

Appendix

A

Taking Attendance with a Spreadsheet

In this chapter, we will learn the following to World Class standards:

- **Designing an Attendance Spreadsheet**
- **Opening Microsoft Excel**
- **Build the Spreadsheet**
- **Adjusting the Column Width**
- **Changing the Direction of Text**
- **Merging and Center Labels**
- **Using the Fill Handle to Quickly Build a Spreadsheet**
- **Adding the Totals to the Row with the Sum Function**
- **Using the Border Toolbar**
- **Adding Data and Comments**

Designing an Attendance Spreadsheet

A group of chefs wants to create a menu for a local restaurant and the leader desires to track the hours and special achievements of the team. The cluster of culinarians has assigned themselves work titles such as cost sheet specialist, menu designer, graphic expert and supervisor. Now the manager needs to build a spreadsheet to record the time spent each day on the project and to insert comments into the spreadsheet when major tasks have been accomplished.

| Menu Project | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|----------------|----------------|----------------|-------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|
| Name | Week 1 | | | | Week 2 | | | | Week 3 | | | | Week 4 | | | | Total | | | | | | | | | | | | |
| | S 27-Sep-09 | M 28-Sep-09 | T 29-Sep-09 | W 30-Sep-09 | Th 1-Oct-09 | F 2-Oct-09 | S 3-Oct-09 | S 4-Oct-09 | M 5-Oct-09 | T 6-Oct-09 | W 7-Oct-09 | Th 8-Oct-09 | F 9-Oct-09 | S 10-Oct-09 | S 11-Oct-09 | M 12-Oct-09 | | T 13-Oct-09 | W 14-Oct-09 | Th 15-Oct-09 | F 16-Oct-09 | S 17-Oct-09 | S 18-Oct-09 | M 19-Oct-09 | T 20-Oct-09 | W 21-Oct-09 | Th 22-Oct-09 | F 23-Oct-09 | S 24-Oct-09 |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |

Figure A.1 – The Excel Spreadsheet

We want to start the project with a sketch, with one column showing the team member’s name, one column for each day of the in the four-week schedule and a column for the grand total of the individual’s contribution. We will have ten rows, the first row showing the title of the spreadsheet, the second row having the number of the week, the third row has the actual calendar date, the fourth row the labels for name, day of the week and total, and rows five through ten for the quantitative data. In our sketch, we can help ourselves by being as accurate as possible, by displaying sizes, fonts, colors and any other specific details, which will enable us to quickly create the spreadsheet. From the beginning to the end of the project, we need to refer to our sketch in figure A.1.

Opening Microsoft Excel

We open Microsoft Excel and we see the most identifiable feature of a spreadsheet is the lettered columns {A, B, C, D} and the numbered rows {1, 2, 3, 4}. Each cell has a name that is made using the column letter and the row number. As we can observe in Figure A.2, the first cell is named A1.

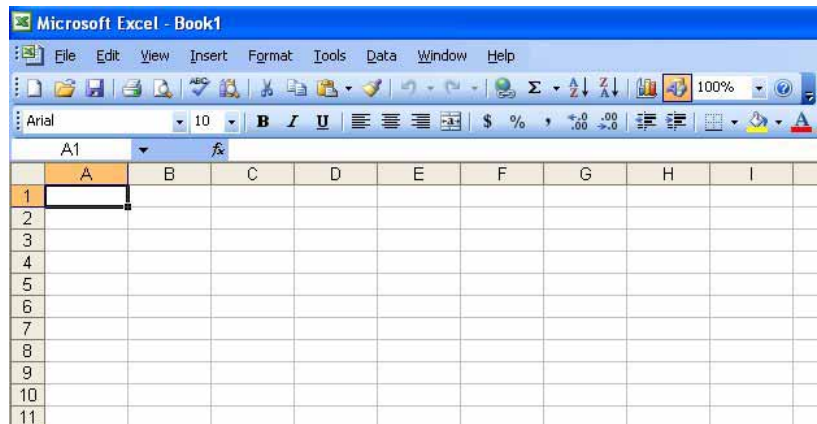


Figure A.2 – The Excel Spreadsheet

Build the Spreadsheet

We initiate work on the spreadsheet by typing the numbers 1 through 6 in cells A5 through A10. If the column of numbers was longer, we can type 1 in cell A5 and 2 in cell A6. Then we highlight both cells A5 and A6 and pull the black fill handle down to the desired row. The numbers will increase for whatever spread is between those first two numbers.

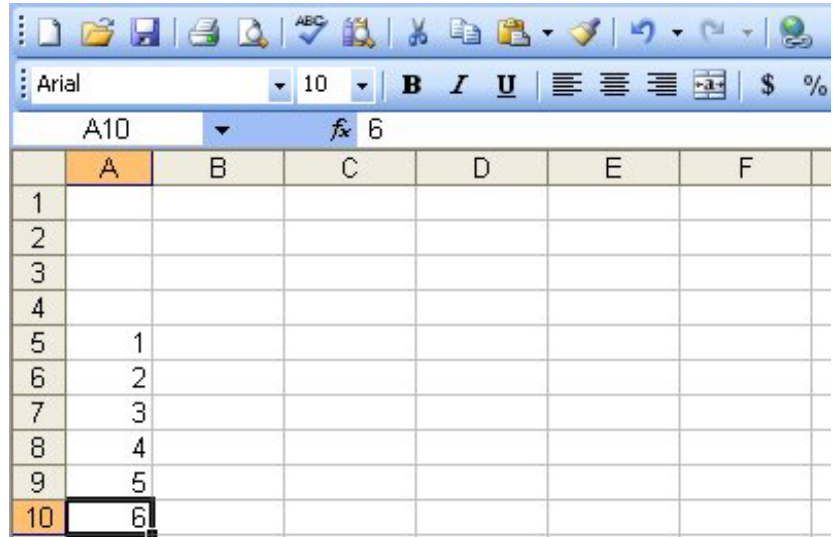


Figure A.3 – Adding Row Number

Adjusting the Column Width

Next, we type the heading label “Name” in cell B4. After that, we place our mouse between the column letters B and C and a double black arrow will come into view. Pull the column width to 20. A yellow tag will appear telling us the width of the column B as shown in figure A.4.

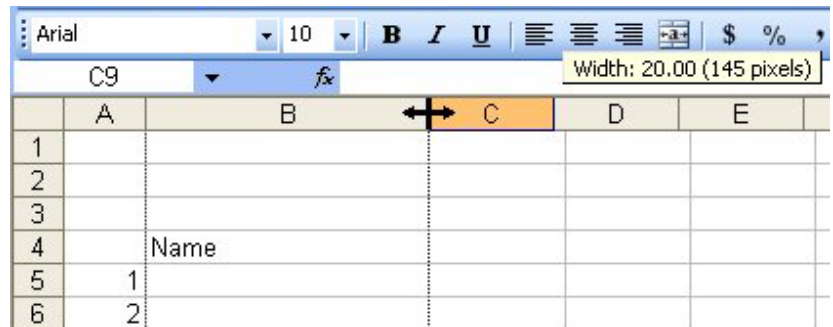


Figure A.4 – Widening the Name Column

Next, we highlight columns C through AD. Right click on the shaded area and a menu will become visible. Select column width and the Column Width window will materialize. We type “3” in the text box and all of the cells will narrow. Now, we will type S in cell C4, M in cell D4, T in cell E4, W in cell F4, Th in cell G4, F in cell H4, and S in cell I4.

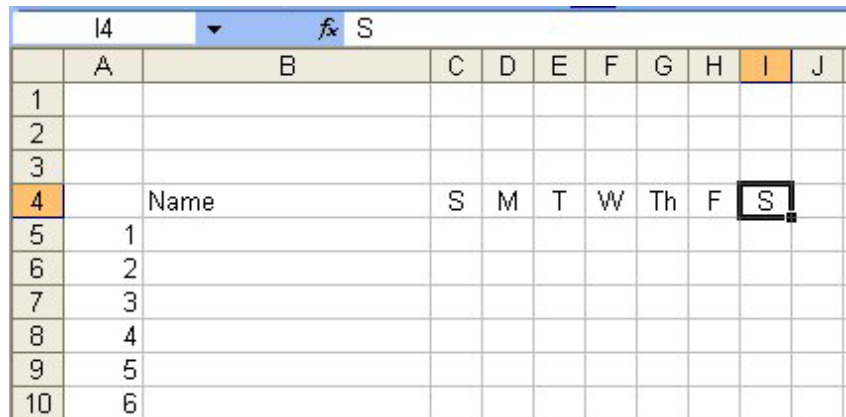


Figure A.5 – Setting the Column Width for Each Day

Changing the Direction of Text

The Format Cell window is a useful tool we want to use it to align text, wrap text, shrink text to fit and change the text directions. In this specific spreadsheet, we have set the column width to 3 and so we will want the date to align at 90°, so we can maintain the narrow spacing.

In cell C3, we type the date “September 27, 2009”. The characters in the cell are too many, so we see a series of pound signs. We will ignore this symbol and right click on the cell. Select Format Cell and this window will appear and we will use the mouse to rotate the text orientation arm on the right side of the dialogue box to the vertical position.

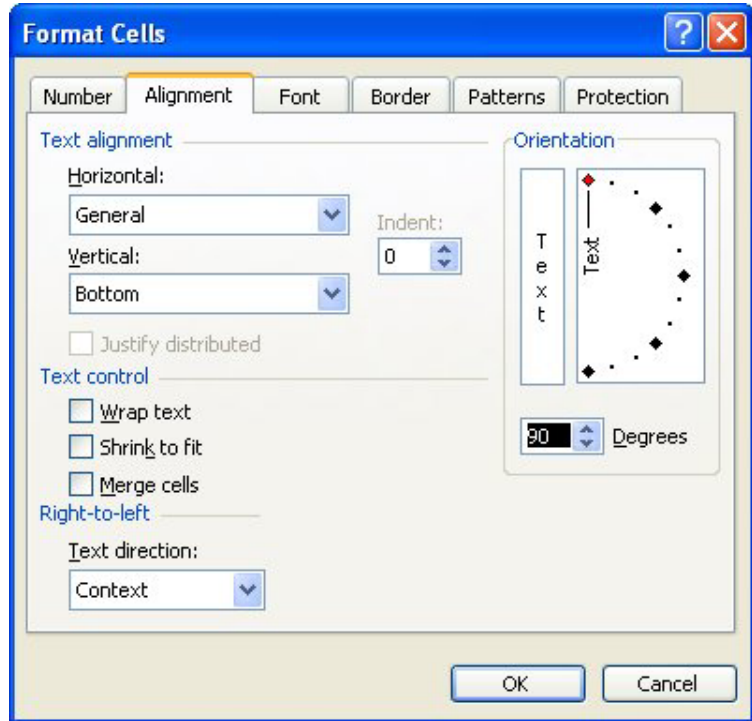


Figure A.6 –Changing Text Direction to 90°

Press Ok and the height of row 3 will automatically adjust and we see the text “27-Sep-09” appear. We highlight cell C3 and pull the fill handle to I3. The dates will emerge as shown in figure A.7.

| | A | B | C | D | E | F | G | H | I |
|---|---|------|-----------|-----------|-----------|-----------|----------|----------|----------|
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | 27-Sep-09 | 28-Sep-09 | 29-Sep-09 | 30-Sep-09 | 1-Oct-09 | 2-Oct-09 | 3-Oct-09 |
| 4 | | Name | S | M | T | W | Th | F | S |
| 5 | | 1 | | | | | | | |

Figure A.7 –Progressing the Date

Merging and Center Labels

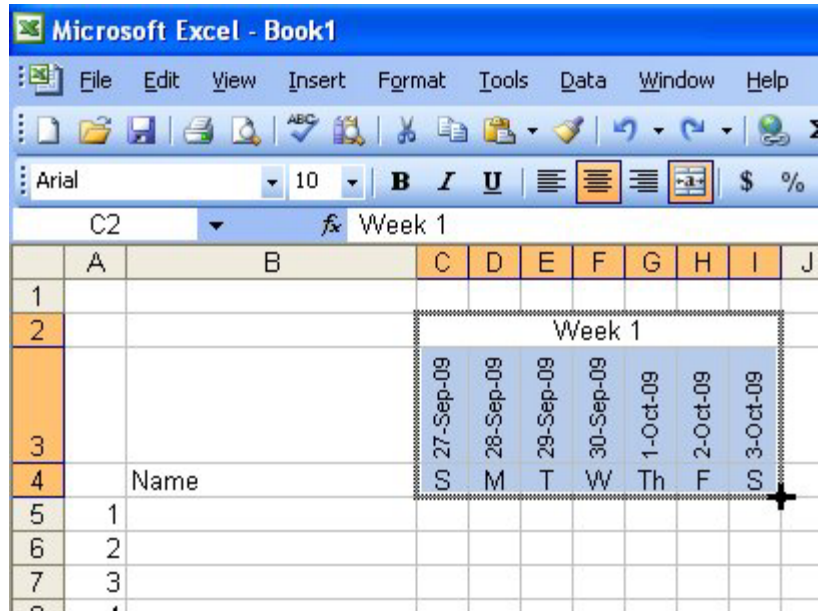
Now, we will merge and center cells C2 through I2 and type “Week 1” as shown in figure A.8.

| | A | B | C | D | E | F | G | Merge and Center | | | L |
|---|---|------|-----------|-----------|-----------|-----------|----------|------------------|----------|--|---|
| 1 | | | | | | | | | | | |
| 2 | | | Week 1 | | | | | | | | |
| 3 | | | 27-Sep-09 | 28-Sep-09 | 29-Sep-09 | 30-Sep-09 | 1-Oct-09 | 2-Oct-09 | 3-Oct-09 | | |
| 4 | | Name | S | M | T | W | Th | F | S | | |
| 5 | | 1 | | | | | | | | | |
| 6 | | 2 | | | | | | | | | |

Figure A.8 – Merge and Center Week 1

Using the Fill Handle to Quickly Build a Spreadsheet

In order to complete all four weeks of dates in the spreadsheet, we highlight cells C2 through I4 as shown in the figure to the right. At the lower right corner of the data range, we place our mouse over the black box and the white cross will turn to black. We need to pull the fill handle to column AD. Notice the dates and the week numbers automatically increase by one and the day labels repeat every seven days.



Type another heading label in cell AE4 called “Total” as shown in figure A.10.

Figure A.9 – Using the Fill Handle

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | AA | AB | AC | AD | AE |
|----|---|------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | Week 1 | | | | | | | Week 2 | | | | | | | Week 3 | | | | | | | Week 4 | | | | | | | |
| 3 | | | 27-Sep-09 | 28-Sep-09 | 29-Sep-09 | 30-Sep-09 | 1-Oct-09 | 2-Oct-09 | 3-Oct-09 | 4-Oct-09 | 5-Oct-09 | 6-Oct-09 | 7-Oct-09 | 8-Oct-09 | 9-Oct-09 | 10-Oct-09 | 11-Oct-09 | 12-Oct-09 | 13-Oct-09 | 14-Oct-09 | 15-Oct-09 | 16-Oct-09 | 17-Oct-09 | 18-Oct-09 | 19-Oct-09 | 20-Oct-09 | 21-Oct-09 | 22-Oct-09 | 23-Oct-09 | 24-Oct-09 | |
| 4 | | Name | S | M | T | W | Th | F | S | S | M | T | W | Th | F | S | S | M | T | W | Th | F | S | S | M | T | W | Th | F | S | Total |
| 5 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Figure A.10 – All Four Weeks

Adding the Totals to the Row with the Sum Function

Although the spreadsheet will start as blank, we will insert formulas to calculate the sums of each individual’s hours. In cell AE5, type “=sum(C5:AD5)”. Whenever we type hours in this range of cells, the total will be shown in the last cell.

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | AA | AB | AC | AD | AE |
|---|---|------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | Week 1 | | | | | | | Week 2 | | | | | | | Week 3 | | | | | | | Week 4 | | | | | | | |
| 3 | | | 27-Sep-09 | 28-Sep-09 | 29-Sep-09 | 30-Sep-09 | 1-Oct-09 | 2-Oct-09 | 3-Oct-09 | 4-Oct-09 | 5-Oct-09 | 6-Oct-09 | 7-Oct-09 | 8-Oct-09 | 9-Oct-09 | 10-Oct-09 | 11-Oct-09 | 12-Oct-09 | 13-Oct-09 | 14-Oct-09 | 15-Oct-09 | 16-Oct-09 | 17-Oct-09 | 18-Oct-09 | 19-Oct-09 | 20-Oct-09 | 21-Oct-09 | 22-Oct-09 | 23-Oct-09 | 24-Oct-09 | |
| 4 | | Name | S | M | T | W | Th | F | S | S | M | T | W | Th | F | S | S | M | T | W | Th | F | S | S | M | T | W | Th | F | S | Total |
| 5 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | =sum(C5:AD5) |
| 6 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Figure A.11 – Using the Sum Function to Create Individual Totals

Select cell AE5 and pull the fill handle down to row 10 to duplicate the summation formula for the rest of the team listed in the table.

Now, we will merge and center cells A1 through AE1 and type “Menu Project”. We will make the font size 16 for the title.

Now, we will want to decorate the table with borders to create a presentation that is easy to read.

Using the Border Toolbar

The Border Tool has an easy collection of tools to utilize. The first step is to select the linetype and line color. In figure A.12, we select the continuous line with a medium thickness.

Once we pick a line, we are ready to use our mouse to draw the border. Go ahead and draw lines as shown in figure A.13. An eraser on the Border toolbar to the right of the Draw Border pencil is available to remove any border segments that are drawn incorrectly. As we can see, we illustrate thin lines for each individual’s data in rows 5 through 10.

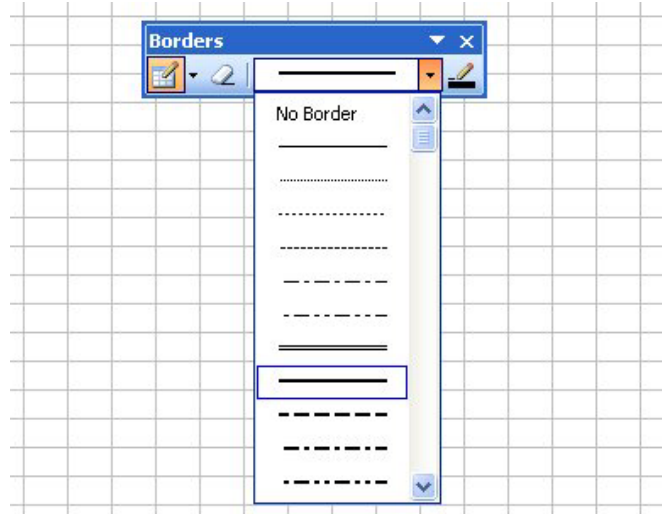


Figure A.12 – The Border Toolbar

| | | Menu Project | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|--------------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| | | Week 1 | | | | | Week 2 | | | | | Week 3 | | | | | Week 4 | | | | | | | | | | | | | |
| | | 27-Sep-09 | 28-Sep-09 | 29-Sep-09 | 30-Sep-09 | 1-Oct-09 | 2-Oct-09 | 3-Oct-09 | 4-Oct-09 | 5-Oct-09 | 6-Oct-09 | 7-Oct-09 | 8-Oct-09 | 9-Oct-09 | 10-Oct-09 | 11-Oct-09 | 12-Oct-09 | 13-Oct-09 | 14-Oct-09 | 15-Oct-09 | 16-Oct-09 | 17-Oct-09 | 18-Oct-09 | 19-Oct-09 | 20-Oct-09 | 21-Oct-09 | 22-Oct-09 | 23-Oct-09 | 24-Oct-09 | Total |
| Name | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 5 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 6 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 7 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 8 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 9 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 10 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | =SUM | |

Figure A.13 – Using the Sum Function to Create a Grand Total

We will tally all of the individual totals to get an overall amount, so we will insert a formula to calculate the totals of each individual’s hours. In cell AE11, type “=sum(AE5:AE10)”.

Now that we have made our timesheet table, we are ready to utilize it.

Adding Data and Comments

We will type the name of each team member in the cells B5 through B10. In each specific day cell, we can type “0” or an actual number. If the person works a half an hour, we will just type “0.5”.

Whenever there is a special event, we will insert a comment in the cell. Right click on the precise cell and select “Insert Comment” from the menu. A yellow box will appear as shown in figure A.15. We should type an accurate note of what happened that day.

When we click off the cell, the yellow text box disappears and the red triangle remains to visually tell us that a comment resides in the cell.

We can edit a comment by right clicking on the cell and selecting Edit Comment. We can delete the comment by picking Delete Comment.

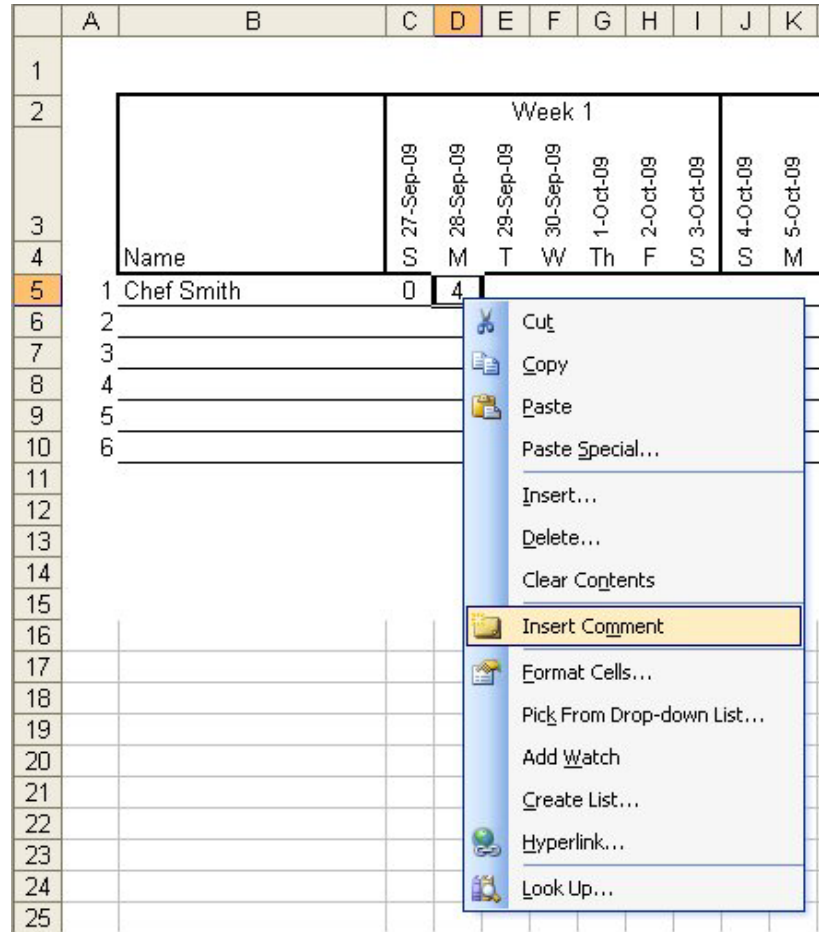


Figure A.14 – Adding a Comment

When we fill out the timesheet everyday, our task to write an evaluation at the end of the project will be become a lot easier. In addition, when someone asks us a question concerning an occurrence that happened weeks ago, we have the ability to retrace the course of events accurately.

Maintaining a precise electronic timesheet is another management skill to achieve in our education.

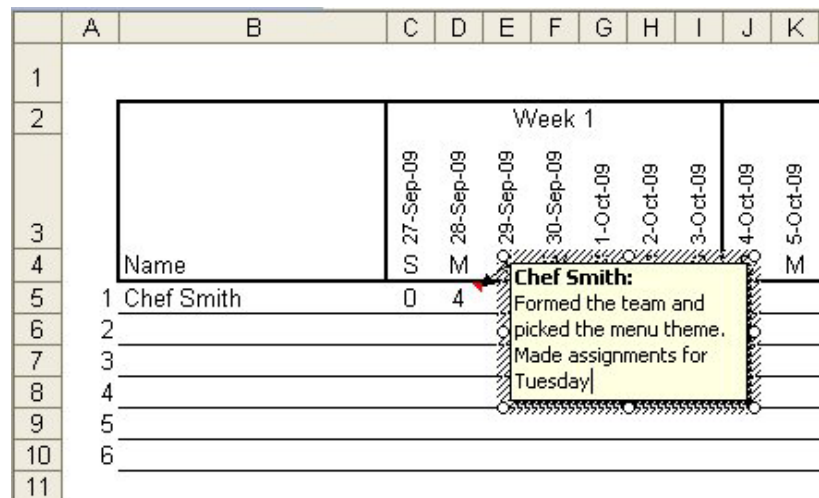


Figure A.15 – Typing the Comment

Figure A.16 shows a timesheet that records data for a four person team.

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | AA | AB | AC | AD | AE | |
|----|---|---------------------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----|-------|
| 1 | | Menu Project | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | Week 1 | | | | Week 2 | | | | Week 3 | | | | Week 4 | | | | | | | | | | | | | | | | | |
| 3 | | | 27-Sep-09 | 28-Sep-09 | 29-Sep-09 | 30-Sep-09 | 1-Oct-09 | 2-Oct-09 | 3-Oct-09 | 4-Oct-09 | 5-Oct-09 | 6-Oct-09 | 7-Oct-09 | 8-Oct-09 | 9-Oct-09 | 10-Oct-09 | 11-Oct-09 | 12-Oct-09 | 13-Oct-09 | 14-Oct-09 | 15-Oct-09 | 16-Oct-09 | 17-Oct-09 | 18-Oct-09 | 19-Oct-09 | 20-Oct-09 | 21-Oct-09 | 22-Oct-09 | 23-Oct-09 | 24-Oct-09 | | |
| 4 | | Name | S | M | T | W | Th | F | S | M | T | W | Th | F | S | M | T | W | Th | F | S | M | T | W | Th | F | S | | | | | Total |
| 5 | 1 | Chef Smith | 0 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| 6 | 2 | Chef Ryan | 0 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| 7 | 3 | Chef Washington | 0 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| 8 | 4 | Chef Jones | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| 9 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| 10 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 17 |

Figure A.16 – The Menu Project Time Sheet

*** World Class CAD Challenge 27-1 * - Create a new timesheet for six individuals covering four weeks of times. Add formulas to total individual time and tally the grand total for the team. Name the worksheet Project Timesheet. Complete the task in 30 minutes.**

Continue this drill four more times on different worksheets in this workbook and each time completing the drill in less than 30 minutes to maintain your World Class ranking.