

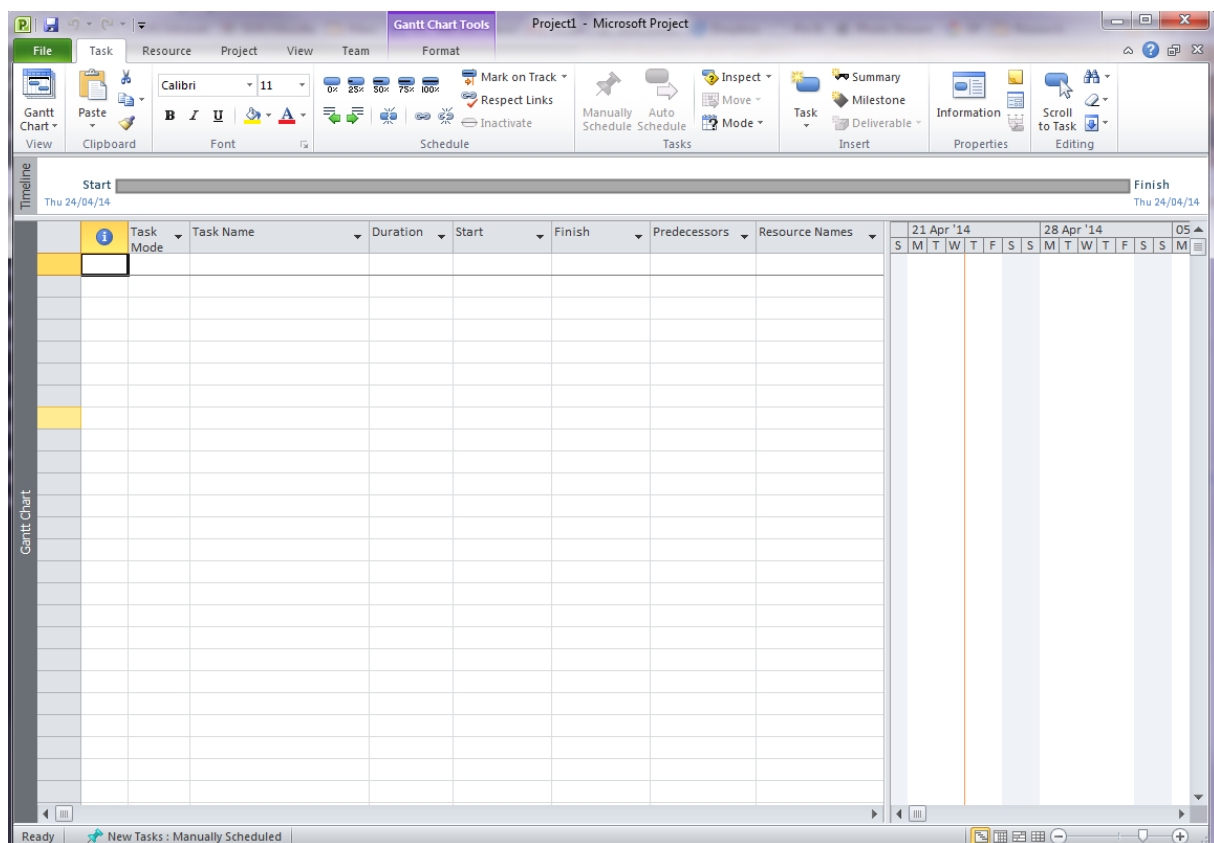
Introduction to Microsoft Project 2010

Introduction

Microsoft Project is a very useful piece of business software that allows the user to plan a project, produce schedules, allocate tasks and resources, and generate reports. It allows you to update these as your project progresses.

Project Layout

A window similar to that shown below should appear. Remember that the exact appearance of the window on your computer depends on your own particular configuration. The default tabs for Project 2010 are File, Task, Resource, Project, View, Team and Format. The main window allows you to enter data directly into a Gantt chart, with the task pane in the centre of the window and the calendar pane on the right of the window.



Project planning

Whenever you start a project it is vitally important that you understand all of the tasks that need to be performed in order to complete the project successfully. As well as the tasks themselves, you will also need to identify:

- The different phases of the project
- How long each task is likely to take
- Any dependencies between tasks (some tasks may need to be completed before other tasks can begin)
- All of the resources that the project will need (which includes people as well as objects)
- Any milestones within the project (delivery dates, meetings, presentations and so on)

Once all of these have been identified you are ready to start inputting them into Project. In this example you are going to create a project plan for the development of an internet portal by a small technical company.

Stage 1: Define the project

The first stage is to define the basic parameters of the project. Go to the Project tab and click on the Project Information control. This will bring up a subwindow into which you can type the start date. We're going to assume that the project will start on December 1st, so select this from the calendar drop-down box next to "Start date", then click on OK to return to the main screen.

Project Information for 'Project3'

Start date: Fri 25/04/14

Current date: Fri 25/04/14

Finish date: Fri 25/04/14

Status date: NA

Schedule from: Project

Calendar: Standard

Priority: 500

Enterprise Custom Field

Department:

Custom Field Name

Value

Help Statistics... OK Cancel

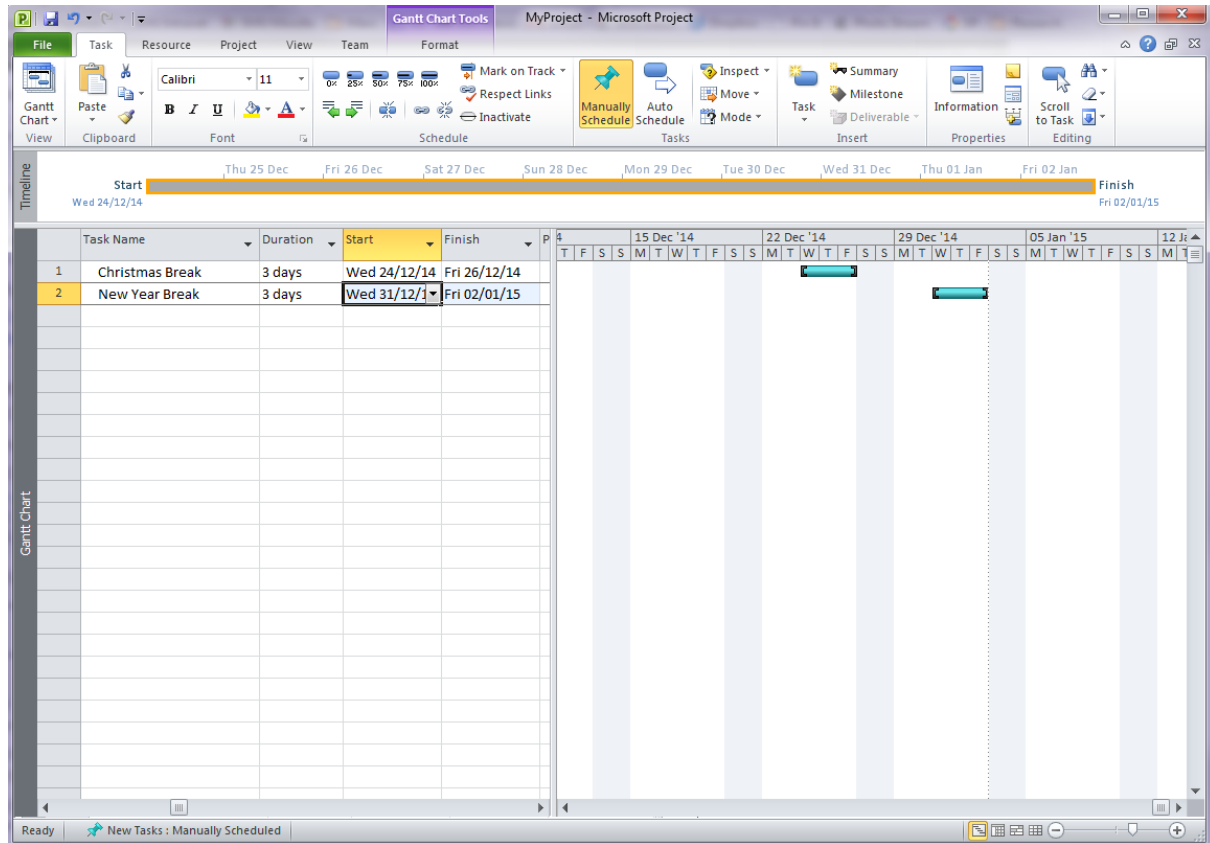
You are ready to start adding the rest of the information. Save the project under the filename MyProject.

Stage 2: Define general holidays

The project is going to continue after Christmas so we need to add time for a Christmas vacation. The company gives its workers three days off at Christmas and another three days at New Year. In the top line of the task area enter **Christmas Break**. Increase the time to **3 days** and use the calendar control in the start date box to select an appropriate day to start the

Christmas break. Repeat this process for the New Year break. Now go to the calendar pane on the right and scroll to the right until you can see the Christmas and New Year period.

Scroll the calendar section at the right side of the window until December appears. The two holidays are shown as bars within the Gantt chart. Save the file.



The calendar pane shows the data as a *Gantt chart*. This is a format commonly used in business to show how the different tasks within a project relate to each other in terms of order, timing and resources. Other views are available from the View tab – a true calendar, a network diagram and others – but we will focus on the Gant chart. The calendar pane can be resized by clicking and dragging the pane divider left or right.

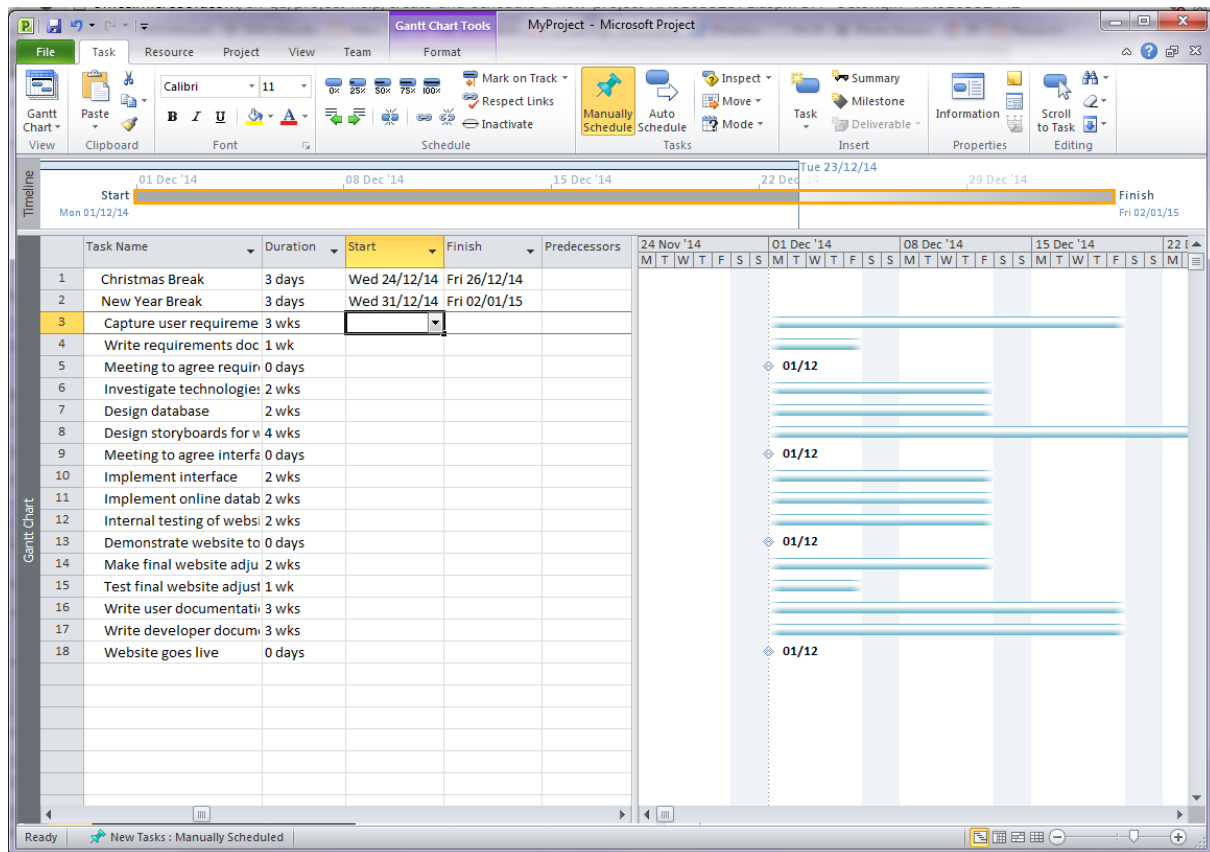
Stage 3: List the tasks in the project

We now need to input the individual tasks and milestones for the project. A task has a task number (generated automatically and shown in the far left column of the chart), a task name, a duration, and a start date.

The following are the tasks required to complete the project:

Task Name	Duration	Start Date
<i>Requirements Capture</i>		
Capture user requirements	3 weeks	01/12/2014
Write user requirements document	1 weeks	
Meeting to agree requirements	Milestone	
<i>Design</i>		
Investigate technologies to be used	2 weeks	
Design database	2 weeks	
Design storyboards for website interface	4 weeks	
Meeting to agree interface	Milestone	
<i>Implementation</i>		
Implement interface	2 weeks	
Implement online database	2 weeks	
<i>Testing</i>		
Internal testing of website	2 weeks	
Demonstrate website to clients	Milestone	
Make final website adjustments	2 weeks	
Test final website adjustments	1 week	
<i>Documentation</i>		
Write user documentation	3 weeks	
Write developer documentation	3 weeks	
Website goes live	Milestone	

Enter these into the list of tasks below the Christmas and New Year breaks. A milestone has a duration of 0 days and will appear not as a line across the calendar, but as a diamond with a date beside it. Scroll the calendar pane back to show the project start date. As we have not put in any start dates or links between tasks, all of the tasks are shown to occur in parallel.



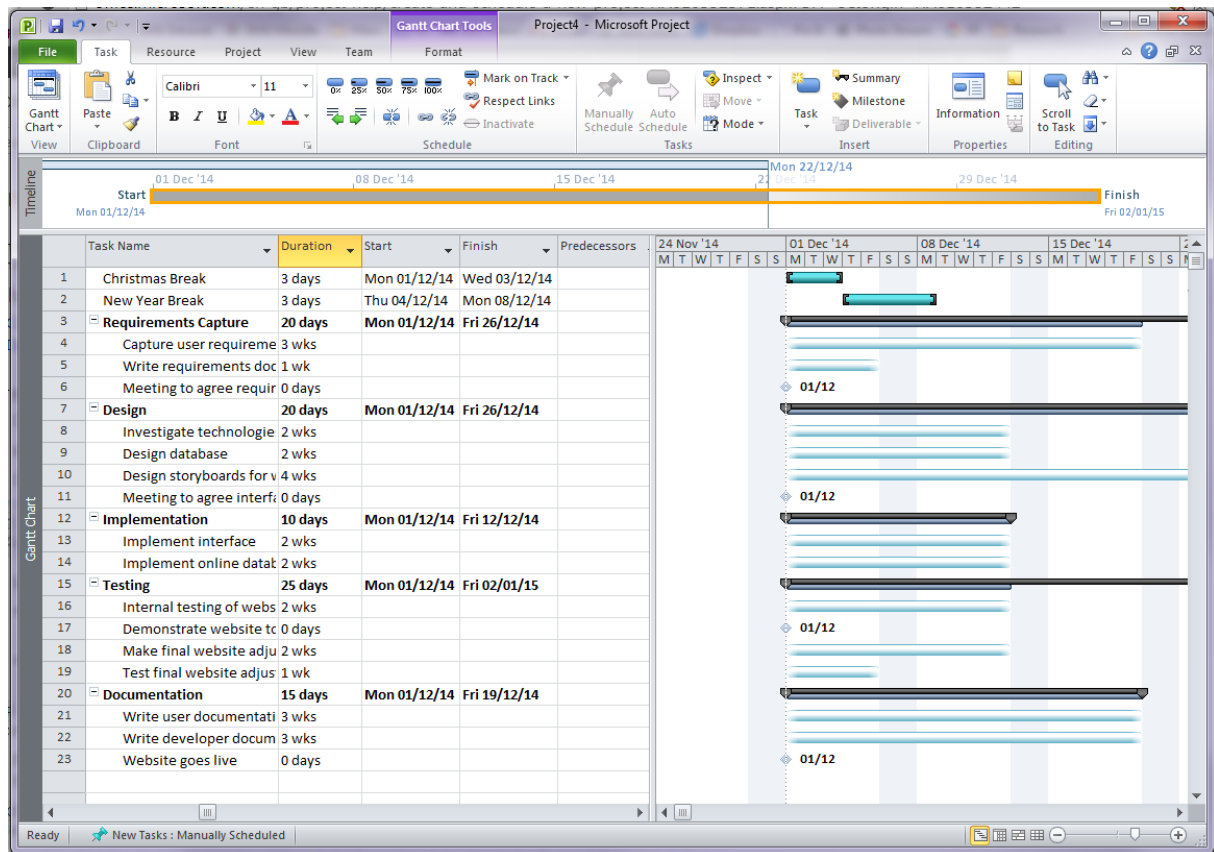
Once you have entered all of the tasks, save the file.

Stage 4: Organise tasks into phases

In the list of tasks we have divided up the tasks into several different phases – the user requirements phase, the design phase and so on. We now need to show these phases within our project plan.

Highlight tasks 4, 5 and 6 ('Capture user requirements', 'Write requirements document', 'Meeting to agree requirements'). Click on the Summary control (in the Insert section of the Task tab of the ribbon) to create a new phase summary. This will insert a new task line in the task list and a black bar in the calendar view. Type into the task name **Requirements Capture**.

Repeat this process to add summary tasks for all of the phases identified in the task list on page 5.



Save the file.

Stage 5: Schedule tasks

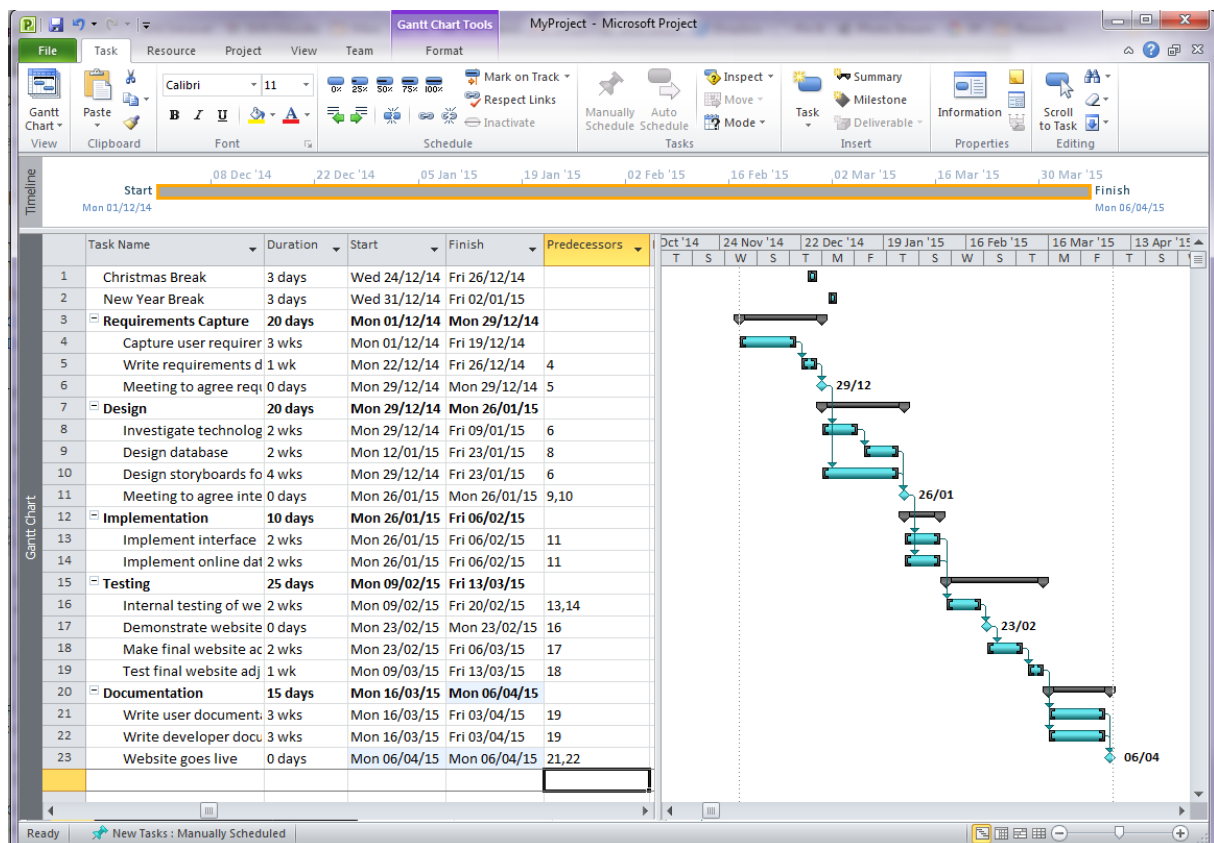
At present all of the tasks are set to be performed at the same time. Normally some tasks cannot be started until other tasks have been completed. We must now set up these dependencies within the task schedule.

The first dependency is that we cannot write the user requirements document before we have collected the user requirements. Scroll the task pane so that you can see the *Predecessors* column, and type the number 4 (the task number of the task 'Capture user requirements') into the *Predecessors* column for the task 'Write requirements document'. In the calendar pane the bar representing the 'Write user requirements' task will now be shifted to the right and will not start until after the 'Collect user requirements' task has finished. A small arrow appears to link the two tasks.

If a task depends on two or more previous tasks then enter the task numbers separated by a comma into the *Predecessors* column. The other task dependencies in the plan are as follows:

Meeting to agree user requirements	<i>Must be done before</i>	Investigate technologies Design storyboards
Investigate technologies	<i>Must be done before</i>	Design database
Design database Design storyboards	<i>Must be done before</i>	Meeting to agree interface
Meeting to agree interface	<i>Must be done before</i>	Implement interface Implement online database
Implement online database Implement interface	<i>Must be done before</i>	Internal testing of website
Internal testing of website	<i>Must be done before</i>	Demonstrate website
Demonstrate website	<i>Must be done before</i>	Make final adjustments
Make final adjustments	<i>Must be done before</i>	Test final adjustments
Test final adjustments	<i>Must be done before</i>	Write user documentation Write developer documentation
Write user documentation Write developer documentation	<i>Must be done before</i>	Website goes live

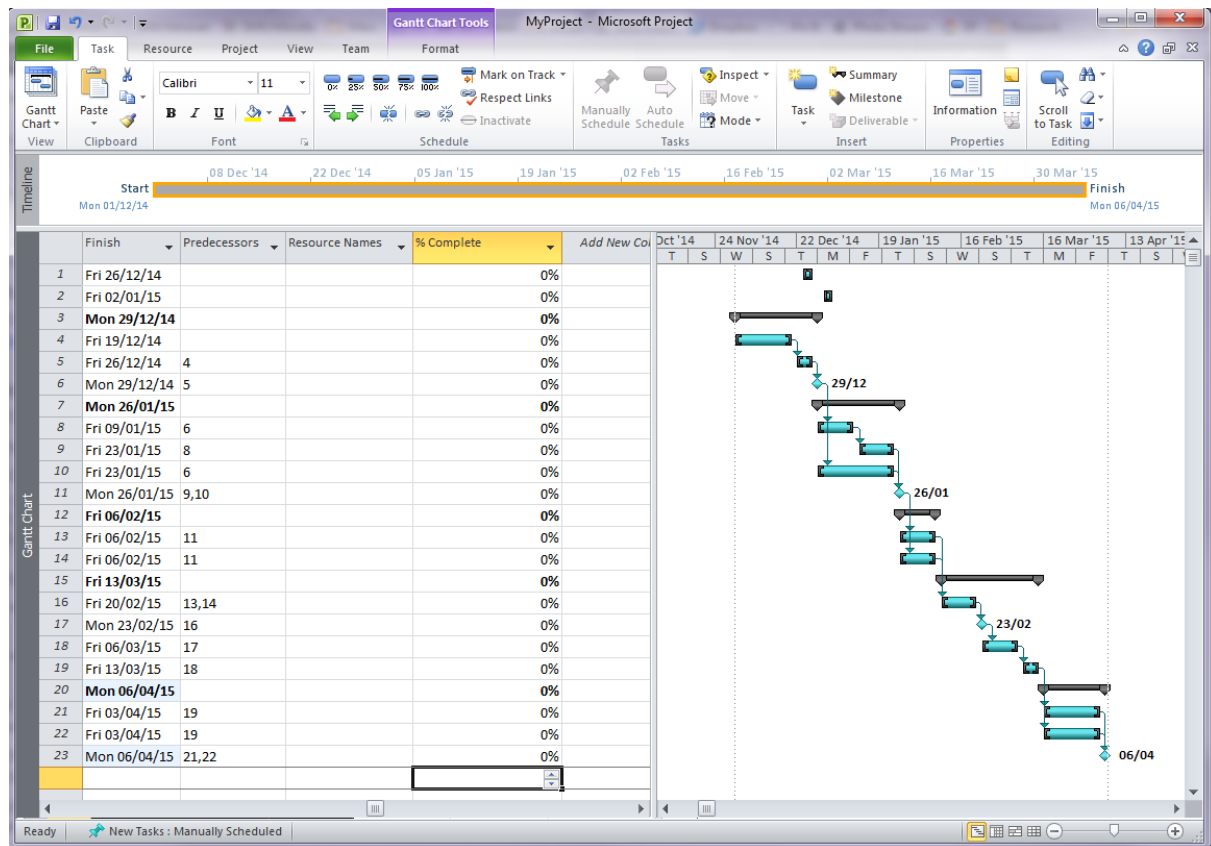
As you add these dependencies the bars representing each task will move to the right in the calendar pane. Scroll across the calendar pane to see how the bars link to each other. You can also use the + and – buttons in the bottom right corner of the window to zoom in and out of the calendar pane.



Stage 6: Add columns of custom information

Within this project we want to see and be able to update the progress of each of the tasks. To do this we need to add a column to the task pane to show % complete for each task. Scroll across the task panel until you can see the *Add new column* option, click on it and select ‘%

Complete'. The column will be added at the far right of the task pane. We will use this column later to show how the project is progressing.

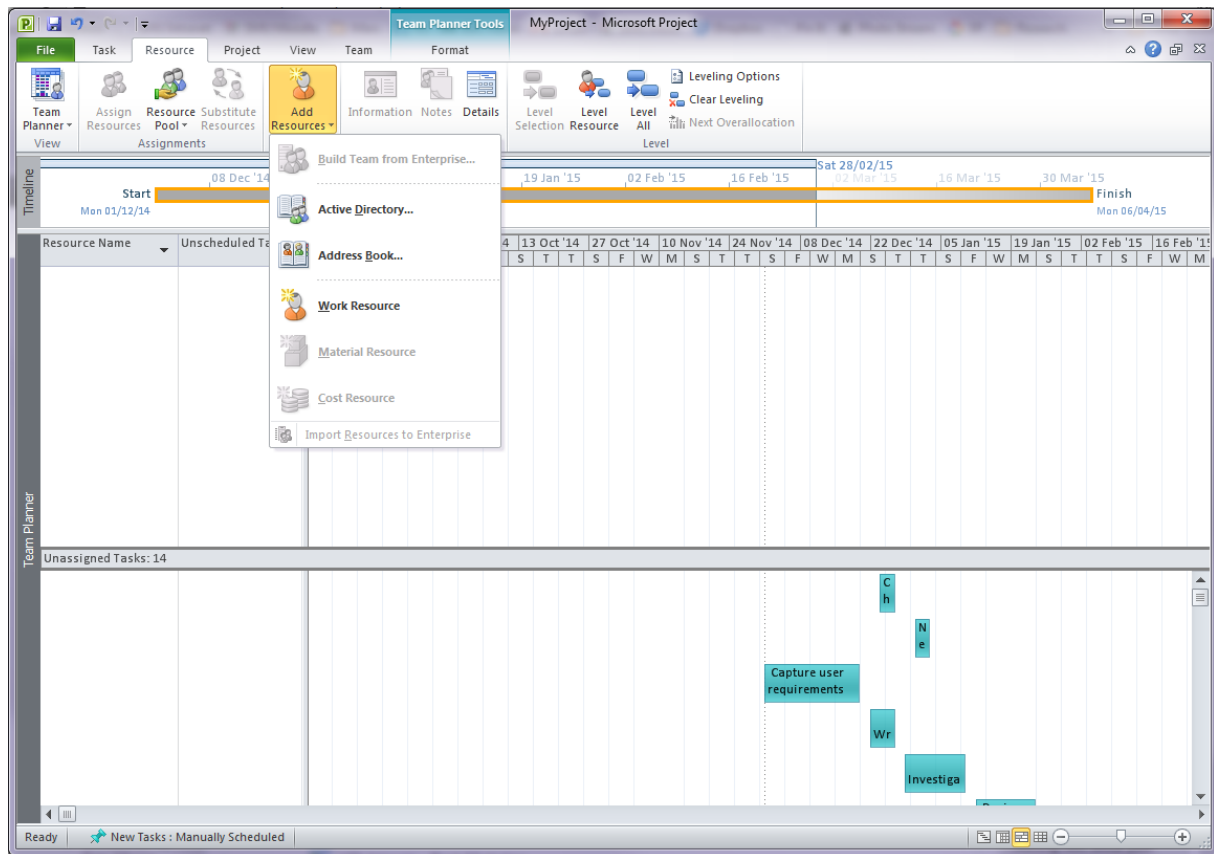


Save the file.

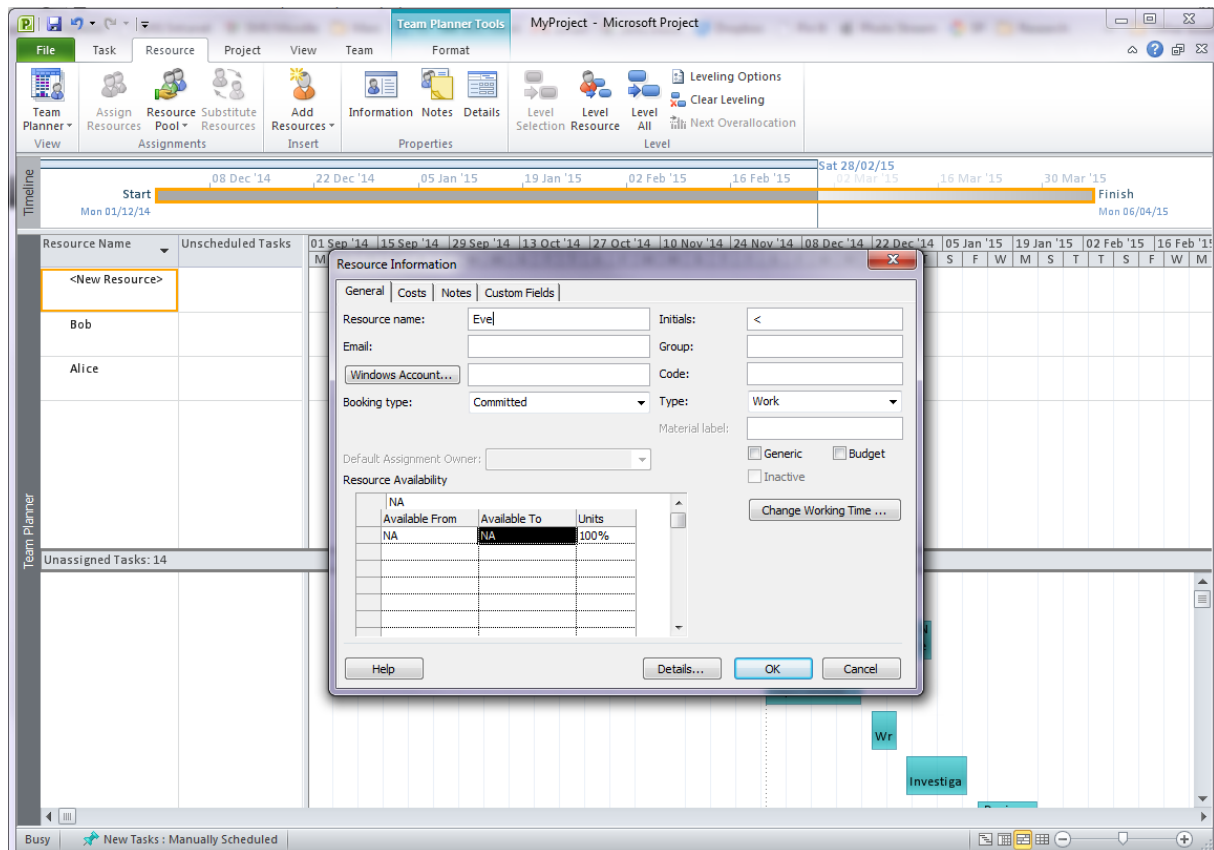
Stage 7: Identify and assign resources

All projects have resources. These include the people working on the project. We therefore need to set up a list of these people and assign tasks to them. Click on the Resources tab and select the Team Planner view. This will change the view to one that shows the available resources at the top, and the unassigned tasks at the bottom.

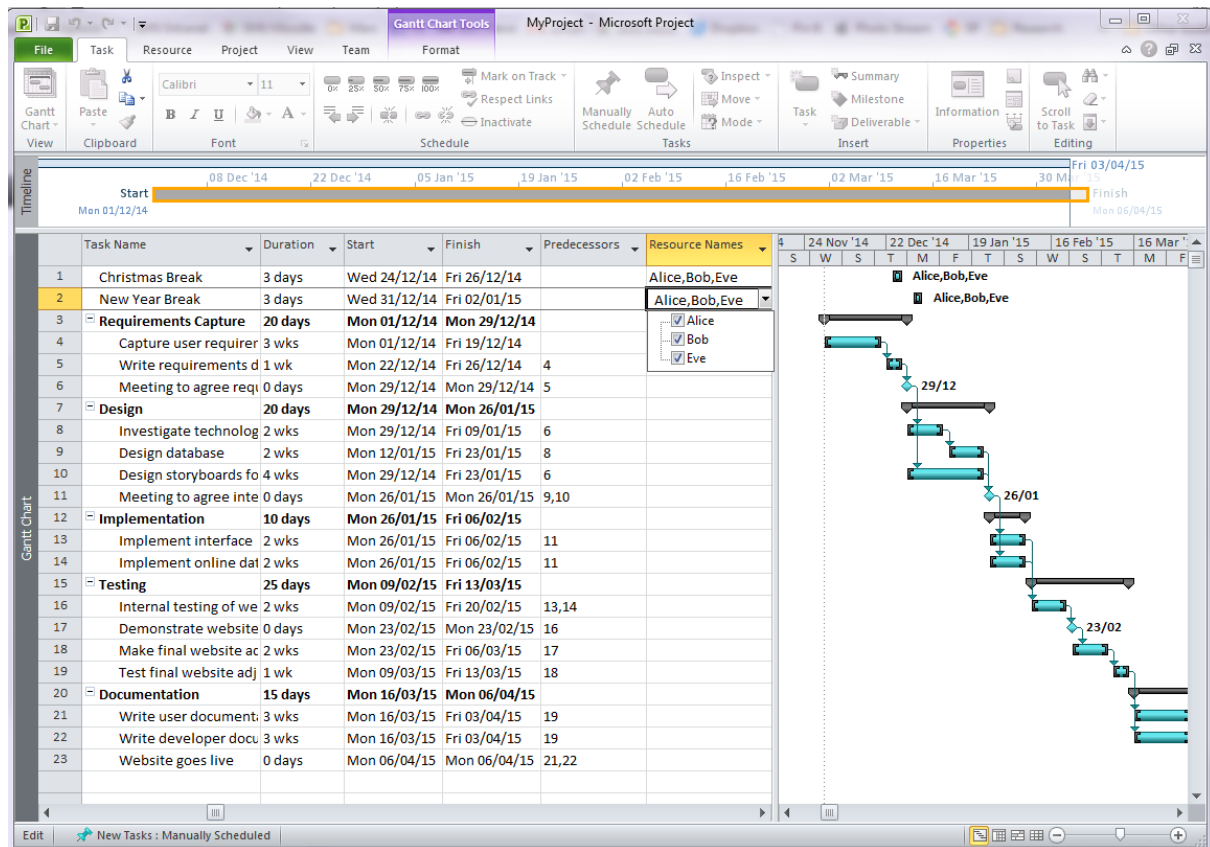
Click on the Add Resources button and select Work Resource.



This will add a new resource to the project but will not name the resource. To name the resource you must double-click on the <New Resource> to bring up the Resource Information subwindow. The name can be added here, as can a variety of other related information. Enter the name **Eve** into the resource name box and click OK. Repeat this to add resources called Alice and Bob.



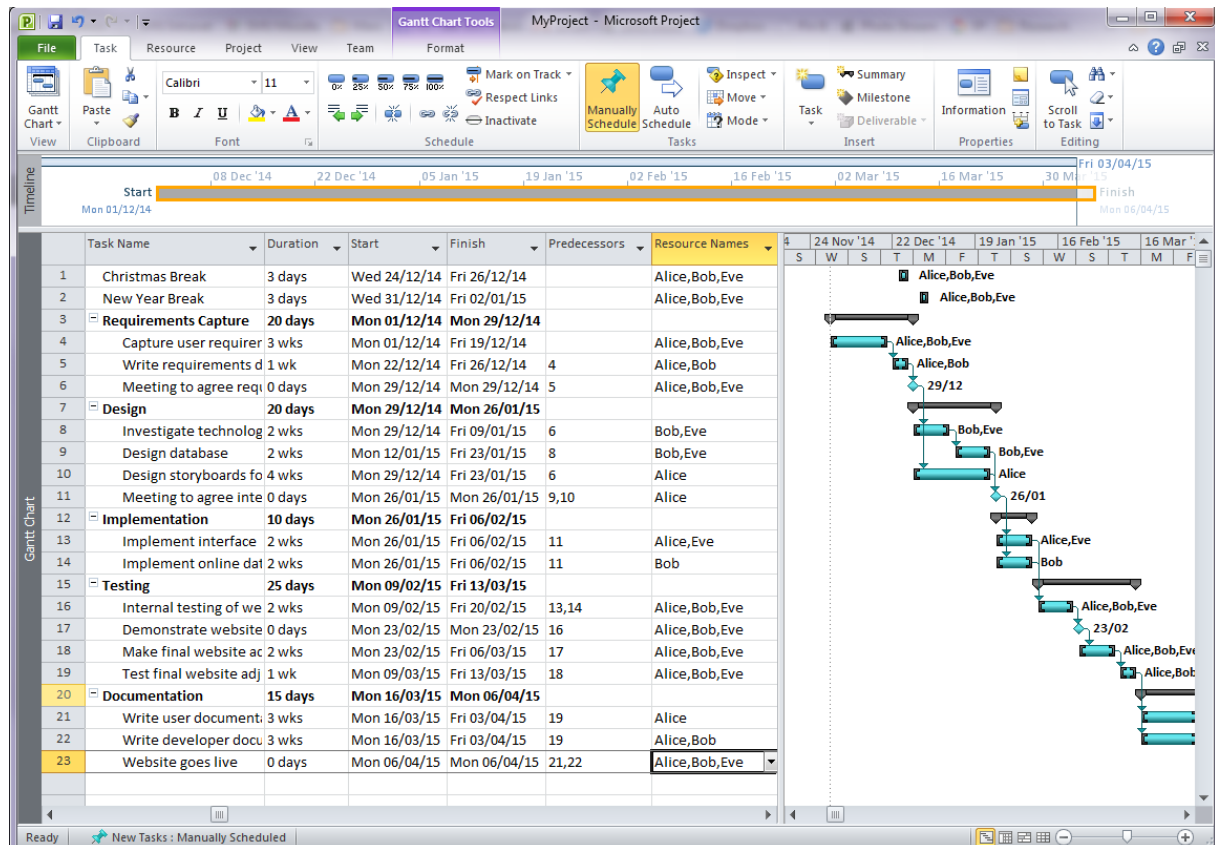
Each of these resources must now be assigned to work on particular tasks. Return to Gantt chart view and adjust the size of the task pane so that you can see the *Resource Names* column. All three resources will be away for the Christmas break, so click into the *Resource Names* column of the 'Christmas break' task and check all three boxes. Do the same for the 'New Year Break' task.



Repeat this process for all of the remaining tasks, allocating the following resources to each task:

Task Name	Resource
Capture user requirements	Alice, Bob, Eve
Write user requirements document	Alice, Bob
Meeting to agree requirements	Alice, Bob, Eve
Investigate technologies to be used	Bob, Eve
Design database	Bob, Eve
Design storyboards for website interface	Alice
Meeting to agree interface	Alice
Implement interface	Alice, Eve
Implement online database	Bob
Internal testing of website	Alice, Bob, Eve
Demonstrate website to clients	Alice, Bob, Eve
Make final adjustments to website	Alice, Bob, Eve
Test final adjustments to website	Alice, Bob, Eve
Write user documentation	Alice
Write developer documentation	Alice, Bob
Website goes live	Alice, Bob, Eve

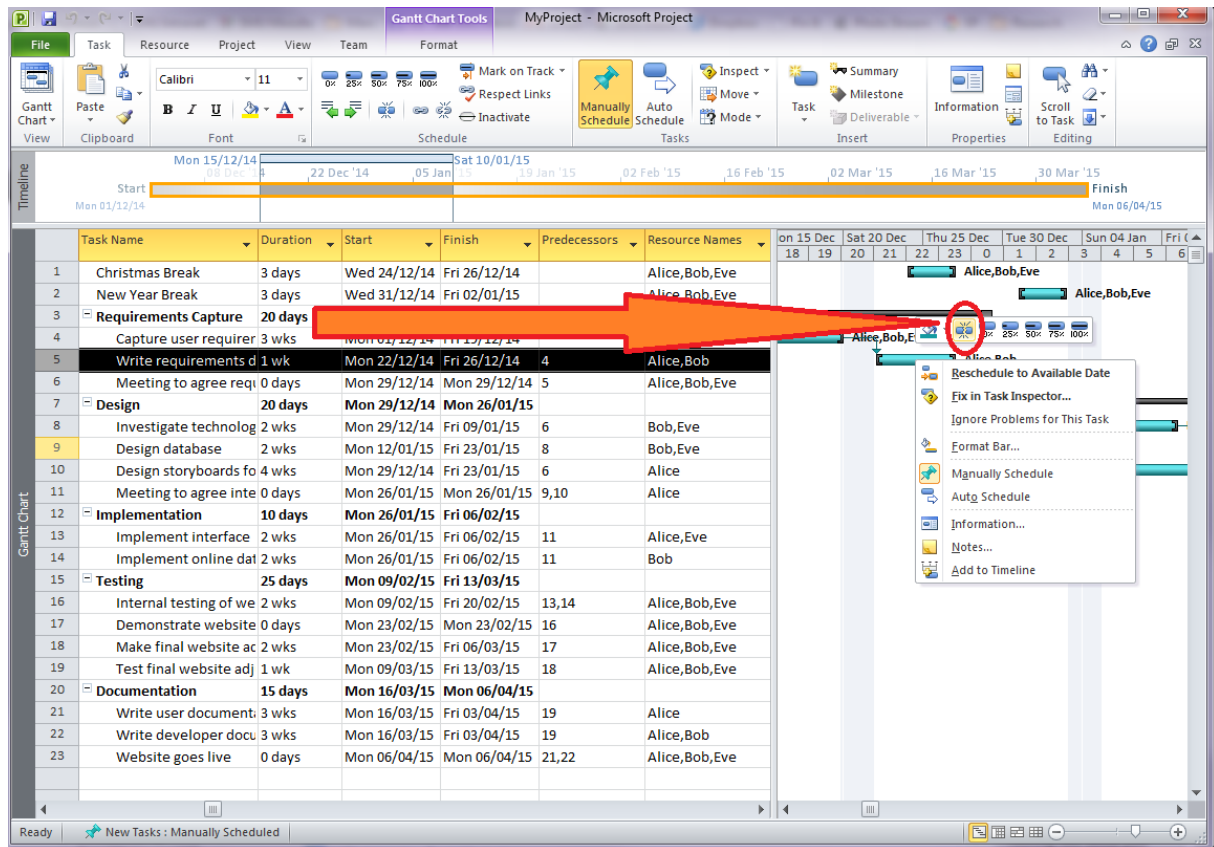
Once resources have been assigned to a task, the resource name will be displayed next to the bar representing that task on the Gantt chart.



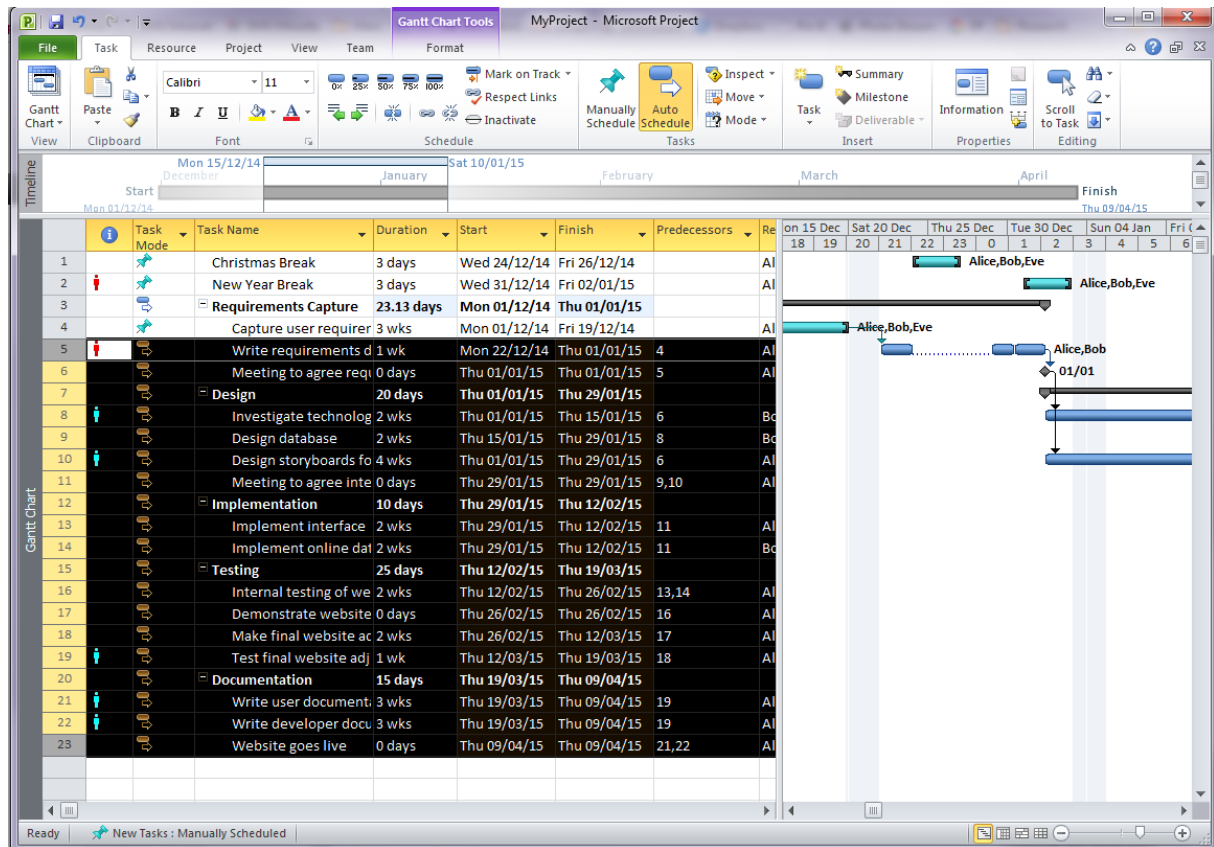
Stage 8: Splitting and moving tasks

Scroll the calendar pane so that you can see the 'Christmas break' task. At present, this occurs in parallel with the 'Write requirements document', 'Investigate technologies' and 'Design storyboards' tasks, so we need to split this second task in order to allow everyone to have a holiday.

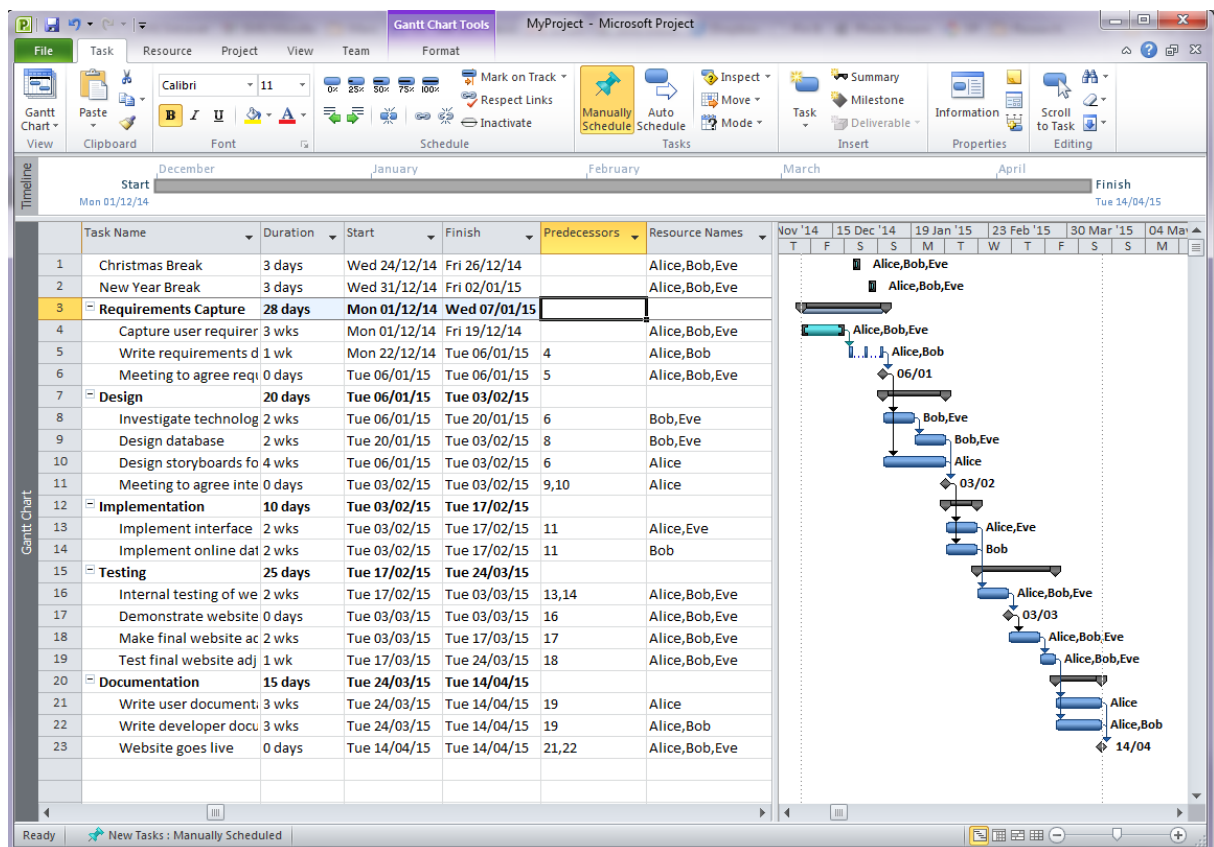
To split a task, right-click on the bar on the Gantt chart that represents the task, and then select the split task icon (a broken chain link) from the pop-up menu.



Now click on the bar at the location representing December 25th. The task will be split, with a dotted line to show the two sections of the task. Highlight the 'Write requirements document' and all tasks dependent upon it. Now drag the right-hand section of the bar so that it starts after Christmas break ends.



Repeat this process to allow space for the New Year break. All tasks that are dependent upon the split task will now have shifted with it.

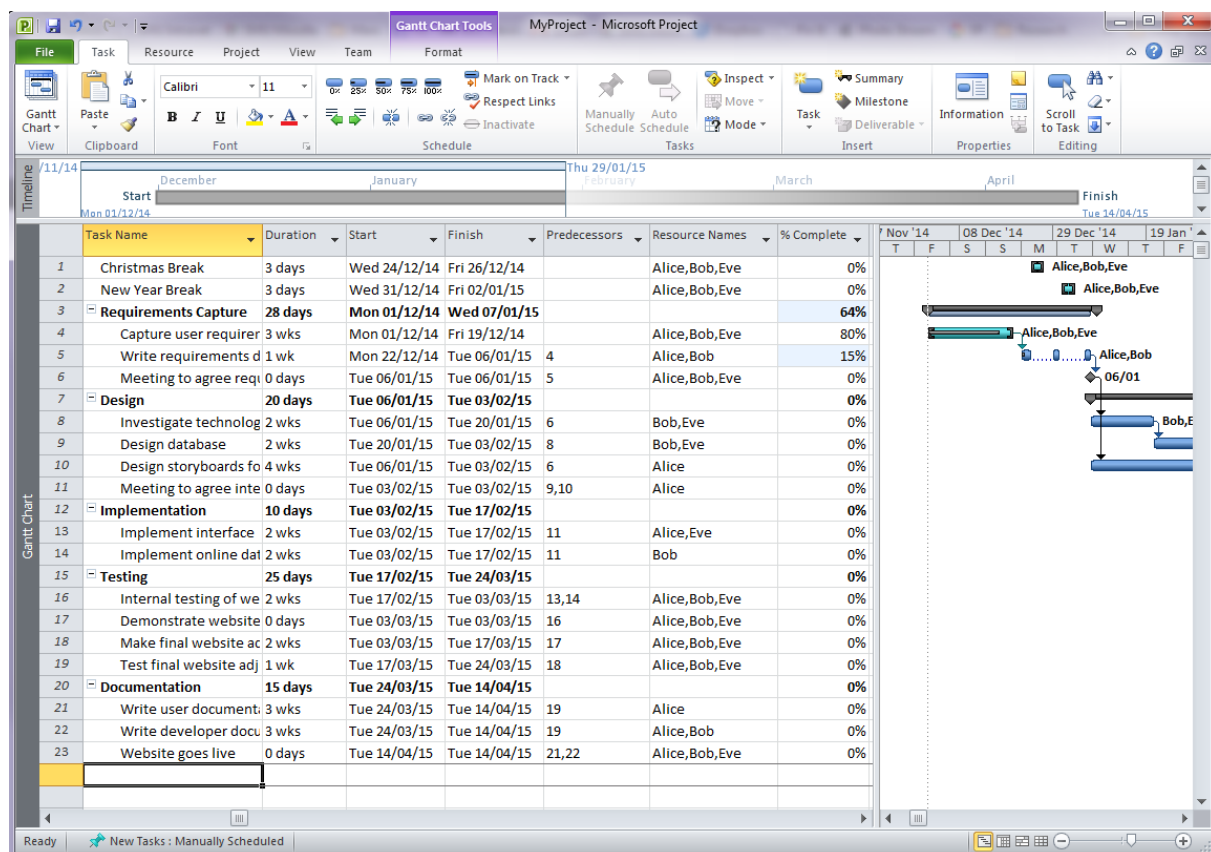


Congratulations! You now have a completed project plan.

Updating your project plan

As your project progresses you will want to show what progress has been made upon the plan. You will need to update how much of the task has been completed. In the task pane, scroll to the right and find the % *Complete* column. Enter **80** for task number 4 and **15** for task number 5. This represents that 80% of the work needed to complete the initial capturing of user requirements has been completed, and that 15% of the user requirements document has been written.

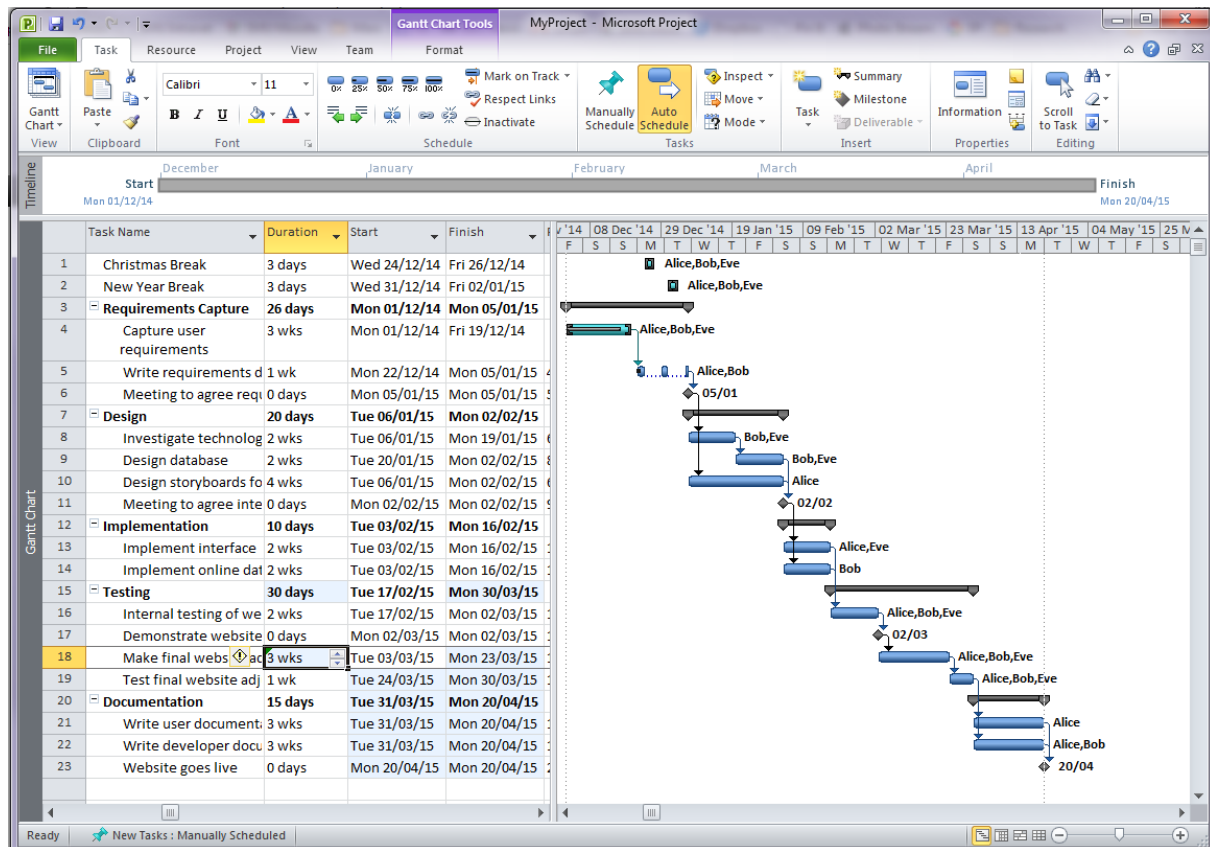
Scroll the calendar pane so that these two tasks are visible in the Gantt chart.



Notice that both tasks are now partially filled in; how much is filled in depends upon the percentage of the task that is complete.

Editing your project plan

Deadlines slip. Tasks take longer than planned. As a result it is sometimes necessary to edit the plan to take these things into account. Suppose everything has gone according to plan until it comes to making and testing the final adjustments. Initially, making final changes was planned to take 2 weeks, but we need to extend this to 3 weeks. To change this, simply change the duration of 'Make final adjustments' (in the task pane) to 3 weeks instead of 2 weeks.



This will automatically extend the length of the task bar to show the new duration. Save the file.

Note that as the tasks which are linked to the two altered tasks have moved, the final deadline has also moved. This might not be acceptable to the client, so although it is not good practise for a website to go live before all of the documentation has been completed, it happens quite regularly!

To print your Gantt chart, simply go to the File menu and select Print in the same way that you would for any other MS Office application.