin once development is complete. Link 'File Reader Testing' so that it depends on 'File Reader Development'.
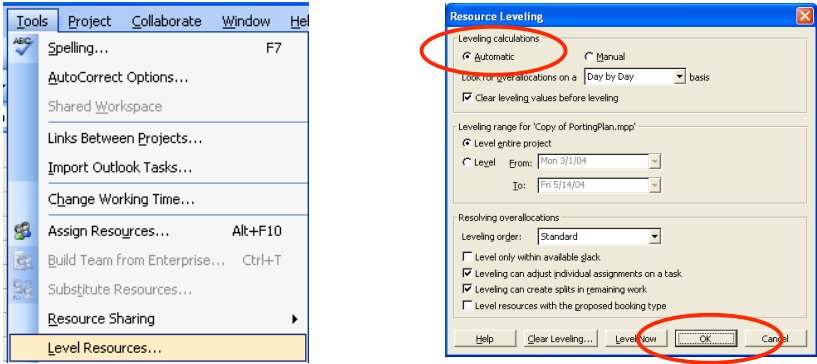

b) The file reader is a part of the overall application. Link the task into the overall plan by making 'File Reader' depend on 'Application Design'. Also make 'Final Integration and Testing' depend on 'File Reader'.
    Your Gantt chart should look similar to the following:

Task 3: Assign tasks to team members

a) Assign Connor to do the two tasks 'File Reader Development' and 'File Reader Testing'.

b) Make certain that the project hasn't got someone assigned to do two jobs at once. Use the 'Level Resources...' function under the 'Tools' menu to make sure that there are no conflicts. Set it to 'Automatic', if it isn't already.
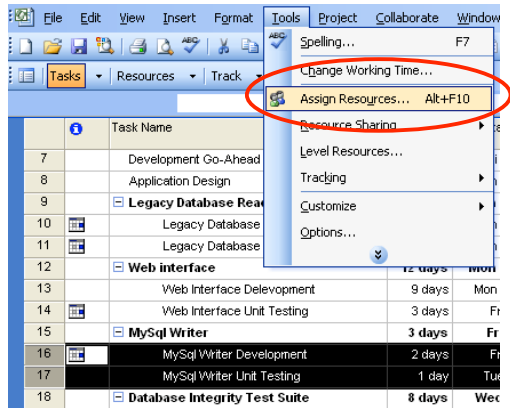
You can find more information about Level Resources in http://office.microsoft.com/en-us/project/HP010419391033.aspx?pid=CH010426611033

Answer the following question in the cover page:
- What is the new delivery date? Does it fall before or after the deadline?

Task 4: Re-assign tasks to team members

a) We will need to reassign some tasks to finish on time. Select the 'MySql Writer Development' and 'MySql Writer Testing' tasks. In the 'Assign Resources' dialog, use the 'Replace' button to switch the tasks from Connor to Kate.

Answer the following question in the cover page:
- What is the delivery date now? How does it relate to the deadline?