

Software Project Planning and Management

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Lab #1: Microsoft Project

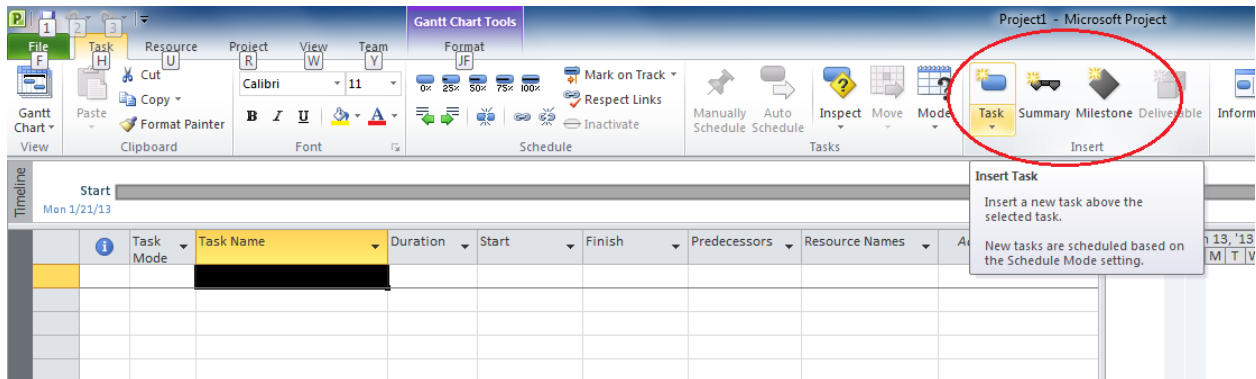
Description:

In this lab, we are going to use Microsoft Project - a project management tool to create project schedule. We will learn how to create tasks (recurring tasks), summaries, WBS code, resources, and how to manage relationships between tasks. At the end of the lab, you need to create a sample project schedule as the exit exercise.

Instructions:

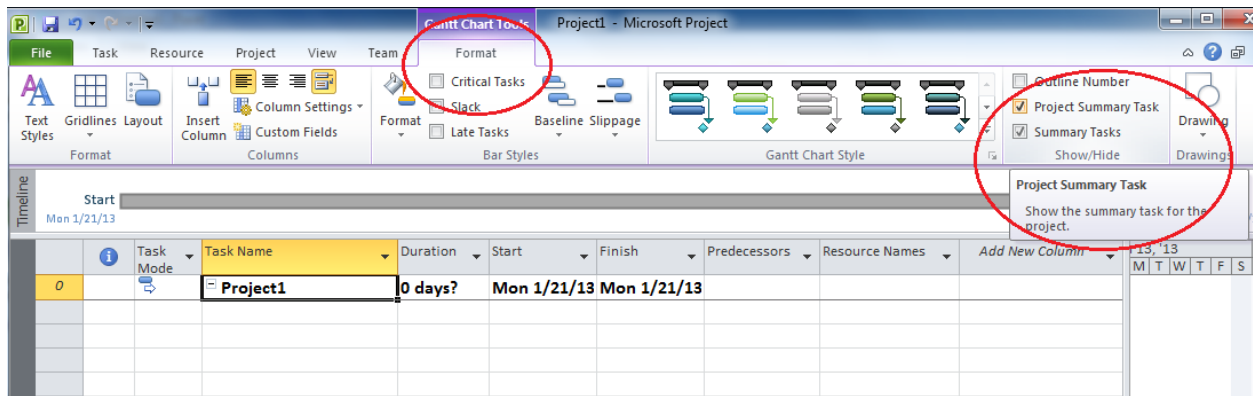
1. Creating a task, a summary, a milestone, and a project summary task

You can click the “Task” button in the ribbon to insert a new task, as show in the figure below. Similarly, you can create a summary and a milestone.



Alternatively, you can just type in your task name in the “Task Name” field to create a new task.

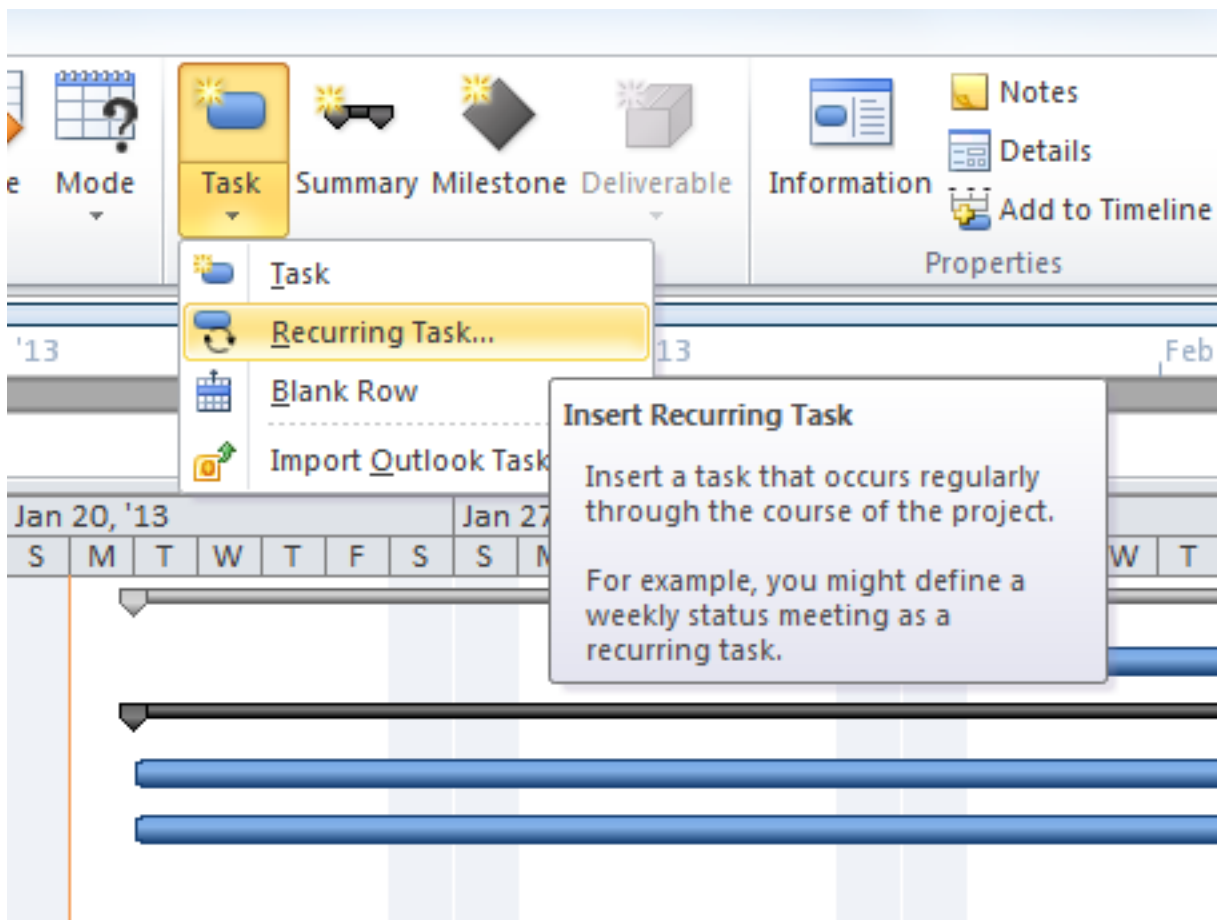
To create a project summary task to represent the whole project, click the “Format” tab and click the check box labelled “Project Summary Task”. See the figure below. Note that the duration, start date, and finish date of this special task will be automatically populated from the specific tasks it includes, and cannot be manually modified.



2. Creating recurring tasks

A recurring task is a special task that happens regularly (e.g. every Monday) in a project, such as a group meeting, a monthly report, etc.

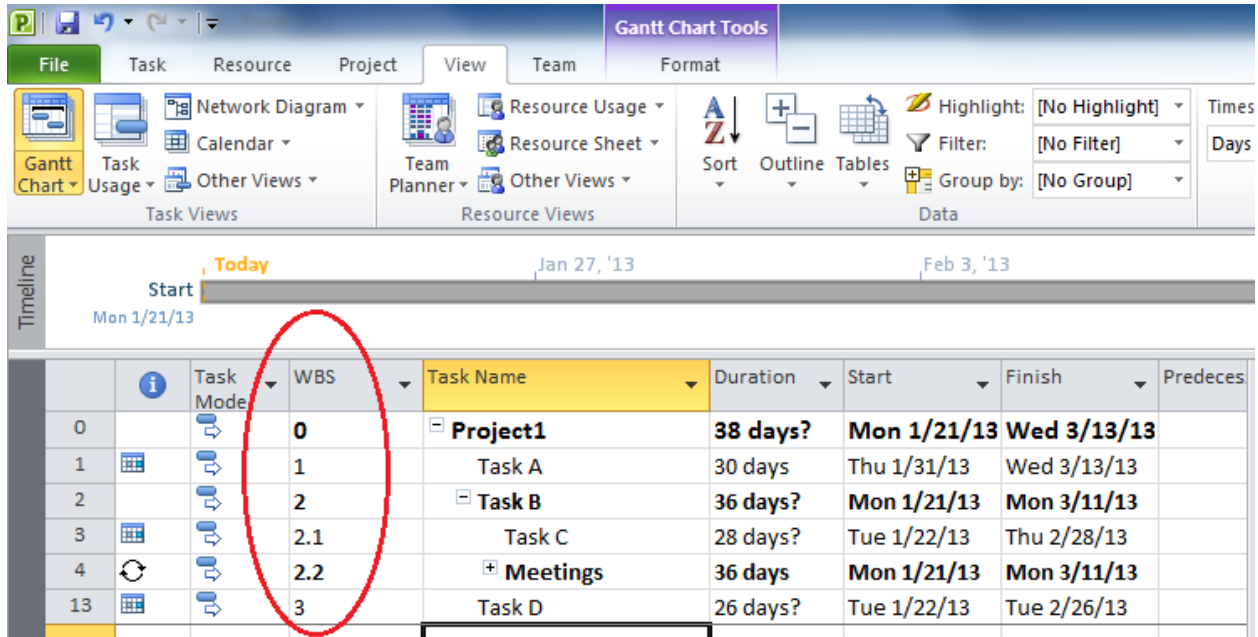
To create a recurring task, simply click the triangle below the Task icon and select “Recurring Task ...” in the pop-up menu, as illustrated in the following figure.



3. Work Breakdown Structure (WBS) Code

WBS decomposes a project into a tree structure, where each node may represent a task or a milestone of the project.

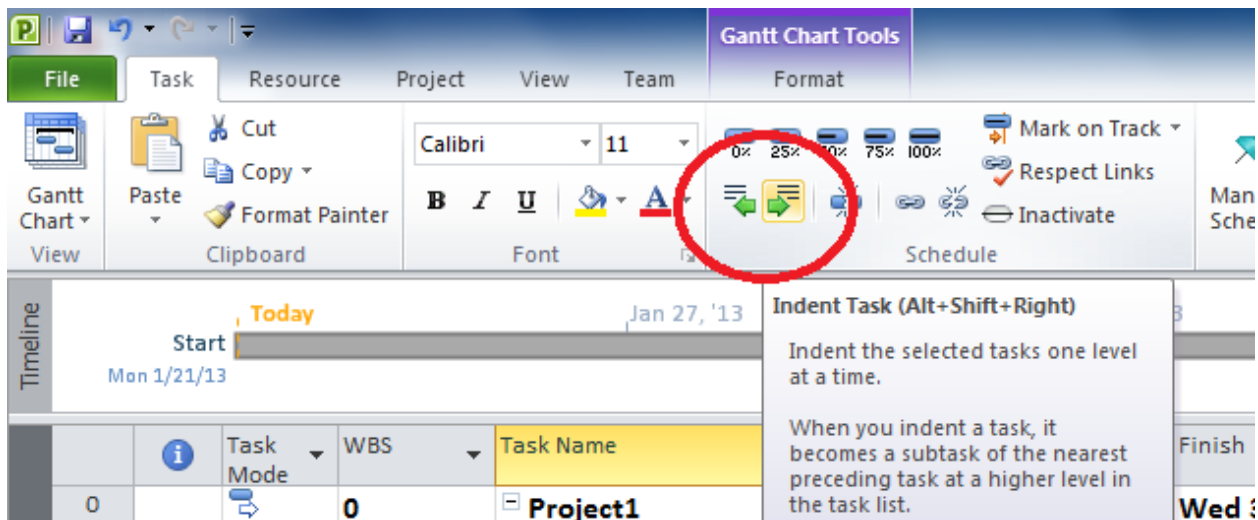
Go to “Format” and select “Insert Column”. Select “WBS” in the drop-down list. A column like the following figure will show up.



	Task Mode	WBS	Task Name	Duration	Start	Finish	Predecessors
0		0	Project1	38 days?	Mon 1/21/13	Wed 3/13/13	
1		1	Task A	30 days	Thu 1/31/13	Wed 3/13/13	
2		2	Task B	36 days?	Mon 1/21/13	Mon 3/11/13	
3		2.1	Task C	28 days?	Tue 1/22/13	Thu 2/28/13	
4		2.2	Meetings	36 days	Mon 1/21/13	Mon 3/11/13	
13		3	Task D	26 days?	Tue 1/22/13	Tue 2/26/13	

Note that the WBS code of the project summary task we created earlier is 0.

Now try changing a specific task to or from a summary and see what happens to its WBS code. This can be done by clicking the indent icon in the ribbon, as shown below.



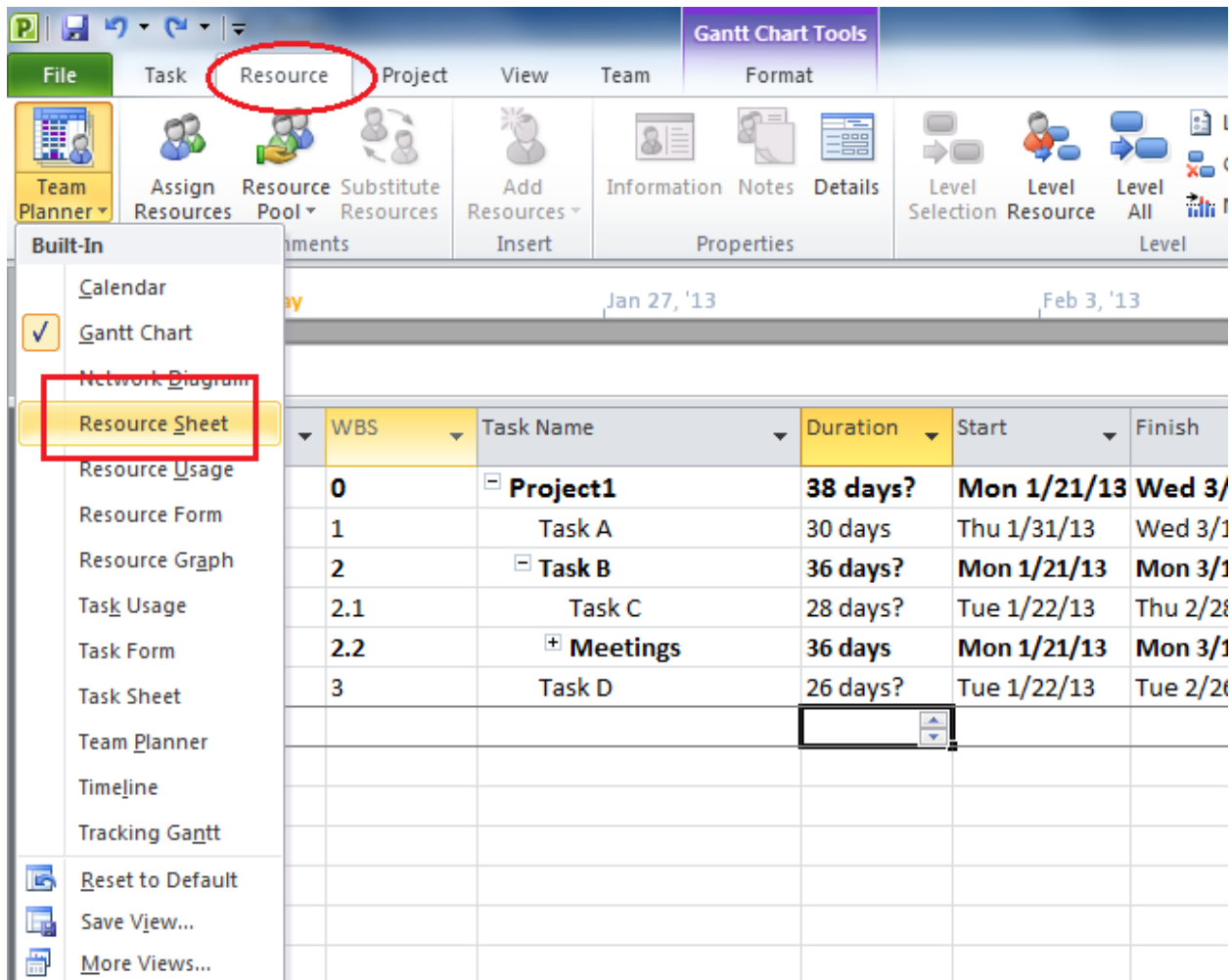
Indent Task (Alt+Shift+Right)
Indent the selected tasks one level at a time.
When you indent a task, it becomes a subtask of the nearest preceding task at a higher level in the task list.

Task Mode	WBS	Task Name
	0	Project1

4. Resources

You can add available resources (e.g. human resources) to the project you just created.

Go to the view of “Resources Sheet”. Enter the names of the people that are going to work on this project in the pop-up dialog box.



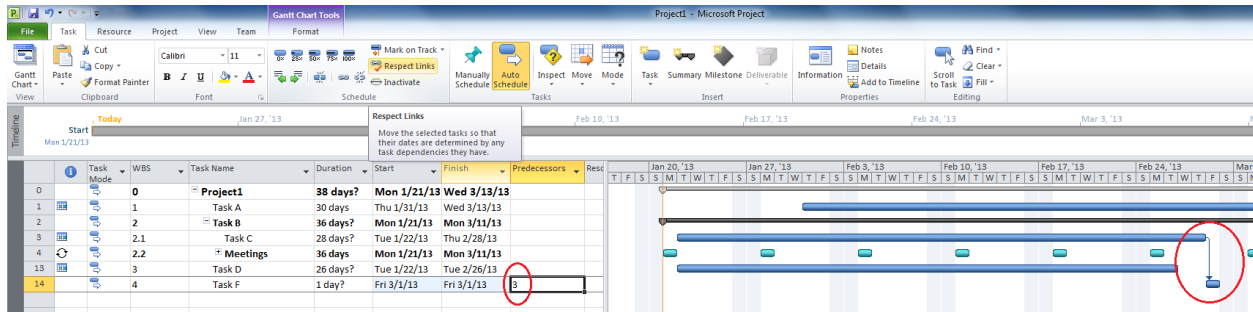
Go back to the Gantt Chart view of the project, and assign the resources you just created to the corresponding tasks, as shown in the figure below.

Task Name	Duration	Start	Finish	Predecessors	Resource Names
Project1	38 days?	Mon 1/21/13	Wed 3/13/13		
Task A	30 days	Thu 1/31/13	Wed 3/13/13		
Task B	36 days?	Mon 1/21/13	Mon 3/11/13		
Task C	28 days?	Tue 1/22/13	Thu 2/28/13		
Meetings	36 days	Mon 1/21/13	Mon 3/11/13		

5. Task dependencies

In MS Project, we can also manage the relationships between different tasks.

As shown in the figure below, this can be done by specifying the task number of the related task. By default, the relationship is “Finish-to-Start(FS).

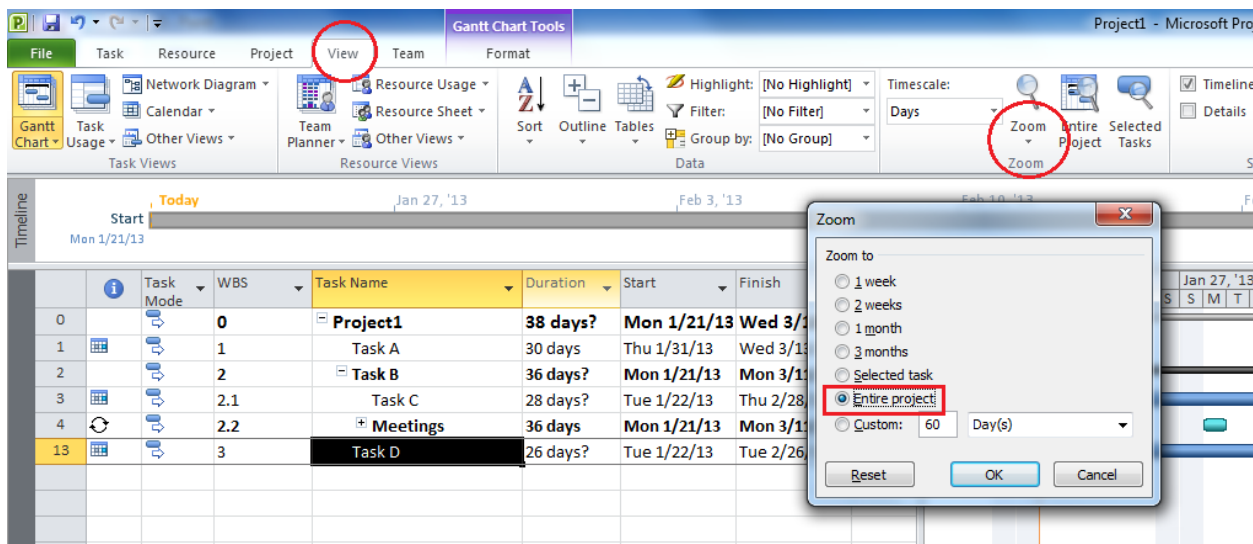


To specify a different relationship, you can type in FF(Finish-to-Finish), SS(Start-to-Start), or SF(Start-to-Finish) following the task number. Try these different relationships, and see how the arrow in the gantt chart will change.

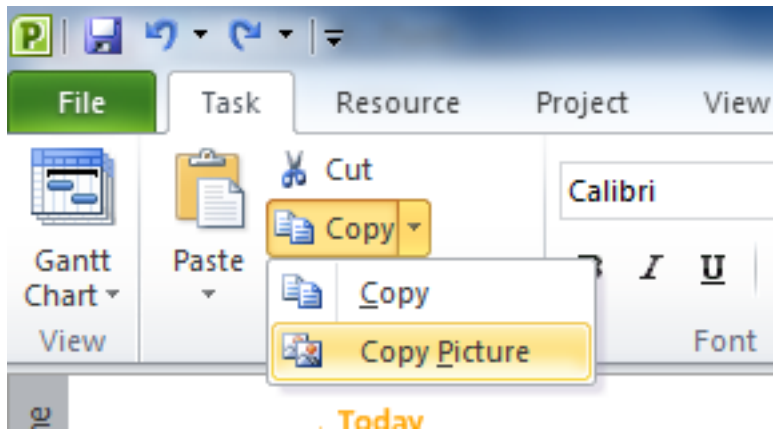
Alternatively, you can double-click the corresponding task in the Spreadsheet and make the selections in the pop-up dialog box.

6. Export as a GIF image

Before exporting the project schedule as an image, go to the view tab, click the “Zoom” drop-down list, and select “Entire Project” to have all the elements shown in the screen.



After that, go to the Task tab and expand the “Copy” drop-down list. Select “Copy Picture” as shown in the figure below.



In the pop-up dialog box, you can specify the output format and the content you want to include in the final picture.

Exit Exercise

Download the file named “Sample.gif” from Cougar Course. Create a project schedule that is similar to the figure included in the downloaded file. The specific Start/Finish time and durations do not have to be the same, but the basic elements, structure, and dependencies must follow the schedule shown in the figure.

Once you are done, export your schedule as a GIF image and submit it together with your Assignment 1.