Managing Large Volumes of Data

AHG Landscape Associates

Your family owns and operates AHG Landscape Associates, a landscape company that coordinates landscaping services through a team of subcontractors. As you receive a request for services, you assign the task to one of three primary subcontractors. Your company manages all paperwork, billing, and coordination of services. To analyze your client base and plan for growth, you have created a worksheet with sales data for the current month.

Large Datasets

You want to review the large dataset you created, viewing the data and adjusting some Page Setup options.

1. Freeze and Unfreeze Panes

a. Open *exp2010_e04_script_lawn*, and then save it as **exp2010_e04_script_lawn_solution**.

b. Select the **January Data worksheet**. Click the **View tab**, click **Freeze Panes** in the Window group, and then select **Freeze Top Row**. Click **Freeze Panes**, and then select **Unfreeze Panes**.

c. Click **cell B6**. Click **Freeze Panes**, and then select **Freeze Panes**. Press **Ctrl+G** to open the Go To dialog box, and then go to **cell K35**. Several rows are not visible since those items scrolled off the screen. Save the workbook.

2. Display and Change Page Breaks

a. Press **Ctrl+Home**. Click **Page Break Preview**. Click **OK**. Drag the **Zoom slider** to the left to **70%**. Scroll down and click **cell A50**, the cell to start the top of the second page.

b. Click the **Page Layout tab**, click **Breaks** in the Page Setup group, and then select **Insert Page Break**. Click **cell A51**. Click **Breaks**, and then select **Remove Page Break**. Save the workbook. (You inserted a page break between rows 50 and 51, so that the 1/20/2012 transactions will be on one page.)

3. Set and Clear a Print Area

a. Change the zoom back to **100%**. Scroll up to see the first row of data. Select the **range A5:I25**, the range of data for the first five days of the month.

b. Click the **Page Layout tab**, if necessary, click **Print Area** in the Page Setup group, and then select **Set Print Area**.

c. Click the **Page Setup Dialog Box Launcher**. Create a footer with your name on the left, the sheet name code in the center, and the file name code on the right.

d. Click the **File tab**, and then click **Print** to see a print preview. Press **Esc** to close the Backstage view. Click **Print Area** in the Page Setup group, and then select **Clear Print Area**. Save the workbook.

4. Print Worksheet Titles

a. Click **Print Titles** in the Page Setup group**.** Click the **Rows to repeat at top collapse button**. Click the **row 5 heading**, and then click the **expand button**. Click in the **Columns to repeat at left box**, type **A:B**, and then click **Print Preview**.

b. Click **Next Page** at the bottom of the Backstage view. Continue to click **Next Page** to view the remaining pages. Close Backstage view, and then save the workbook.

5. Change the Page Order

a. Click the **Page Layout tab**, if necessary, and then click the **Page Setup Dialog Box Launcher**. Click the **Sheet tab**, and then click **Over, then down**. Click **OK**. Save the workbook.

Excel Tables

You will convert the January transactions from a basic worksheet to a table.

1. Create a Table

a. Click on any cell and go up the styles section on the HOME tab. Click on FORMAT as Table and select a style.

b. When the pop up box appear make certain the box is checked where it says my tables has headers.

2. Remove Duplicate Rows

a. Click the **Design tab**. Click **Remove Duplicates** in the Tools group.

b. Click **Select All**, if necessary, to select all table columns. Make sure the **My data has headers check box** is selected, and then click **OK**. Click **OK**. Save the workbook.

3. Changing a Table Style

a. Click the **More button** in the Table Styles group. Click **Table Style Medium 10**.

Excel Table Manipulation

You want to start analyzing the January transactions for AHG Landscape Services by sorting and filtering data in a variety of ways to help you understand the transactions better. In addition, you will calculate the down payment required and determine how much clients owe for your services.

1. Sort Individual Columns

a. Click the **Contact Last Name filter arrow**, and then select **Sort A to Z**.

b. Click the **Subcontractor filter arrow**, and then select **Sort A to Z**. Click the **Transaction Number filter arrow**, and then select **Sort A to Z**. Save the workbook.

2. Use the Sort Dialog Box

a. Click inside the table. Click the **Data tab**. Click **Sort** in the Sort & Filter group. Click the **Sort by arrow**, and then select **Service Category**. Sort Order should be A to Z. Add a sort level for Client Type.

b. Add another sort level for Contract Amount, and sort Largest to Smallest. Click **OK**. Save the workbook.

3. Apply a Text Filter

a. Click the **Contact Last Name filter arrow**. Filter to show records for McGuire.

b. Click the **Subcontractor filter arrow**. Click the **Evergreen Landscape check box** to deselect the category, and then click **OK**. Save the workbook.

4. Apply a Number Filter

a. Select the first contract amount through the last contract amount in column H. View the status bar. **(**The average transaction amount is $2,693 with 18 transactions. McGuire's total January sales are $48,477. You will use this total to see how much of the $48,477 is for large accounts (in excess of $5,000).)

b. Click the **Contract Amount filter arrow**. Point to **Number Filters**, and then select **Greater Than**. Type **5000** and click **OK**. Save the workbook. Clear the filter from Contract Amount. **(**Out of the 18 accounts that McGuire managed for The Turf Team and Lawn Doctors, only two are in excess of $5,000.)

5. Apply a Date Filter

a. Click the **Date Filter arrow**. Point to **Date Filters**, and then select **Between**.

b. Type **1/22/2012** in the first box and **1/28/2012** in the second. Click **OK**. Save the workbook.

McGuire had three sales during that week, totaling $6.626.

6. Create Structured References

a. Click the **January Totals worksheet tab**. Use the **Name box** to go to **cell I6**. Click **Insert Function** on the Formula Bar, select **IF**, and then click **OK**. Type **[Client Type]="Established"** in the **Logical_test box**.

b. Type **[Contract Amount]** in the **Value_if_true box**.

If a customer is an established client, no down payment is required.

c. Type **[Contract Amount]*C3** in the **Value_if_false box**.

If a customer is a new client, they must pay a required down payment, which is 25% of the contract amount.

d. Click **OK**. Click **cell J6**. Enter the formula **=[Contract Amount]-[Down Payment]**. Save the workbook.

7. Add a Total Row

a. Click the **Design tab** (a subtab of the Table Tools contextual tab), and then click **Total Row**. Click the **Down Payment cell** in row 76. Click the **total arrow**, and then select **Sum**.

b. Click the **Contract Amount cell** in row 76, click the **total arrow**, and then select **Sum**. Filter by McGuire again. Save the workbook. (Notice that the total row values change to display totals for the filtered records.)

8. Convert a Table to a Range

a. Click the **January Range worksheet tab**. Click within the table, and then click the **Design tab**, if necessary. Click **Convert to Range** in the Tools group. Click **Yes**. AutoFit column I so that Total shows. Save the workbook.

Conditional Formatting

To visually analyze worksheet data, you will apply conditional formatting to the worksheet.

1. Highlight Cell Rules

a. Select the **range A6:A75** in the January Range worksheet. Click the **Home tab**, if necessary, and apply a fill color of **No Fill**.

b. Select the **range D6:D75**. Click **Conditional Formatting** in the Styles group, point to **Highlight Cell Rules**, and then select **Text that Contains**. Type **Prescott** in the box. Fill with **Green Fill with Dark Green Text**. Click **OK**. Deselect the range, and then save the workbook.

2. Specify Top/Bottom Rules

a. Select the **range H6:H75**. Click **Conditional Formatting**, point to **Top/Bottom Rules**, and then select **Top 10 Items**. Click the **spin arrow** to display **5**, and then select **Light Red Fill**. Click **OK**. Scroll through the worksheet to see the top five amounts. Save the workbook.

3. Display Data Bars

a. Select the **range I6:I75**. Click **Conditional Formatting**, point to **Data Bars**, and then select **Purple Data Bar**. Save the workbook.

4. Create a New Rule

a. Select the **range J6:J75**. Click **Conditional Formatting**, and then select **New Rule**. Select **Use a formula to determine which cells to format**. Type **=AND(D6=”Fairbanks”,J6>=5000)** in the **Format values where this formula is true: box**.

b. Click **Format**. Format with a bold font, outline border, and green fill. Click **OK**. Click **OK**, and then scroll through the list to see which contract amounts are greater than $5,000 for Fairbanks only. Save the workbook.

5. Filter by Rule

a. Deselect the range. Click **Sort & Filter** in the Editing group. Select **Filter**. Click the **Owed Filter arrow**. Point to **Filter by Color**, and then select the **green color**. Save and close the workbook.