Creating Gantt Charts in Microsoft *Excel 2000* and *2002*

A Gantt chart is a special kind of bar graph that allows people who read and evaluate proposals and progress reports to gain a quick understanding of the tasks and time involved in completing a project. In addition, Gantt charts show something no other type of task schedule can show: overlap between tasks.

While Gantt charts can prove quite handy, you may find them difficult to create. Microsoft *Project* is a popular tool for creating Gantt charts, but few campus computers provide this expensive program. And, unfortunately, Microsoft *Excel*, an application more students are familiar with and have access to, does not provide a template for creating a Gantt chart.

Fortunately, the December 1997 issue of *PC World* included instructions for turning an ordinary bar graph into a Gantt chart. I have rewritten these instructions for clarity and for updated versions of *Excel*, namely the 2000 and 2002 versions.

Entering Project Data

You need to begin your Gantt chart by filling out the tasks and dates for your project. You type these values into an *Excel* spreadsheet. The following steps take you through this process:

1. In a blank *Excel* workbook, type the following headings in the appropriate cell:

   - In cell A1, type `Task`.

   - In cell B1, type `Start Date`.

   - In cell C1, type `Duration`.

   - In cell D1, type `End Date`.

2. Under the appropriate headings, fill in three columns of information:

   - In column A, type the tasks you will complete *in chronological order*. Each task should be in its own cell.

   - In column B, type the start dates that correspond with each task listed in column A.

   - In column C, enter the number of days it will take you to complete each respective task.

3. Type the following formula in cell D2: `=B2+C2-1`. This formula will produce the end date for the first phase of the project.

4. Fill out the remainder of column D by right-clicking cell D2 and clicking **Copy** from the shortcut menu. Click and drag to select the remainder of the cells making up column D, right-click inside the selected area, and choose **Paste** from the shortcut menu. Column D should now be filled with end dates corresponding to each task.

Figure 1 shows how your spreadsheet should look after completing these steps.

	A	B	C	D
1	Task	Start Date	Duration	End Date
2	Brainstorm Ideas	8/29/2001	3	8/31/2001
3	Conduct Initial Research	8/30/2001	14	9/12/2001
4	Organize and Outline Ideas	9/13/2001	7	9/19/2001
5	Write the First Three Sections	9/16/2001	14	9/29/2001
6	Conduct Additional Research	9/16/2001	18	10/3/2001
7	Take and Scan Photos	10/3/2001	4	10/6/2001
8	Write the Final Two Sections	10/9/2001	14	10/22/2001
9	Write the Front and Back Matt	10/23/2001	5	10/27/2001
10	Assemble and Edit the Docum	11/1/2001	14	11/14/2001
11	Bind and Submit the Project	11/17/2001	2	11/18/2001

Figure 1: *Excel* spreadsheet after the task and time data have been entered.

Starting the Graph

After you've entered all the task and date information, complete the following steps to begin graphing the data using *Excel*'s Chart Wizard:

1. From the **Insert** menu, click **Chart**. Once the Chart Wizard - Step 1 of 4 - Chart Type window appears, click **Bar** under chart type and click **Stacked Bar** under chart sub-type. Click **Next** to continue.

2. From the Chart Wizard - Step 2 of 4 - Chart Source Data window, click the ▣ icon to the right of the Data Range box. This button brings up the spreadsheet.

3. Select all the tasks, dates, and durations you entered in columns A, B, and C. *Do not select headings or any item from column D*. Once the area is selected, click the ▣ icon to return to the Chart Wizard.

4. Click the **Series** tab in the Source Data window. Click the icon to the right of the Category (X) Axis Labels box to bring up the spreadsheet. Select all the tasks entered in column A, excluding the heading. Once the area is selected, click the icon to return to the Data Source window.

5. Click the icon to the right of the Values box. Select all the dates entered in column B, excluding the heading. Once the area is selected, click the icon to return to the Data Source window.

6. Under the Series box, click the **Add** button. Series 2 should appear highlighted inside the box. With Series 2 highlighted, click the icon to the right of the Values box. Select all the durations listed in column C, excluding the heading. Once the area is selected, click the icon to return to the Data Source window. Click **Next** to continue.

7. From the Chart Wizard - Step 3 of 4 - Chart Options window, click the **Legend** tab. Uncheck the Show Legend checkbox. Click **Next** to continue.

8. From the Chart Wizard - Step 4 of 4 - Chart Location window, use the As Object In drop-down menu to select Sheet 2. Click **Finish**. Your unformatted Gantt chart appears on a new sheet of your workbook.

Formatting the Chart

Your Gantt chart is nearly complete, but you still need to change a few options to put the information in chronological order, to format the text, and to remove unnecessary bars. The following steps will help you format and finish your chart:

1. Right-click the tasks listed on the left side of your Gantt chart, and click **Format Axis** from the shortcut menu. Click the **Scale** tab from the Format Axis window. Make sure the following boxes are checked:

   ✓ Value (Y) axis crosses between categories

   ✓ Categories in reverse order

   ✓ Value (Y) axis crosses at maximum category.

2. Click the **Font** tab. Change the font to 9 point Arial. Click **OK**.

3. Right-click the dates listed at the bottom of the Gantt chart, and click **Format Axis** from the shortcut menu. Click the **Scale** tab from the Format Axis window. Type the following information in the respective fields:

   • In the Minimum box, type the earliest date in your project.

   • In the Maximum box, type the date that comes a week after the latest date in your project.

   • In the Major Unit box, type 7.

4. Click the **Font** tab. Change the font to 9 point Arial.

5. Click the **Number** tab. Change the number format to mm/dd format (for example, 8/29). Click **OK**.

6. On your Gantt chart, click the first set of colored bars, which are probably bluish-purple. Right-click the selected bars and choose **Format Data Series** from the shortcut menu. Click the **Patterns** tab. Under Borders click None, and under Area click None. Click **OK**. You should notice that the first series of bars have disappeared, providing the look of a Gantt chart.

7. Resize your chart until all the information fits and is legible. Save your workbook. Your Gantt chart should appear similar to the one shown in Figure 2.
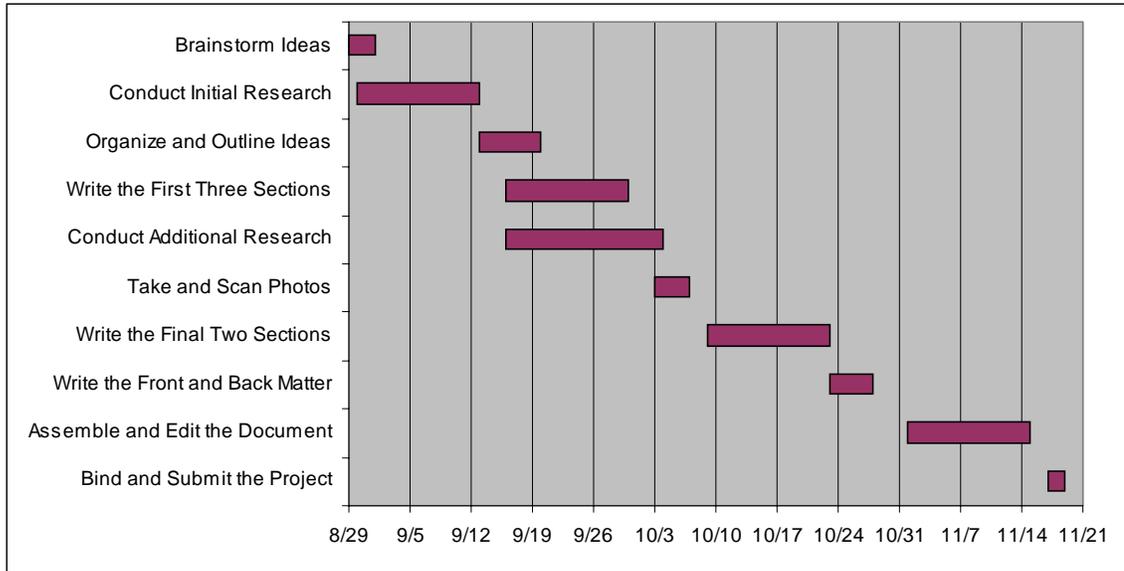
Figure 2: A finished Gantt chart based on the information shown in Figure 1.

8. Click somewhere outside the Gantt chart to clear all the selections. Now click a blank area of your chart, which should select your entire chart. From the **Edit** menu, click **Copy**.

9. Launch your word-processing software, and open your proposal or progress report. From the **Edit** menu, click **Paste** to insert your chart into your document.