

Lab 1

Introduction to Microsoft Project

Statement Purpose

This lab provides students with the knowledge and skills to use Microsoft Project. This course takes students step-by-step through the features and concepts they will need to plan and manage projects effectively with MS Project by delivering practical techniques to take advantage of the more advanced features of Microsoft Project such as including cost & resource management.

Activity Outcomes

In this lab, students will learn about Microsoft Project::

- Setting basic information
- Entering tasks
- Entering subunit tasks
- Using WBS codes
- Using task bar
- Using task predecessors
- Creating output image

Instructor Note

Read the exercises below and submit your answer in the answer sheet available in the end in individual format. English will be the official language in throughout the discussion.

All assignments are to be your own work unless directed otherwise by the instructor.

Lab 1– Introduction to Microsoft Project

1.1. Launch Microsoft Project 2013

Project 2013 takes you to a one-stop center for starting your project. Click File > New, then get your project going.

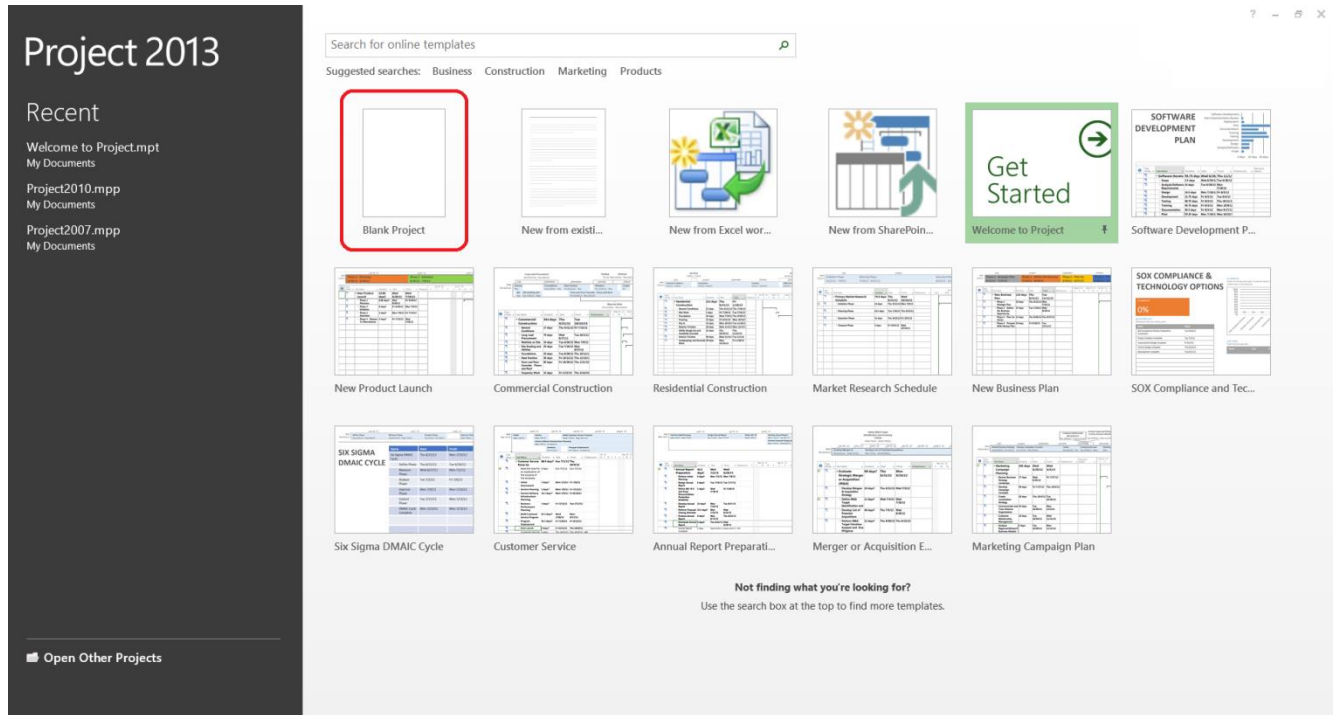


Figure 1 - New Project Screen

From this screen, you can create a new project, browse common project templates, import info from Excel or a SharePoint site, or just click Blank Project to get a clean Gantt Chart. You can open previous projects from your computer, from your network, from Project Online, or even from SkyDrive.

1.2. Basic Project Information

From the “Project” menu select “Project Information” and enter the anticipated project start date.

Project Information for 'Project1'

Start date: Mon 2/3/14 Current date: Mon 2/3/14

Finish date: Mon 2/3/14 Status date: NA

Schedule from: Project Start Date Calendar: Standard

All tasks begin as soon as possible. Priority: 500

Enterprise Custom Fields

Department:

Custom Field Name	Value

Help Statistics... OK Cancel

Figure 2 - Project Information

1.3. Major tasks entry

Type in the major tasks (Work Breakdown Structure level 1) in the “Task Name” box. Each row is a separate task

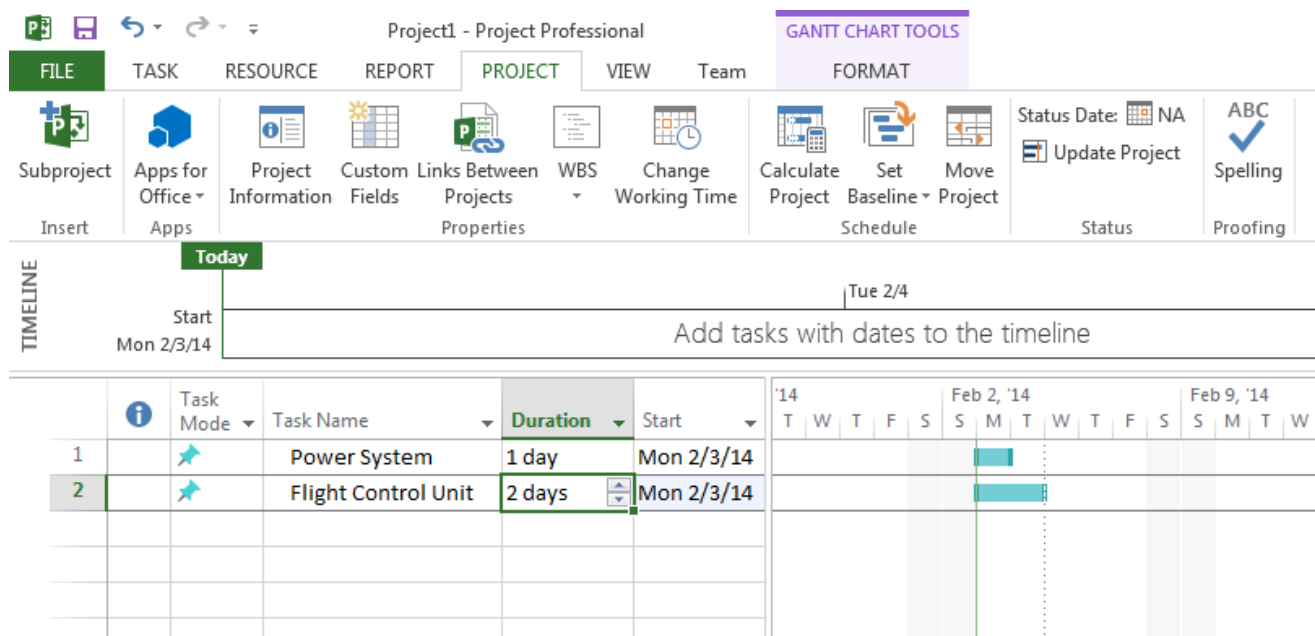
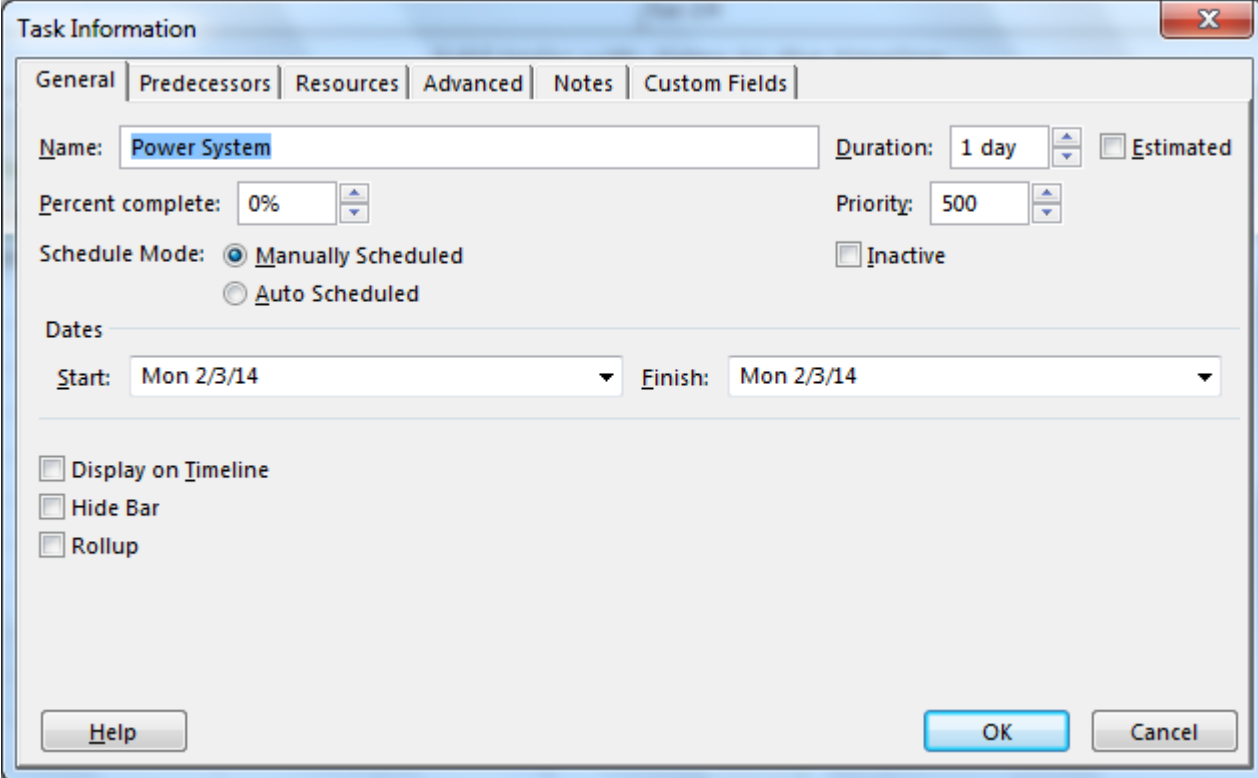


Figure 3 - Entering tasks

Indicator Field

The Indicators field displays indicators that give different types of information about a task or resources. For example, a completed indicator ✓ alerts you that the task is completed, and a note indicator 📝 means that a task or resource note is attached.

In order to make changes to task information, double click the task information field that will open window as shown in figure below.



The image shows a 'Task Information' dialog box with a blue title bar and a close button (X) in the top right corner. The dialog has several tabs: 'General', 'Predecessors', 'Resources', 'Advanced', 'Notes', and 'Custom Fields'. The 'General' tab is selected. Inside the 'General' tab, there are several fields and options: 'Name' is 'Power System'; 'Duration' is '1 day' with a spin button and an 'Estimated' checkbox; 'Percent complete' is '0%' with a spin button; 'Priority' is '500' with a spin button and an 'Inactive' checkbox; 'Schedule Mode' has two radio buttons, 'Manually Scheduled' (selected) and 'Auto Scheduled'; 'Dates' section has 'Start' and 'Finish' dropdowns, both showing 'Mon 2/3/14'; and three checkboxes at the bottom: 'Display on Timeline', 'Hide Bar', and 'Rollup'. At the bottom of the dialog are 'Help', 'OK', and 'Cancel' buttons.

Figure 4 - Task Information

Task Mode Field

There are two task modes:

1. **Manually Scheduled:** In this mode you have to enter duration, start, and finish dates for your tasks. By default, this option is selected.
2. **Automatically Scheduled:** In this mode the scheduling engine automatically calculates durations and start dates and finish dates for your tasks.



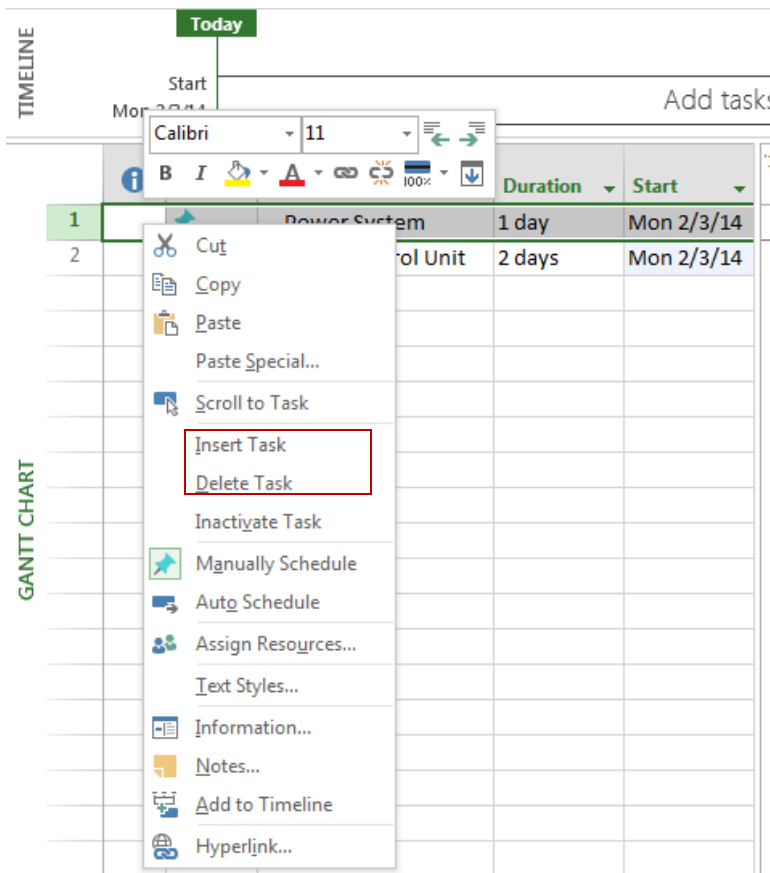
		Task Mode ▾	Task Name ▾	Duration ▾	Start ▾
1			Power System	1 day	Mon 2/3/14
2		Juled ▾	Flight Control Unit	2 days	Mon 2/3/14
		Manually Scheduled			
		Auto Scheduled			

Figure 5 - Setting task mode

1.4. Inserting and deleting rows

- Select the row above which you want to insert a subunit
- Select “New Task” from the “Insert” menu
- To delete a row, select the row and press the “Delete” key



The screenshot displays a project management interface with a Gantt Chart on the left and a task list on the right. A context menu is open over the 'Flight Control Unit' task in the list. The menu includes options like Cut, Copy, Paste, Insert Task, Delete Task, Inactivate Task, Manually Schedule, Auto Schedule, Assign Resources..., Text Styles..., Information..., Notes..., Add to Timeline, and Hyperlink... The 'Insert Task' and 'Delete Task' options are highlighted with a red box. The task list shows 'Power System' (1 day) and 'Flight Control Unit' (2 days) starting on Mon 2/3/14. The Gantt Chart shows a timeline with a 'Today' marker.

Figure 6 - Inserting and deleting rows

1.5. Enter the subunit task names

- Go to the Gantt Chart.
- In the Task Name column, click the task you want to indent.
- Click Task > Indent . The task becomes a subtask.
- Click Outdent to move the task back to the level of the task above it. It's no longer a subtask.

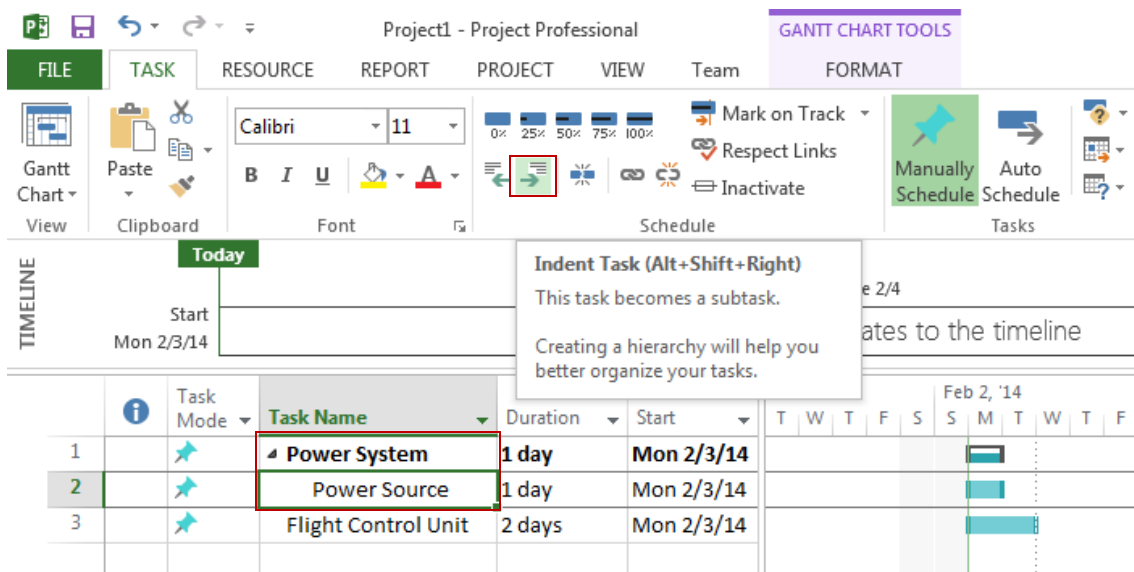


Figure 7 - Enter the subunit task names

1.6. Complete entering WBS (Work Breakdown Structure)

Process of inserting rows, typing in the task name and indenting the subunit continues until all tasks in the WBS are entered.

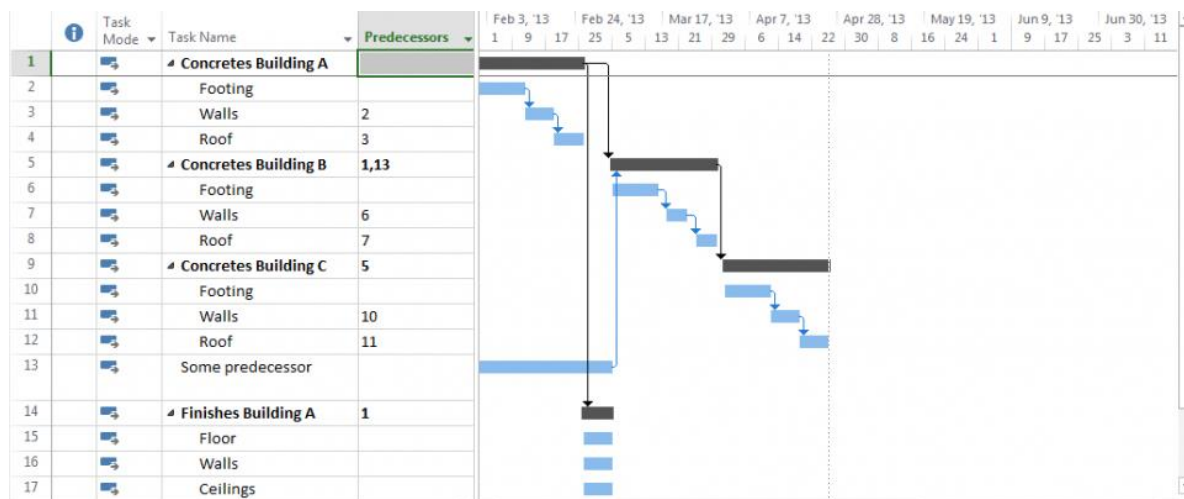


Figure 8 - Complete entering WBS

1.7. Display the WBS code

- Select the “Information” column, right click and choose “Hide Column”.
- Next select the “Task Name” column and from the “Insert” menu select “Column”.
- Choose “WBS” as the “Field name”

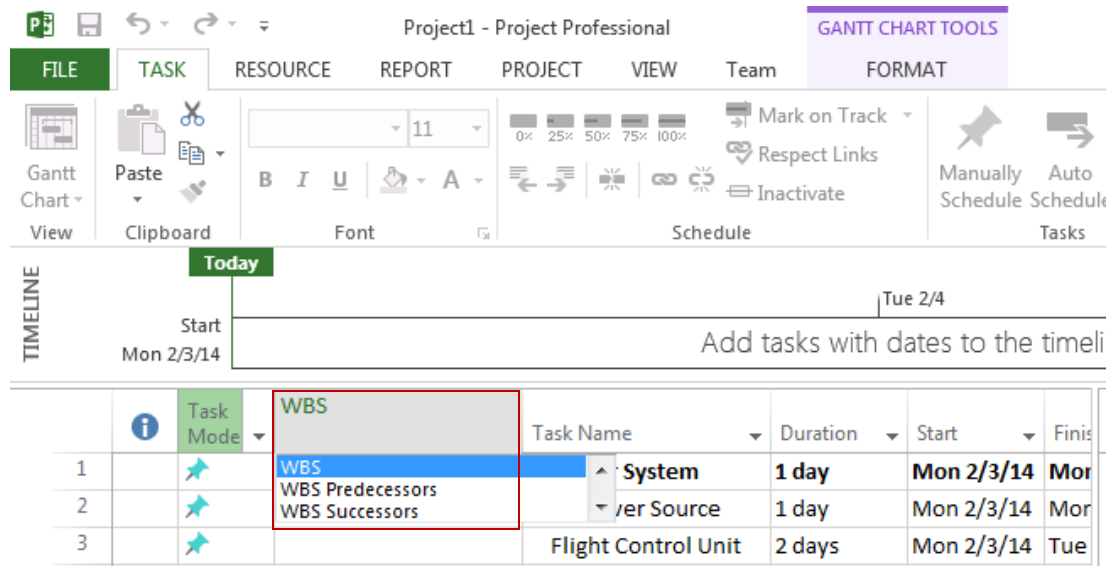


Figure 9 - Column Definition

- The correct WBS code number will now be displayed for all tasks

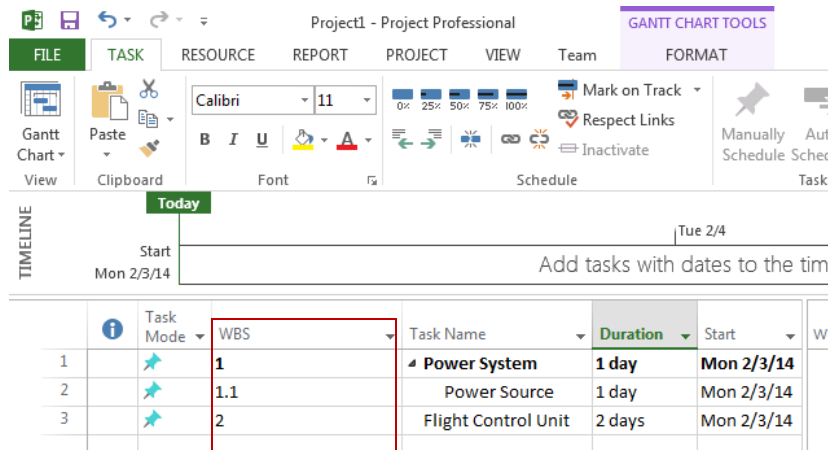


Figure 10 - WBS code

1.8. Task bars

With all subunits inserted the lowest level will be blue rectangles and higher levels will be black bars with points on the ends.

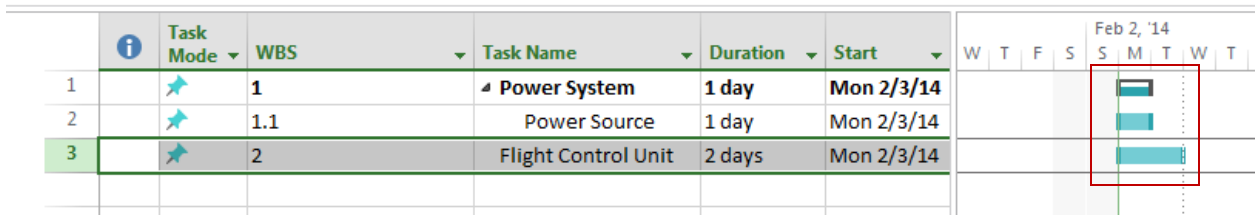


Figure 11 - Task bars

1.9. Distinguishing different levels

- You can change the color of the task bar to distinguish between the different levels in your WBS
- Select the task bar to change (in the Gantt chart area), right click and select "Format Bar".
- Change the color of the "Start", "Middle" and "End"

Figure 12 - Format bar

- The results of changing the task bar color are shown below

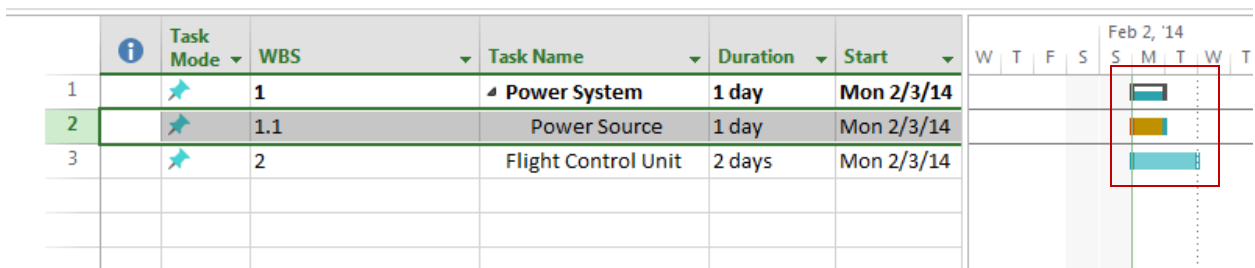


Figure 13 - Results after task bar change

1.10. Set the task durations

- Now enter the time associated with each task in the "Duration" field. See the MS Project Help for choices on units.

- Set durations for the lowest level tasks and the total time will be summarized or rolled-up to the next highest level.

	Task Mode ▾	WBS ▾	Task Name ▾	Duration ▾	Start ▾	Feb 2, '14 W T F S S M T W T						
1		1	Power System	1 day	Mon 2/3/14							
2		1.1	Power Source	1 day	Mon 2/3/14							
3		2	Flight Control Unit	2 days	Mon 2/3/14							

Figure 14 - Task duration

1.11. Set the task predecessors

- Enter the task dependence (i.e. which tasks must be complete prior to starting the next task) in the “Predecessors” field.
- You need to use the row number, not the WBS code.

	Task Mode ▾	WBS ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾	Predecessors ▾		Feb 2, '14										
									R	N	F	S	S	M	T	W	T	F	S
1	🚀	1	⚡ Power System	1 day	Mon 2/3/14	Mon 2/3/14													
2	🚀	1.1	Power Source	1 day	Mon 2/3/14	Mon 2/3/14													
3	🚀	2	Flight Control Unit	2 days	Tue 2/4/14	Wed 2/5/14	1												

Figure 15 - Task predecessors

1.12. Set the timescale of the chart

- From the “View” tab select “Timescale”
- Set the Major Scale to Months
- Set the Minor Scale to Weeks

Project1 - Project Professional

VIEW | Team | GANTT CHART TOOLS | FORMAT

Task Views: Gantt Chart, Task Usage, Team Planner, Resource Usage, Resource Sheet, Other Views

Resource Views: [No Highlight], [No Filter], [No Group]

Data: Timescale: Days, Zoom

Timeline: ☒ Timeline, ☐ Details, Split View

TIMELINE

Today | Tue 2/4 | Wed 2/5

Start Mon 2/3/14

Add tasks with dates to the timeline

	Task Mode ▾	WBS ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾	Predecessors ▾	R	N	F	S	Fe	S
1		1	Power System	1 day	Mon 2/3/14	Mon 2/3/14							
2		1.1	Power Source	1 day	Mon 2/3/14	Mon 2/3/14							
3		2	Flight Control Unit	2 days	Tue 2/4/14	Wed 2/5/14	1						

Figure 16 – Timescale

1.13. Make an image for documents

- To make a GIF image that can be inserted into documents, first arrange the chart and task info boundaries to display just what you want.
- From the “Project” menu select “Copy Picture”
- Select “To GIF image file:” and enter a filename for the image
- Select what to copy: Rows on screen or Selected Rows
- Select the timescale as either what is shown on the screen or for specific dates
- Click OK and the image will be generated

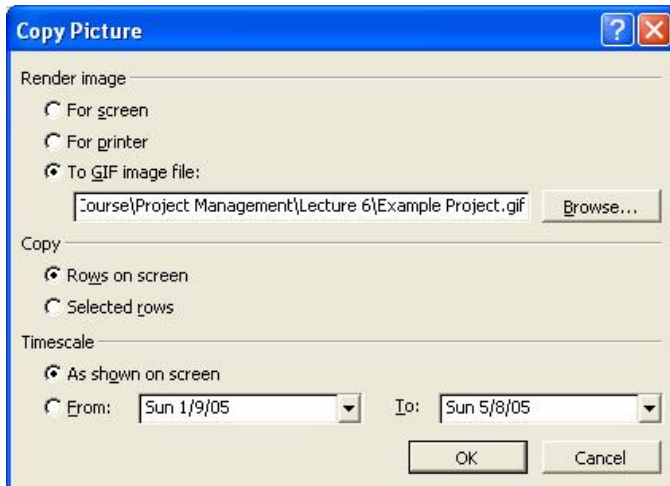


Figure 17 - Copy image

- Below is the GIF image of the example project ready to be inserted in a document.

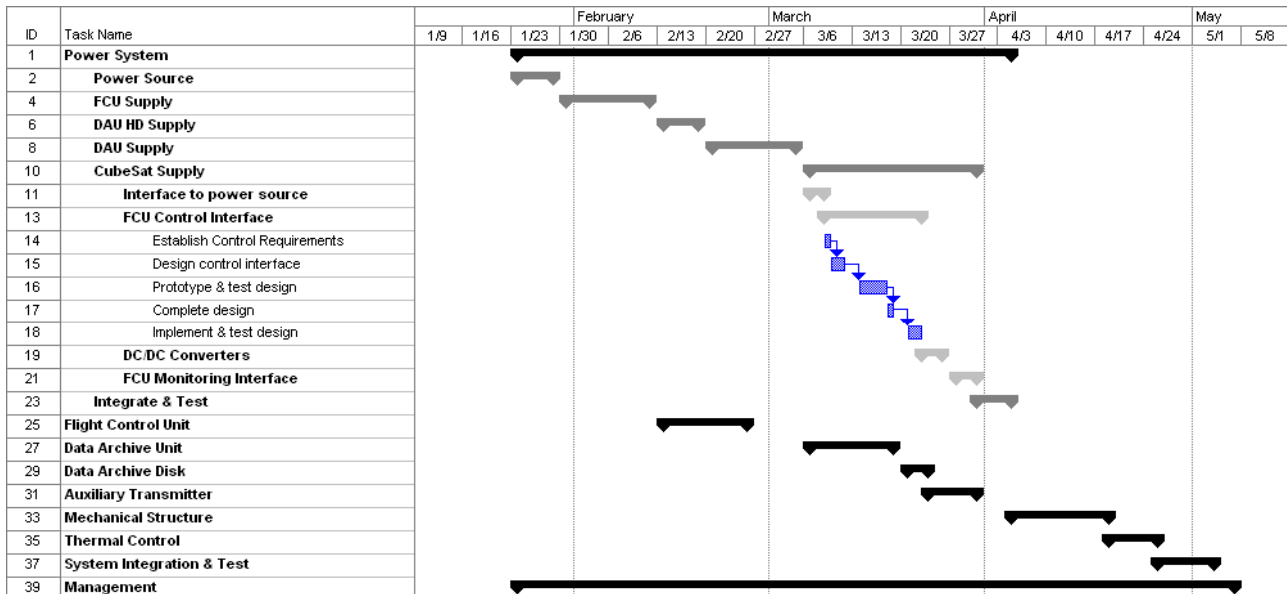


Figure 18 - Final version of project

1.14. Assignment 1

1. You need to create a new project in Microsoft Project using following information.

Task	Earliest start	Length	Type	Dependent on
A. High level analysis	Week 0	1 week	Sequential	
B. Selection of hardware platform	Week 1	1 day	Sequential	A
C. Installation and commissioning of hardware	Week 1.2	2 weeks	Parallel	B
D. Detailed analysis of core modules	Week 1	2 weeks	Sequential	A
E. Detailed analysis of supporting modules	Week 3	2 weeks	Sequential	D
F. Programming of core modules	Week 3	2 weeks	Sequential	D
G. Programming of supporting modules	Week 5	3 weeks	Sequential	E
H. Quality assurance of core modules	Week 5	1 week	Sequential	F
I. Quality assurance of supporting modules	Week 8	1 week	Sequential	G
J. Core module training	Week 6	1 day	Parallel	C,H
K. Development and QA of accounting reporting	Week 5	1 week	Parallel	E
L. Development and QA of management reporting	Week 5	1 week	Parallel	E
M. Development of Management Information System	Week 6	1 week	Sequential	L
N. Detailed training	Week 9	1 week	Sequential	I, J, K, M

2. You are a project manager and you need to create a schedule for the development of a web based application from scratch. Create a table that covers all processes of software development life cycle for this project with realistic timelines. [Hint: Take table in Question 2 as reference]