GETTING TO KNOW PROJECT 2016

Microsoft Project is software specifically designed to assist you in managing and controlling projects. It is arguably one of the more difficult software products to learn, not only because you need to study how to use the software, but because you also need to know a little about project management theory.

This chapter is an introduction to the basic operating concepts in ***Microsoft Project***.

In this session you will:

✓ gain an understanding of ***Microsoft Project's*** operating philosophy

✓ learn how to start ***Microsoft Project 2016***

✓ gain an understanding of the ***Project 2016 Start*** screen

✓ gain an understanding of the main ***Project*** screen elements

✓ gain an understanding of the operating process of ***Project***

✓ learn how to use the ribbon

✓ learn how to show and collapse the ribbon

✓ gain an understanding of ***Backstage View*** in ***Project***

✓ gain an understanding of the work area and project views

✓ learn how to change the view of your project

✓ learn how to split the project work area horizontally

✓ gain an understanding of sheet views in ***Project***

✓ learn how to change the table in a ***Sheet*** view

✓ gain an understanding of the ***Gantt Chart*** view

✓ learn how to work with the ***Gantt Chart*** view

✓ gain an understanding of the ***Quick Access Toolbar***

✓ learn how to add a command to the ***Quick Access Toolbar***

✓ learn how to work with existing ***Project*** files

✓ learn how to exit from ***Project***.

HOW PROJECT 2016 WORKS

Microsoft Project is a computer database that uses two main *tables* of data to keep track of your project. *Project* uses one table to store information about the tasks associated with your project and the other for *resource* information. By using the many *views* available in *Project*, you can display your project data from these tables in many different ways.

Tasks Table

The *Tasks* table is comprised of over 240 columns (or fields) which contain information about the tasks such as scheduled start, scheduled finish, name, duration, cost, and the like. Some of these fields require you to enter data, while others are calculated and filled by Project for you.

ID	Name	Duration	Start	Finish	Fixed	Cost	etc.
8	Erect fencing	3 days	9/7/2015	11/7/2015	No	$500	

Resources Table

This table contains over 200 fields (or columns) which contain information about the resources being used to complete the tasks in the project.

ID	Name	Initials	Group	Max Units	Standard Rate	Overtime Rate	etc.
3	Builder	FG	Contractor	4	$55.00/h	$75.00/h	

The two tables are joined together by assigning *resources* to *tasks*.

Views

To help you view your data, Project adopts techniques used in spreadsheets, databases, and graphics packages.

For example, you can view your task or resource table in *sheets* on the screen. Sheets are similar to spreadsheet programs where data is presented in rows and columns. In fact, many of the operations used in spreadsheets, such as widening columns, deleting data, selecting cells and the like are also found in Project.

		Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1			◢ **Planning**	**74 days**	**Mon 6/05/19**	**Thu 15/08/19**		
2			Create architectural plans	3.2 wks	Mon 6/05/19	Mon 8/07/19		Architect,Draftsperson[200%],Building Clerk[25%]
3			Submit plans for approval	1 mon	Tue 9/07/19	Mon 5/08/19	2	Architect
4			Order materials	8 days	Tue 6/08/19	Thu 15/08/19	3	Draftsperson,Building Clerk
5			Planning Completed	0 days	Thu 15/08/19	Thu 15/08/19	4,2,3	
6			◢ **Site Works**	**27 days**	**Mon 19/08/19**	**Tue 24/09/19**		
7			Erect fencing	3 days	Mon 19/08/19	Wed 21/08/19	5	No Barrier Fencing
8			Erect site buildings	4 days	Thu 22/08/19	Tue 27/08/19	7	Supervisor,Carpenter[400%],Labourer[800%]
9			Clear and level site	3 wks	Wed 28/08/19	Tue 17/09/19	8	Driver[200%],Grader[200%],Supervisor
10			Prepare drainage infrastructure	1 wk	Wed 18/09/19	Tue 24/09/19	9	Supervisor[50%],Plumber[200%]

You can also view your data in *forms*. Forms are similar to a form view that is usually utilised in the data entry screen in database programs. Forms allow you to add or edit data, and you can usually cycle through the cards as you would in a normal database.

Name: Create architectural plans	Duration: 3.2 wks	☐ Effort driven	☐ Manually Scheduled	Previous	Next
Start: Mon 6/05/19	Finish: Mon 8/07/19	Task type: Fixed Units	% Complete: 0%		

ID	Resource Name	Work	R/D	Leveling Delay	Delay	Scheduled Start	Scheduled Finish
1	Architect	120h		0d	0d	Mon 6/05/19	Mon 8/07/19
2	Draftsperson	240h		0d	0d	Mon 6/05/19	Mon 8/07/19
3	Building Clerk	30h		0d	0d	Mon 6/05/19	Mon 8/07/19

If you wish to see your data graphically you can view it as a *Gantt Chart* or *Network Diagram*.
In addition, there are a variety of other graphs available for displaying resources.

STARTING PROJECT IN WINDOWS 10

To create a new project or edit an existing one, the first thing you must do is start Project. The first time you use Project you will need to open it from the taskbar ***Search the web and Windows*** bar or the ***All apps*** list in the ***Start*** menu. You can then choose to pin Project to the ***Start*** menu or the taskbar so that you can access it more quickly and easily the next time you use it.

Try This Yourself:

Before you begin, ensure that your computer is switched on and the desktop is displayed…

1 If there is no ***Project*** icon in the taskbar at the bottom of the desktop, click on the ***Windows*** icon in the taskbar, as shown, to display the ***Start*** menu

2 Click on ***All apps*** to display a list of all the apps on your computer

3 Scroll down to the ***P*** section

Project 2016 is listed here…

4 Click on ***Project 2016*** to start Project

5 Right-click on the Project icon in the taskbar to display a menu of options, as shown, then select **Pin this program to taskbar**

You can now click on this icon to open Project from the desktop. This icon will remain in the taskbar unless you remove it…

6 Repeat step *5* to select **Close window** to close Project

7 Click on the ***Project*** icon in the taskbar to open Project again
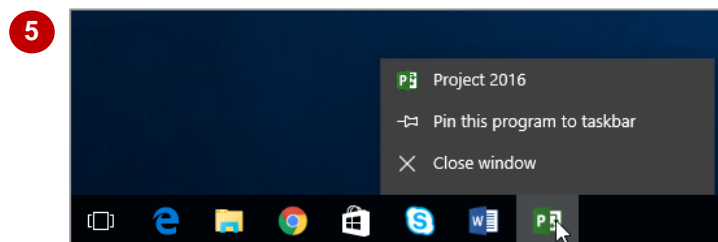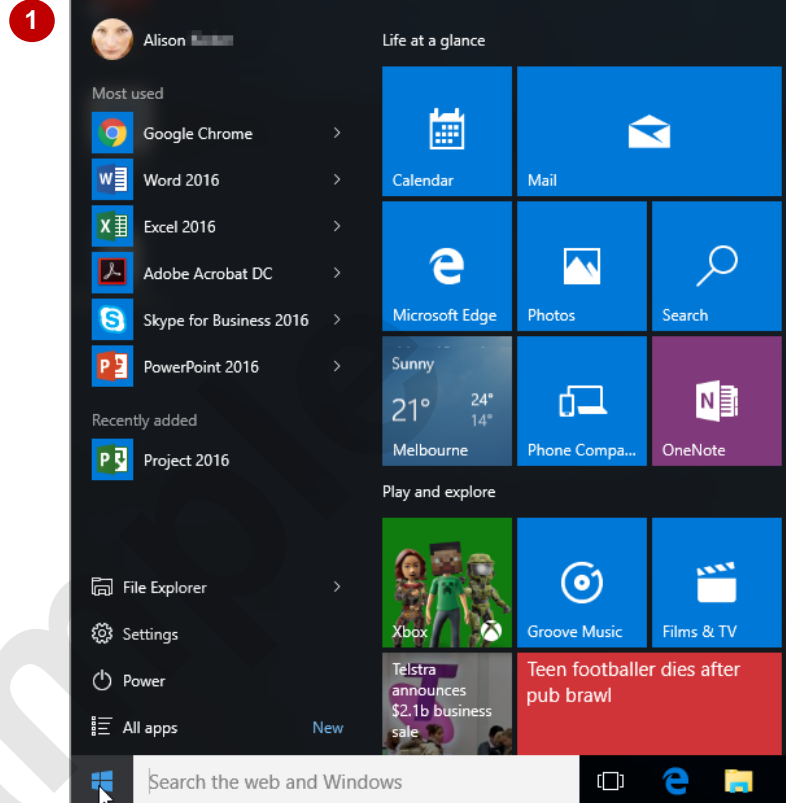
For Your Reference…

To ***add*** a ***Project icon*** to the ***desktop taskbar***:

1. Display the ***Start*** menu, then click on ***All apps***
2. Right-click on ***Project 2016***
3. Select **Pin to taskbar**

Handy to Know…

- You can start Project by clicking in the taskbar ***Search…*** bar, typing **project**, then clicking on Project in the list of search results.
- You can pin Project to the ***Start*** menu by displaying the ***All apps*** list, right-clicking on ***Project 2016*** and selecting **Pin to Start**.

UNDERSTANDING THE PROJECT START SCREEN

Unless you start Project with a specific data file, *Project 2016* will open with a *start* screen displayed. This is like a gateway into Project and from this initial screen you can choose what kind

of workbook you want to work with. You can choose to work with a recent file, open an existing file, or even create a new file using the available templates.
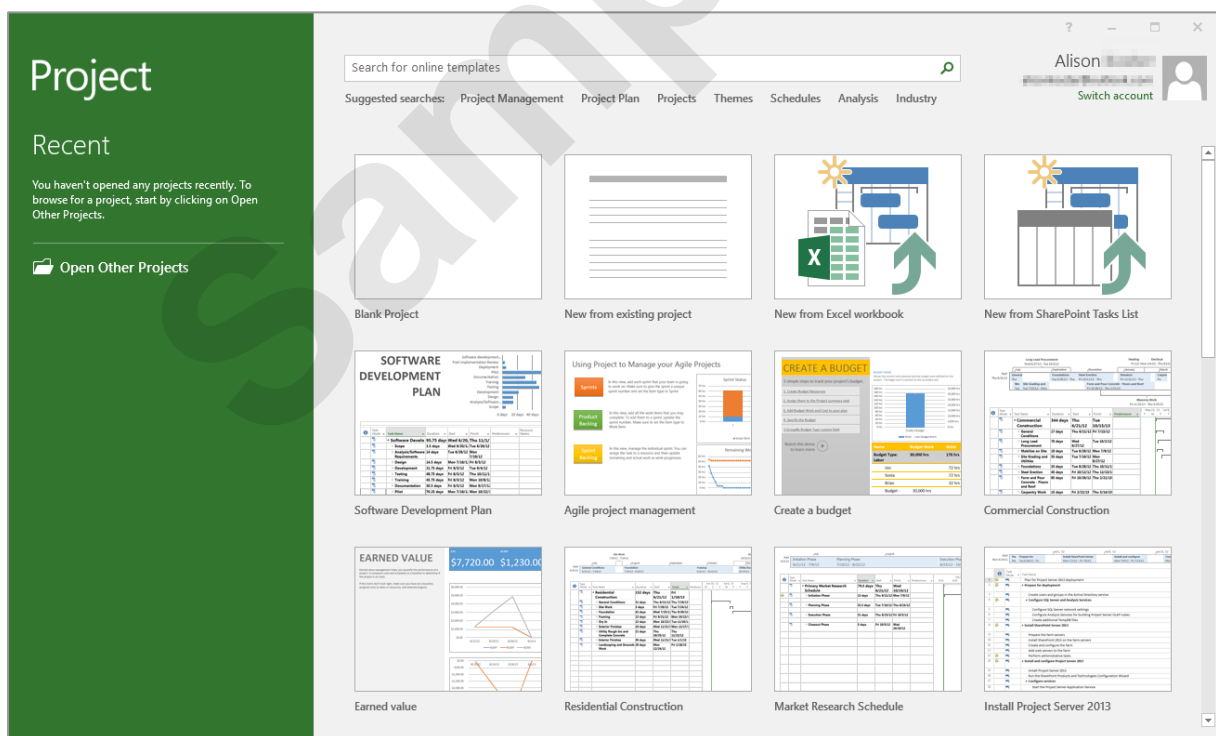
The Project 2016 Start Screen

In Microsoft Project your data is stored in a computer file referred to as a *workbook*.

The Project 2016 *start* screen is very helpful if you want to quickly access files you have worked on recently or create a new project file based on one of the available templates (including the default *Blank* project template).

If you have already worked on projects, a list of recent files will display below *Recent* in the green pane to the left of the screen. If you haven't worked on any projects yet you can still open existing files by clicking on the link *Open Other Projects* located below *Recent.* This lets you open an existing project file from your computer or OneDrive.

The main pane of the *start* screen displays available templates you can use to create a new project, and a search box you can use to search the internet for additional templates. Templates are simply layouts that have already been created which you can customise to suit your needs and then enter relevant data. If you want to start with a clean slate, you can choose the *Blank project* template – you'll probably find this is the one you'll use most often.

In the top right corner of the *start* screen you'll see information about the account you've used to sign into *Office* as well as *help*, *minimise*, *restore down* or *maximise* and *close* tools.


The *start* screen will only display when you launch the *Project 2016* application directly – that is, by clicking on a *Project* tile on the *Start* menu, clicking on the application in the *All apps* list or in a list of search results, or clicking on the taskbar icon if the application has been pinned to the desktop taskbar.

Project 2016 can also be started in *Windows 10* by double-clicking on a project file in *File Explorer*. When this occurs *Project 2016* will start with the project screen and the *start* screen shown above will be bypassed.

THE PROJECT 2016 SCREEN

The Project screen will vary depending upon the *view*, *table* and *filter* that is currently active. However, you will need to become familiar with the basic components of the screen as shown

below. Understanding the layout of the screen, and its components and terminology will help you in learning to use Project.
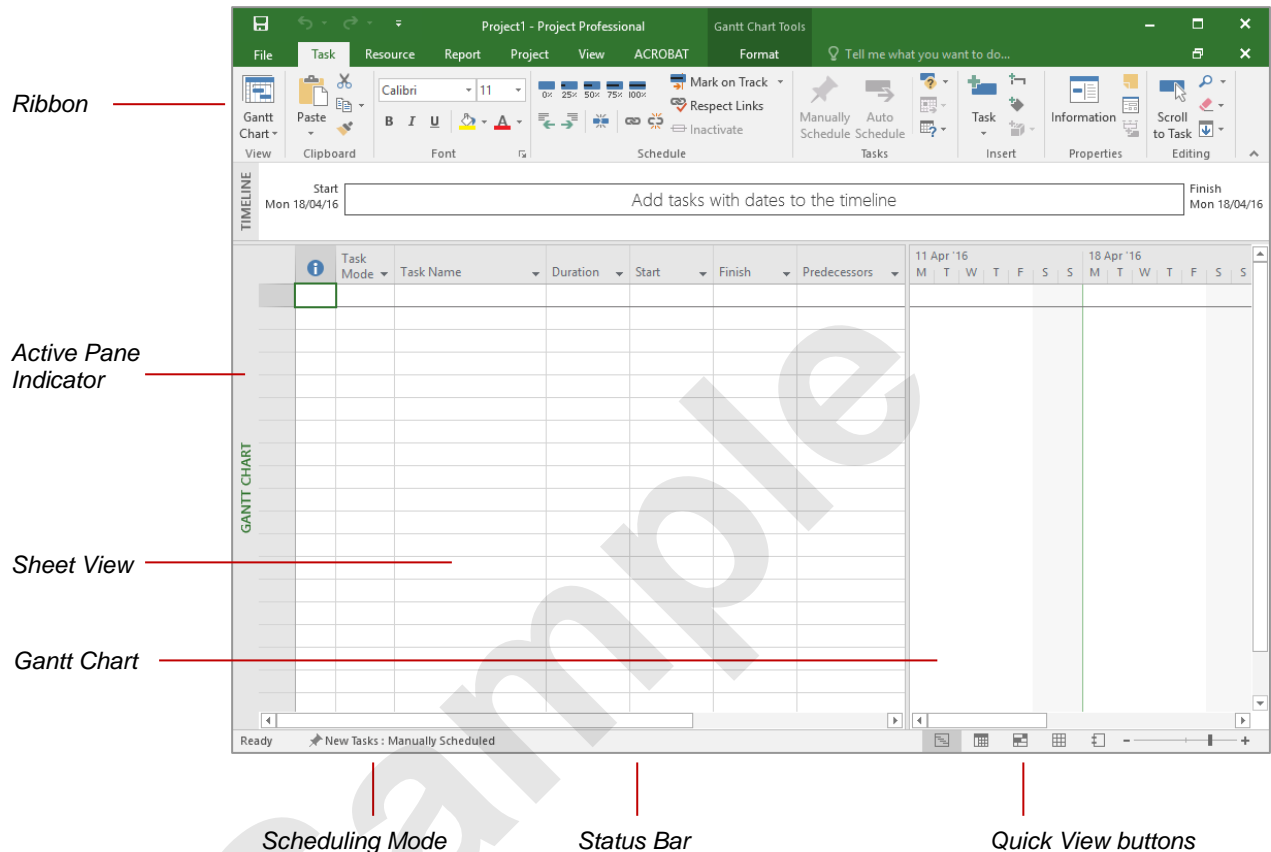
| Ribbon	The *ribbon* displays the commands required to use Microsoft Project. It is made up of tabs (*File*, *Task*, *Resource*, etc.) which each contain *groups* of commands organised into logical order.
Active pane indicator	The *active pane indicator* is a dark grey vertical bar that runs down the left side of a screen (or a *view*). In the example above, the active pane indicator is labelled *Gantt Chart* to indicate that the Gantt Chart is the active view. As seen above, you can have two different views displayed by *splitting* the screen; however, only one view will be active at a time. This is because functions such as the commands on the ribbon change depending on the view you are using. The indicator shows which view is currently *active*.
Sheet view	Your project's tasks and resources can be seen as a *table*, which appears similar to spreadsheet. In Project this is referred to as a *sheet view*.
Scheduling mode	Your project can be scheduled manually (the default) or automatically. This (very important) indicator tells you which mode is currently applicable.
Status bar	Watch this space – it tells you what Project is currently doing.
Quick view buttons	There are many ways to change the view of the screen. These four buttons provide quick access to the four most common views saving you the hassle of locating the commands to do this on the ribbon. From left to right, these views are *Gantt Chart*, *Task Usage*, *Team Planner* and *Resource Chart*.
Gantt chart	The *Gantt Chart* is the most popular view of a project. It shows your project's tasks as a series of timelines. It is the default view of Project when it is first started and will most likely be the one you use most.

PROJECT OPERATIONS

For a novice user the *Project 2016* screen can seem intimidating. However, you'll soon see that it is made up of only three key areas. The data you type is placed in the *work area*. The data here can be manipulated and changed using commands on the *ribbon*. The data is saved in a project file which is controlled through commands on the *Backstage*.
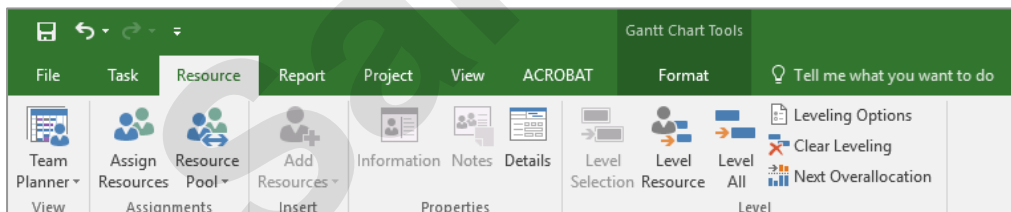
The Work Area

The *work area* occupies the largest part of the screen and contains the data associated with your project. The key point to remember is that a project is made up of *tasks* and *resources* and the work area allows you to view your task and resource data in a number of different ways. The work area may show your data in a *sheet* view, a *chart* view like a Gantt chart, or both.
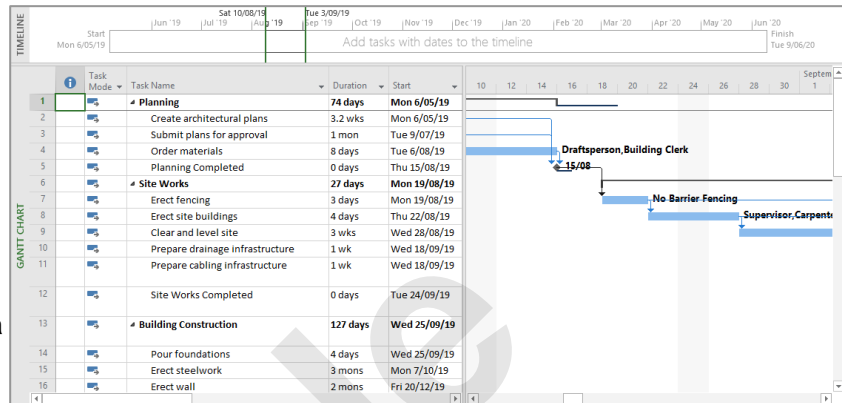
The Ribbon

When you need to do something with the data in the work area, such as format it, colour it, analyse it, move it, copy it, change the view of it and much more, you'll find all of the relevant commands on the *ribbon*. The ribbon has commands organised thematically using a series of *tabs* across the top. Commands on each tab are further organised into *groups* of related commands. For example, the *Task* tab contains commands that allow you to work with tasks, while the *Resource* tab contains commands for working with resources. These commands are organised into groups such as *Schedule*, *Assignments*, and so on.

Backstage

When you want to do something with the data in your work area, such as save it so that you can access it again later, print it, share it with a colleague, send it to your boss, apply protective security and so on, you will need to access the *Backstage* area of Project. The *Backstage* is accessed using the *File* tab on the ribbon. Rather than offering you commands on a *ribbon*, the *Backstage* occupies the entire screen and has a series of options down the left side. Here the *Print* option is active, displaying a preview of the work area and a series of print-related options on the right side of the *Backstage*.
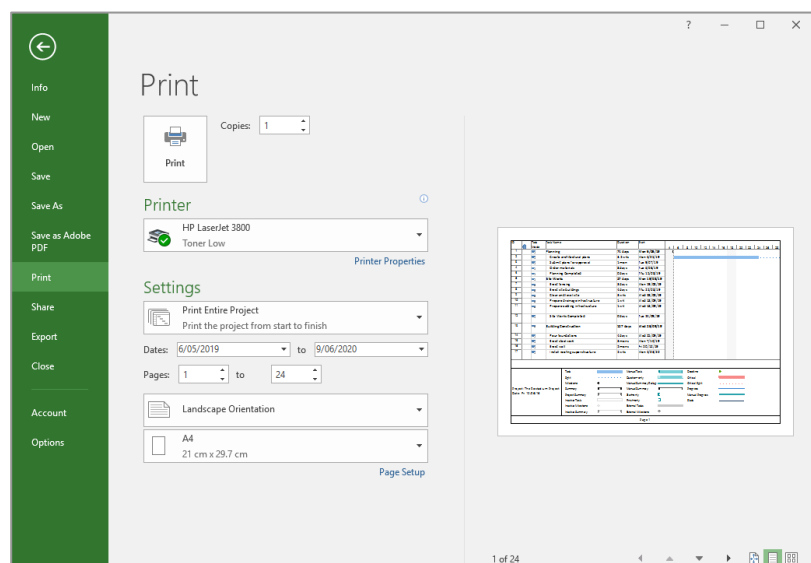

USING THE RIBBON

The *ribbon* is the command centre for Project. It provides a series of *commands* organised into *groups* and placed on relevant *tabs*. Tabs are activated by clicking on their name to display the command groups. Commands are activated by clicking on a button, tool or gallery option. Everything you could possibly want to do in Project will be found somewhere on the ribbon.

Try This Yourself:

Before starting this exercise ensure that Project has started...

1 Examine the various groups on the *Task* tab

The group names appear at the bottom of the ribbon…

2 Click on the *Resource* tab

The commands on this tab are used to work with resources. Many will not be available because there are no resources in the blank project on the screen…

3 Click on *Resource Pool* in the *Assignments* group to display a menu of options

4 Select **Share Resources** to display the *Share Resources* dialog box

5 Click on **[Cancel]** to close the dialog box without doing anything

6 Click on the other tabs and spend some time examining the groups and commands they contain

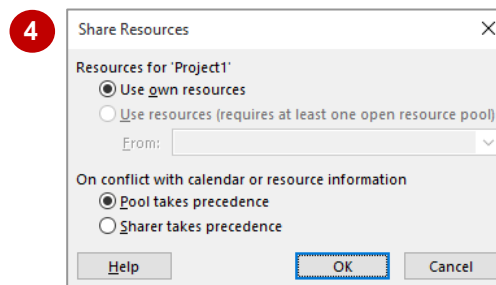**7** Click on the *Task* tab to display the commands and options for working with tasks
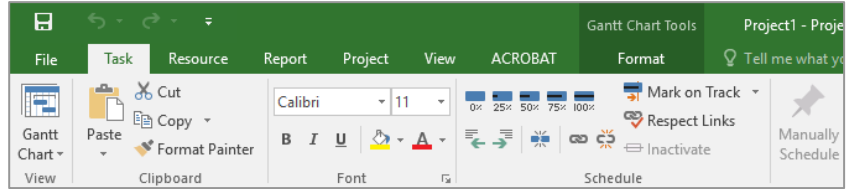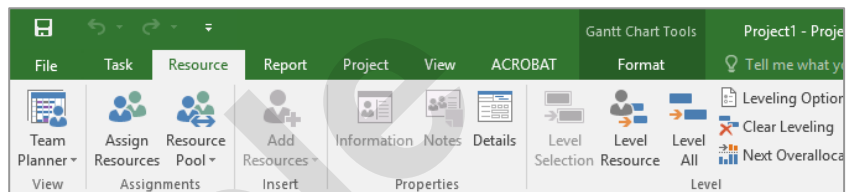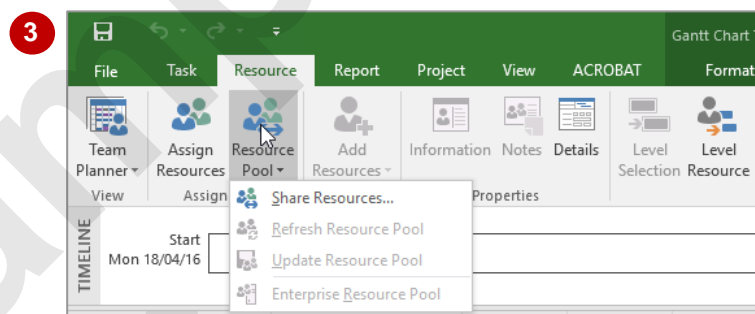
For Your Reference…

To *use* the *ribbon*:

1. Click on a *tab* to display the commands
2. Click on a *button* to activate a *command*, display a *gallery* or display a *dialog box*

Handy to Know…

- *Contextual tabs* appear in the ribbon in specific circumstances. For example, if the Gantt Chart view is active, the *Gantt Chart Tools: Format* tab will appear. This provides quick access to all of the tools you may need to modify and work with the Gantt Chart.

SHOWING AND COLLAPSING THE RIBBON

The ribbon, valuable as it is, does tend to occupy a reasonable amount of space. You can minimise the ribbon so that only the tabs are visible. You can minimise the ribbon as a once-off operation, or have it remain constantly minimised and display full commands only briefly when a tab is clicked.

Try This Yourself:

*Before starting this exercise ensure that Project has started...*

1. Click on the **Project** tab to display the **Project** commands

2. Double-click on the **Project** tab to minimise the ribbon

   While the tabs stay visible, the rest of the commands are hidden...

3. Click on the **View** tab to display the ribbon and see the commands for the **View** tab

4. Click back in the work area of the project

   The ribbon will hide again – it only becomes visible when you click on a tab…

5. Double-click on the **Task** tab to redisplay the ribbon permanently again
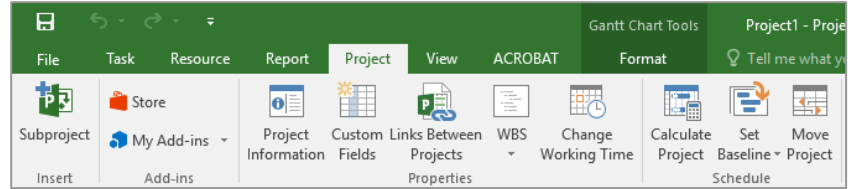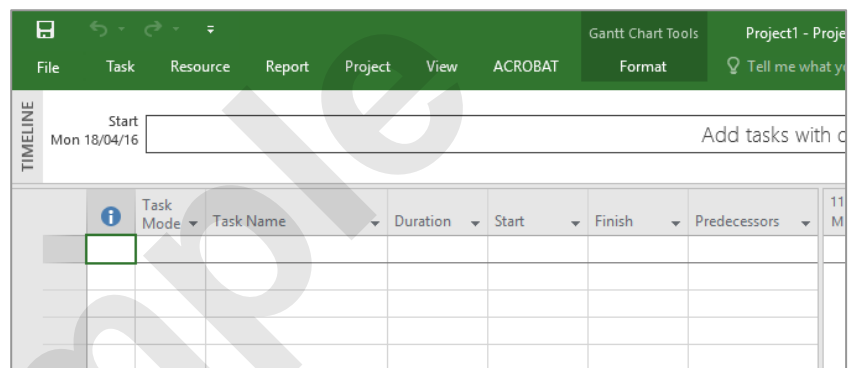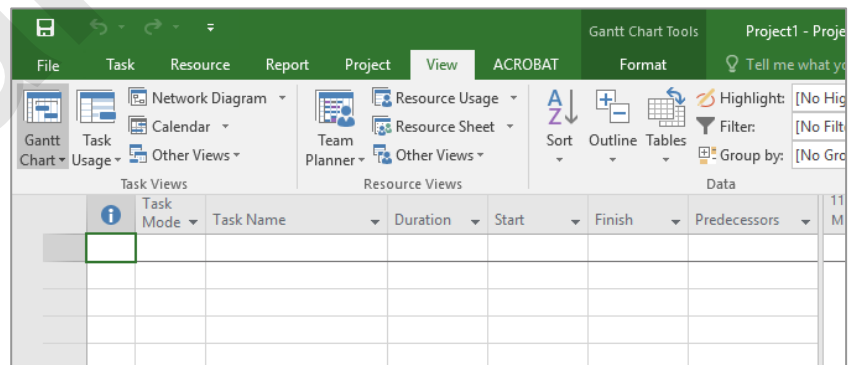
For Your Reference…

To **hide/display** the **ribbon**:

1. Double-click on the active tab to hide the ribbon
2. Click on a tab to see the ribbon temporarily
3. Double-click on a tab to show the ribbon permanently

Handy to Know…

- You can use the keyboard shortcut `Ctrl` + `F1` to show or hide the ribbon.

- You can hide the ribbon by clicking on the small grey arrow at the right end of the ribbon, and redisplay it permanently by clicking on the pin icon.

UNDERSTANDING THE BACKSTAGE

The ribbon lets you work on the content in a document so that you can add more content, format it, insert pictures into it, copy it, and much more. The *Backstage view*, which is accessed using the *File* tab, lets you do something with the content you create. You can save it for later use, print it on paper, send it via email, and more by using the options found in the *Backstage view*.
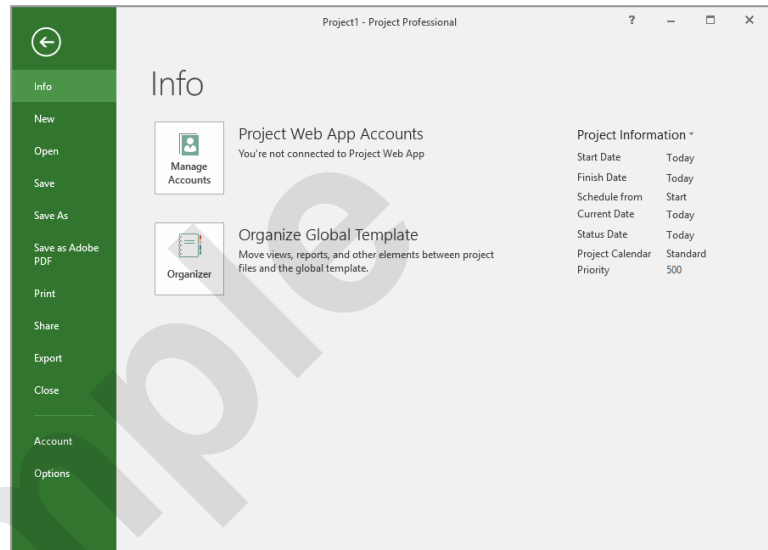
The Backstage View

The *File* tab on the ribbon is not a normal tab – as you can tell by the fact that it is coloured. Clicking on the *File* tab launches a mini-program within Project known as *Backstage view*. *Backstage*, as it's known for short, occupies the entire screen.

At the left of the *Backstage* is a navigation pane which is made up of *tabs*. These tabs provide you with access to various operations such as printing, saving and sharing. They can also provide you with information about your project such as the file size.

Clicking on one of these tabs brings up a range of options associated with that particular operation.

The whole underlying purpose of the *Backstage* is to let you protect your data and share it with others, and to provide you with valuable information about your project. Depending on what type of project it is and what has been done to it, different information may display when the *Info* tab is selected.

Backstage Tabs

The *Backstage tabs* provide more options for working with a project:

|	
Info	Provides status information about the current project and lets you manage versions and permissions.
New	Lets you create a new project and provides access to a gallery of inbuilt templates as well as a range of online templates.
Open	Provides a list of recent projects as well as the option to search through your Computer, OneDrive or other place, to find what you are looking for.
Save	Saves your current project (if already saved to a location) or prompts you to save to a location.
Save As	Allows you to name your project and save it to a location.
Save as Adobe PDF	Lets you save a project as an Adobe PDF file.
Print	Lets you print the current project and preview it.
Share	Lets you share your project with other people via email, online presentation, blog or cloud (e.g. OneDrive).
Export	Allows you to export your project to a different application.
Close	Closes your current project.
Account	Contains product and user information.
Options	Presents you with a range of options which assist in the creation and editing of your project.
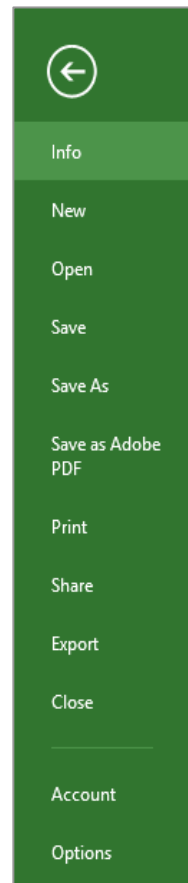
THE PROJECT WORK AREA

The main part of the Project screen is made up of the *work area* where your project data is displayed. Remember, Project is really just two tables of data – *tasks* and *resources*. The work area shows you different aspects and sometimes combined *views* of this data. For example, you can view your tasks and the resources assigned to them.

The View Tab

The *View* tab on the ribbon provides you with access to the views for your project's data.

Notice there are two different groups of views: *Task Views* and *Resource Views*.
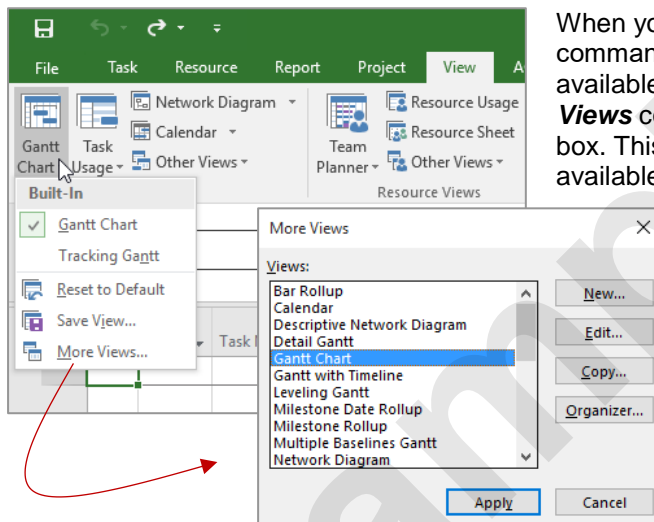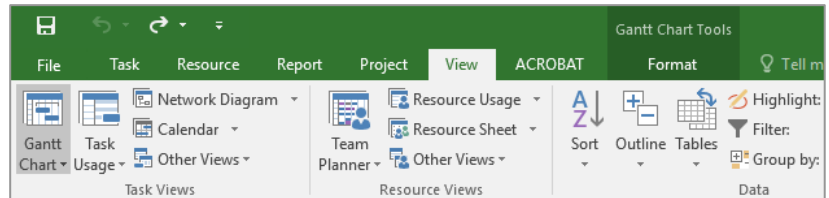
When you click on the arrow for one of the *View* commands you'll receive a menu of further views available to you. All of the menus feature the *More Views* command which displays the *More Views* dialog box. This dialog box lists all of the standard views available to you in Project.

Built-In Project Views

Project contains twenty-seven different built-in views. Seven of these views are available from the *Task Views* and *Resource Views* groups on the *View* tab, while the full twenty-seven are available from the More Views dialog box. Here's a list of the twenty-seven views – the ones marked with a (*T*) or (*R*) are accessible directly from the *View* tab of the ribbon.

- Bar Rollup
- Calendar (*T*)
- Descriptive Network Diagram
- Detail Gantt
- Gantt Chart (*T*)
- Gantt with Timeline
- Levelling Gantt
- Milestone Date Rollup
- Milestone Rollup

- Multiple Baselines Gantt
- Network Diagram   (*T*)
- Relationship Diagram
- Resource Allocation
- Resource Form
- Resource Graph
- Resource Name Form
- Resource Sheet (*R*)
- Resource Usage (*R*)

- Task Details Form
- Task Entry
- Task Form
- Task Name Form
- Task Sheet
- Task Usage (*T*)
- Team Planner (*R*)
- Timeline
- Tracking Gantt

WORKING WITH VIEWS

A *view* is the way the project and the data it contains is displayed. In order to work with your project successfully, you will need to learn how to operate and manipulate the many different views.

The easiest way to change the view of your project is through the commands on the *View* tab or through the *Quick Views* buttons at the bottom right of the screen.

Try This Yourself:

Before starting this exercise ensure that Microsoft Project has started...

1 Click on the *View* tab and spend a few moments studying the options in the *Task Views* and *Resource Views* groups

2 Click on the top half of *Task Usage* in the *Task Views* group to display the work allocations on the screen

3 Click on the top half of *Calendar* in the *Task Views* group to display the content on the screen as a calendar

4 Click on *Other Views* in the *Task Views* group to display a menu of options, then select *Task Form*

5 Click on the top half of *Resource Sheet* in the *Resource Views* group to display a spreadsheet-like view of the resources

6 Click on the top half of *Gantt Chart* in the *Task Views* group to return to the *Gantt Chart* view
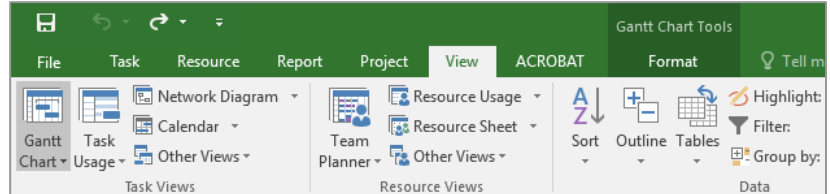
1 *The commands on the ribbon grow or shrink in width depending on the size of the Project window – when they've shrunk down their names often don't appear. You may need to enlarge the window (if possible) to see the names properly.*
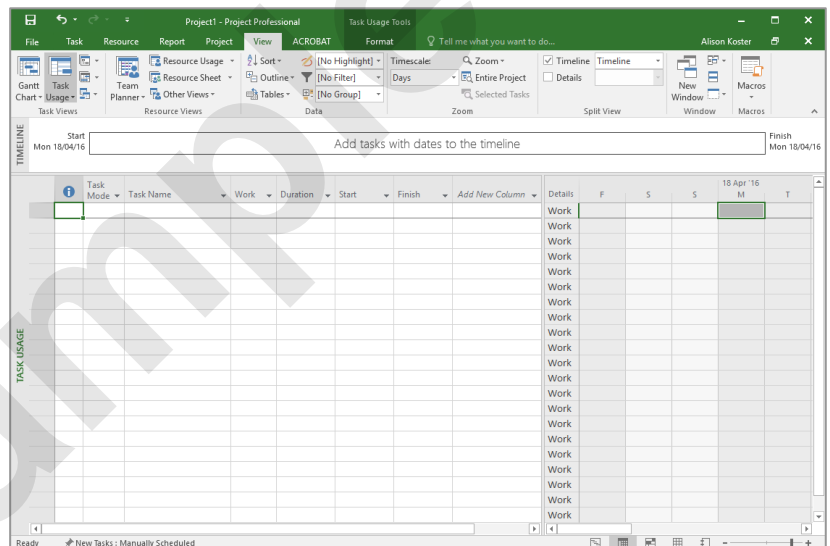
2 *There is an obvious lack of data presented on this screen! Don't worry too much at this stage about what the view is all about. All we are doing at the moment is examining the View commands to see how they work and what they offer.*

For Your Reference…

To *display different views*:

- Click on a command on the *View* tab, or Click on the arrow of a command and click on *More Views* to display a list of all available views

Handy to Know…

- The *Gantt Chart*, *Task Usage*, *Team Planner* and *Resource Sheet* views appear as buttons at the bottom right of the screen.

WORKING WITH SPLIT SCREENS

Sometimes in Project one view of your data is not enough. Therefore, Project allows you to *split* your screen horizontally into two views. For example, you might want to see tasks at the top and the resources they use at the bottom. One of these views is deemed to be the *active* view, as indicated by the *Active Pane* indicator.

Try This Yourself:

Before starting this exercise ensure that Microsoft Project has started...

1 Click on the *View* tab and click on *Details* in the *Split View* group so it appears ticked

The Task Form view is now displayed in the bottom half of the screen…

2 On the *View* tab, click on the drop arrow next to *Details* to see a list of available views

**3** Click on *Resource Form* to display this view in the lower area

4 Click on *Details* in the *Split View* group so it appears unticked, to return to the *Gantt Chart* view

5 Point to the *split screen* button at the bottom right of the screen

The mouse pointer will change to a double-headed arrow…

6 Click and drag the button about one third of the way up the screen to create a custom split

7 Double-click on the button (which now runs the full width of the screen) to return to a single view
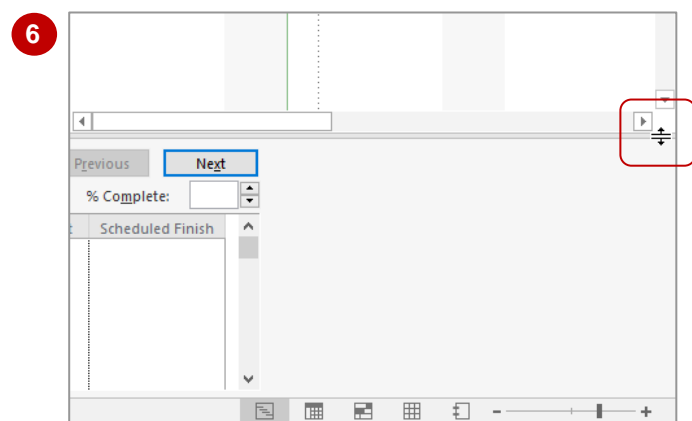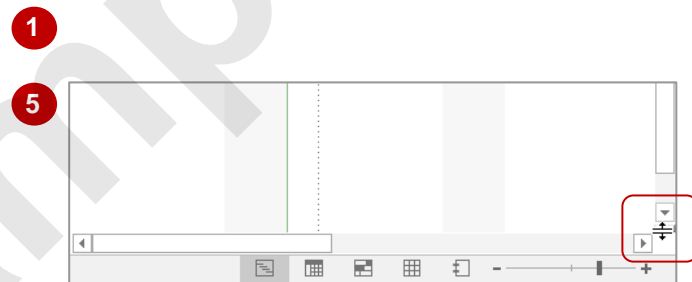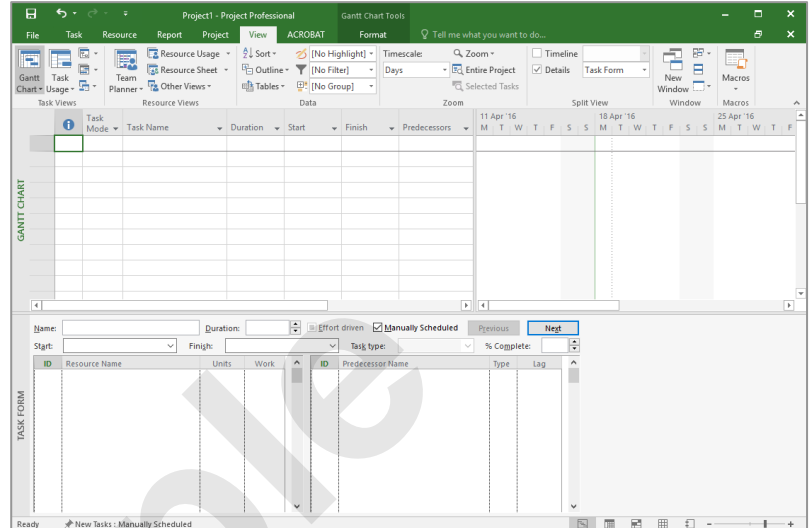
For Your Reference…

To *display* a *split view*:

1. Click on *Details* in the *Split View* group on the *View* tab
2. Optionally, click on the drop arrow for *Details* and choose the desired view

Handy to Know…

- The *Timeline* tick box in the *Split View* displays/hides a timeline that appears above a *Gantt Chart*. The timeline encompasses the whole project from start to end, and provides a useful way of quickly moving through the duration of a project.