CHAPTER 1 ADVANCED LISTS

INFOCUS

There are a number of ways in which you can modify and customise lists and libraries to suit your needs. This chapter will cover a range of techniques including renaming and deleting lists and libraries, linking with Excel, adding columns, and working with settings.

In this session you will:

- ✓ learn how to create a list by importing data from ***Excel***
- ✓ learn how to publish an ***Excel*** table as a list
- ✓ learn how to update data in an ***Excel*** table that is connected to a list
- ✓ learn how to add a custom list
- ✓ gain an understanding of column types
- ✓ learn how to add columns in datasheet view
- ✓ learn how to add a column with custom validation
- ✓ gain an understanding of the list and library settings page
- ✓ learn how to modify a column in a list or library
- ✓ learn how to delete a column from a list or library
- ✓ learn how to change the order of the columns in a list or library
- ✓ learn how to rename a list or library
- ✓ learn how to change the versioning settings for a list or library
- ✓ learn how to create multiple items from an ***Excel*** worksheet
- ✓ learn how to edit the document template for a library
- ✓ learn how to delete a list or library.

IMPORTING A LIST FROM EXCEL

If the data you require for a list exists in an Excel worksheet, SharePoint offers an app that lets you duplicate the columns and data in the worksheet and add it to a new list. Prior to importing the data, it is a good idea to ensure that the first cell in each column has sample data so that SharePoint recognises whether the data type is text, numbers, dates, etc. Blank cells will always be set to text.

Try This Yourself:

At the time of publication, you cannot import a list from Excel unless you are using Internet Explorer. Therefore, ensure you open the Alpheius Finance Group site in Internet Explorer…

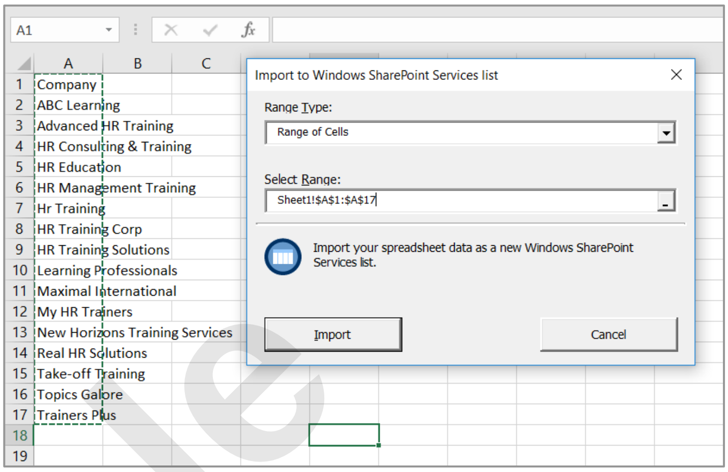
1. Click on ***New*** and select **App**, then click on ***Import Spreadsheet*** to display the ***New*** page

   The Import Spreadsheet option may be on the second page of apps…

2. Type **Vendors** in ***Name***
3. Click on **[Browse]** for ***File location***, navigate to the course files folder, click on ***Training Companies***, then click on **[Open]** to add the file
4. Click on **[Import]** to open Excel and the ***Import to Windows SharePoint Services list*** dialog box

   The Sign in window may appear, in which case you must sign in using your credentials for the SharePoint site…

5. In the ***Import to…*** dialog box, click on the drop arrow for ***Range Type*** and select **Range of Cells**
6. Click in ***Select Range***, click in cell ***A1*** in the worksheet, then hold down Shift and click in cell ***A17*** to select the cells
7. Click on **[Import]**, then enter your password if prompted to close Excel and import the data into the new ***Vendors*** list



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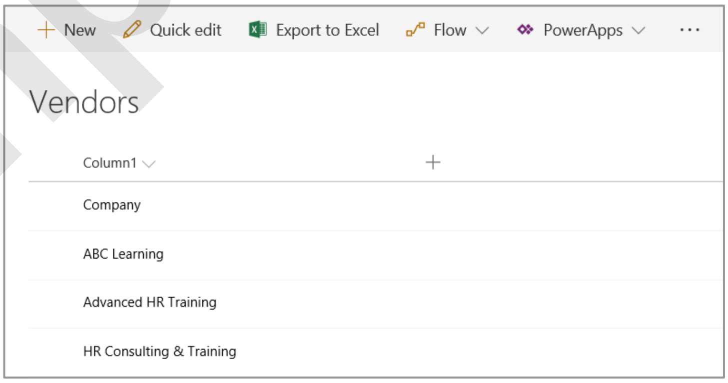

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For Your Reference…

To ***import*** a ***list from Excel***:

1. Click on ***New*** and select **App**, then click on ***Import Spreadsheet***
2. Name the new list, then browse to and select the spreadsheet file
3. Click on **[Import]**, select the range, then click on **[Import]**

Handy to Know…

- You may not be able to import a spreadsheet if you haven't added the SharePoint site as a trusted site in Internet Explorer. To do so, in Internet Explorer click on **Tools** > **Internet Options**, click on the **Security** tab, click on **Trusted sites**, click on **[Sites]**, type or paste the SharePoint site URL in **Add this website to the zone**, click on **[Add]**, then click on **[OK]**.

Publishing An Excel Table As A List

If one person is responsible for updating the data in an Excel table that various other people need to access, and it is stored on that person's computer, the table should be published to SharePoint and stored in a central location. When this data is then updated in SharePoint, everyone will be able to see this data. ***Note***: Ensure that each student opens a different Excel file.

Try This Yourself:

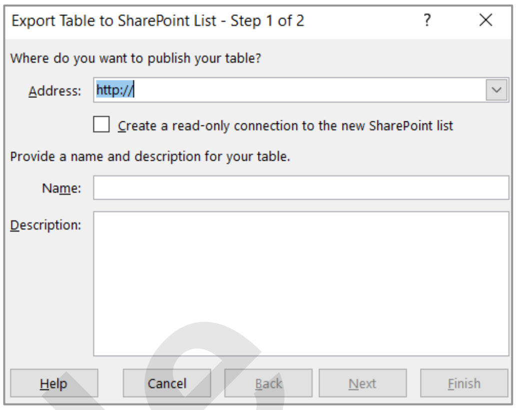
Open File

*You MUST open **Courses_1.xlsx** (or **Courses_#.xlsx** as every student must use a different file) in **Excel**...*

1. Click in cell ***A4***, click on the ***Table Tools: Design*** tab, click on ***Export*** in the ***External Table Data*** group, then select **Export Table to SharePoint List**
2. Switch to SharePoint, display the ***Alpheius Finance Team*** home page, select the address, then press Ctrl + C to copy the address to the clipboard
3. Switch to Excel and press Ctrl + V to paste the address in ***Address***
4. Click in ***Create a read-only…***

   Creating a read-only connection ensures that when the data is changed in SharePoint, the changes will appear in the original Excel file when this file is refreshed…
5. Type **CrsCosts** in ***Name***, type **This lists the HR courses, trainers and costs** in ***Description***, then click on **[Next]** and enter your password if prompted to display ***Step 2 of 2***

   The formulas have been removed from the last column but we'll fix this later…
6. Click on **[Finish]** to publish the table and display a message with the link to the new list
7. Click on the link to open the list – leave Excel open for the next topic

1


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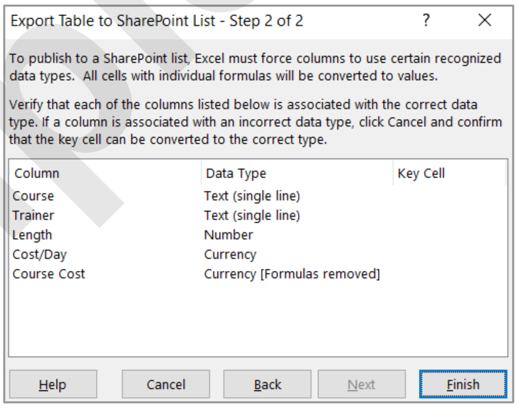
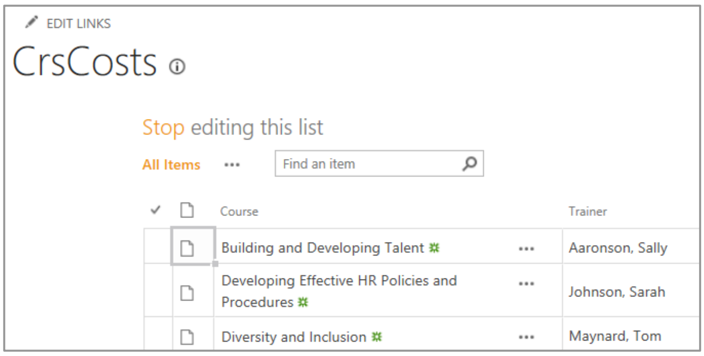


Check each Column and Data Type. If any column is wrong, click on [Cancel] and format the data correctly in Excel before trying again.



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For Your Reference…

To ***publish*** an ***Excel table*** as a ***list***:

1. Click in the table in Excel, click on the ***Table Tools: Design*** tab, click on ***Export*** and select **Export Table to SharePoint List**
2. Enter the details, selecting read-only if the data will be updated, then click on **[Finish]**

Handy to Know…

- Ensure the Excel information has no blank rows between the headers and data, then format it as a table. To do this, click in any cell in the data, then click on ***Format as Table*** in the ***Styles*** group on the ***Home*** tab.
- If the Excel data will never be updated, you don't need to create a read-only connection.

UPDATING DATA IN A CONNECTED EXCEL TABLE

When the ***CrsCosts*** list was generated, a read-only connection was built between this list in SharePoint and the Excel file from which it was created. This connection allows the person with the original Excel file on their computer to open the file in Excel at any stage and refresh it to incorporate any changes that have been made to the list in SharePoint.

Try This Yourself:

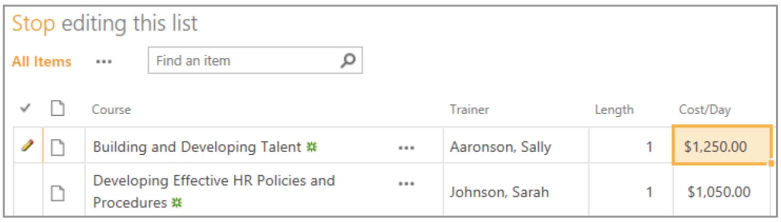
Continue using the previous site with this exercise…

1. In the ***CrsCosts*** list, change the ***Cost/Day*** value for the top record to ***$1,250.00***
2. Click on ***Stop*** to stop editing the list and save the change

   Let's check whether this data has been passed back to the Excel file…
3. Switch to Excel – notice that SharePoint has added two extra columns to the table: ***Item Type*** and ***Path***
4. Click on **[OK]** to close the message box containing the link to the SharePoint list

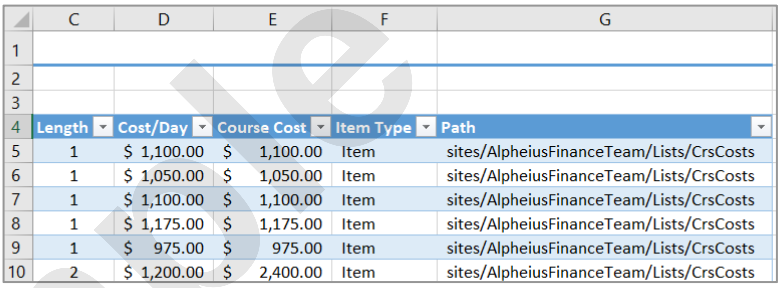
   The Cost/Day is still $1,100.00. Let's refresh the file…
5. In the ***Table Tools: Design*** tab, click on the top half of ***Refresh*** in the ***External Table Data*** group, then enter your password if prompted

   The data in the Cost/Day column has altered, but notice that the Course Cost value hasn't changed – the formulas were removed from this column as a result of the export…
6. Close Excel, choosing to save the file, to return to SharePoint



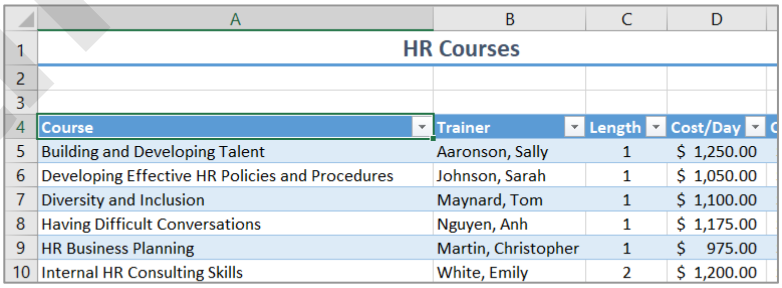
		Course	Trainer	Length	Cost/Day
		Building and Developing Talent	Aaronson, Sally	1	$1,250.00
		Developing Effective HR Policies and Procedures	Johnson, Sarah	1	$1,050.00

1



	C	D	E	F	G
1					
2					
3					
4	Length	Cost/Day	Course Cost	Item Type	Path
5	1	$ 1,100.00	$ 1,100.00	Item	sites/AlpheiusFinanceTeam/Lists/CrsCosts
6	1	$ 1,050.00	$ 1,050.00	Item	sites/AlpheiusFinanceTeam/Lists/CrsCosts
7	1	$ 1,100.00	$ 1,100.00	Item	sites/AlpheiusFinanceTeam/Lists/CrsCosts
8	1	$ 1,175.00	$ 1,175.00	Item	sites/AlpheiusFinanceTeam/Lists/CrsCosts
9	1	$ 975.00	$ 975.00	Item	sites/AlpheiusFinanceTeam/Lists/CrsCosts
10	2	$ 1,200.00	$ 2,400.00	Item	sites/AlpheiusFinanceTeam/Lists/CrsCosts

3



	A	B	C	D
1	HR Courses			
2				
3				
4	Course	Trainer	Length	Cost/Day
5	Building and Developing Talent	Aaronson, Sally	1	$ 1,250.00
6	Developing Effective HR Policies and Procedures	Johnson, Sarah	1	$ 1,050.00
7	Diversity and Inclusion	Maynard, Tom	1	$ 1,100.00
8	Having Difficult Conversations	Nguyen, Anh	1	$ 1,175.00
9	HR Business Planning	Martin, Christopher	1	$ 975.00
10	Internal HR Consulting Skills	White, Emily	2	$ 1,200.00

5

For Your Reference…

To ***view updated data*** in a ***connected Excel table***:

1. Open the file in Excel, then click in the table
2. Click on the ***Table Tools: Design*** tab, then click on the top half of ***Refresh*** in the ***External Table Data*** group
3. Save the file

Handy to Know…

- You can use a keyboard shortcut to refresh the table data connected to a SharePoint list. Open the file in Excel, click anywhere in the table, then press Alt + F5.

ADDING A CUSTOM LIST

If you want to create a list that doesn't conform to any of the predefined list apps, you can use one of two custom list apps to create a custom list instead. Using either app, you can create a list with two or three columns and then modify it by adding the columns you require. Here we will create two lists using the two custom list apps, but you will customise them later in this chapter.

Try This Yourself:

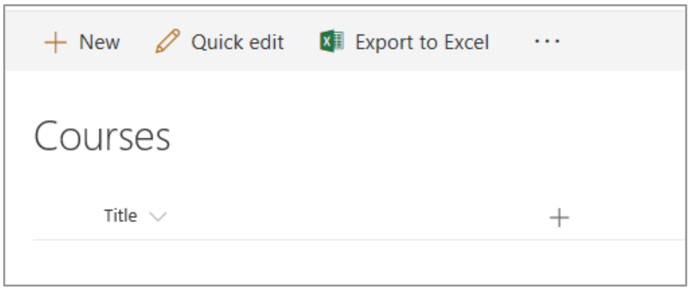
Continue using the previous site with this exercise...

1. On the Alpheius Finance Team home page click on ***New*** > **App**, then click on ***Custom List*** to display the ***Adding Custom List*** pane
2. Type **Courses** in ***Name***, then click on **[Create]** to create the ***Courses*** list
3. Click on ***Courses*** in the ***Contents*** list to open this new list

   You can now add items or edit the list. Let's look at the second method for creating a custom list…
4. Repeat step ***1***, but click on the ***Custom List in Datasheet View*** app to display the ***Adding Custom List in Datasheet View*** pane
5. Type **Contacts** in ***Name***, then click on **[Create]** to create the list
6. Click on ***Contacts*** in the ***Contents*** list to open this list in Quick Edit (or datasheet view) by default

   Quick Edit makes it easy to populate and add columns to the list, but we won't now…
7. Click on ***Stop*** (editing this list) to switch off Quick Edit mode

3



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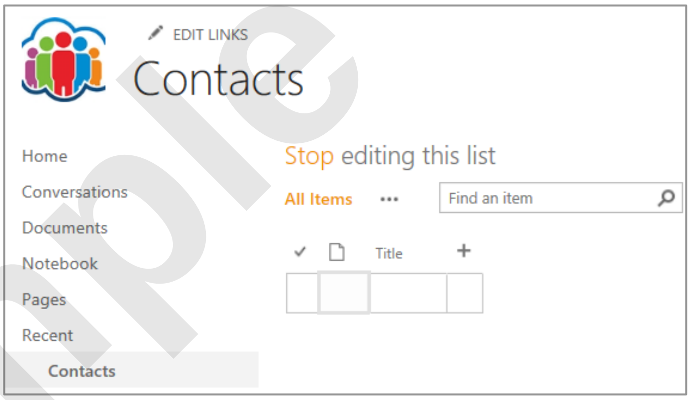

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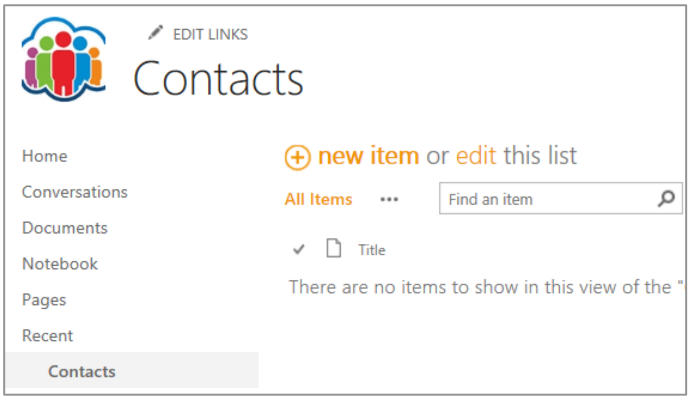


For Your Reference…

To ***add*** a ***custom list***:

1. Click on ***New*** and select **App**
2. Click on ***Custom List*** or ***Custom List in Datasheet View***
3. Name the app, then click on **[Create]**

Handy to Know…

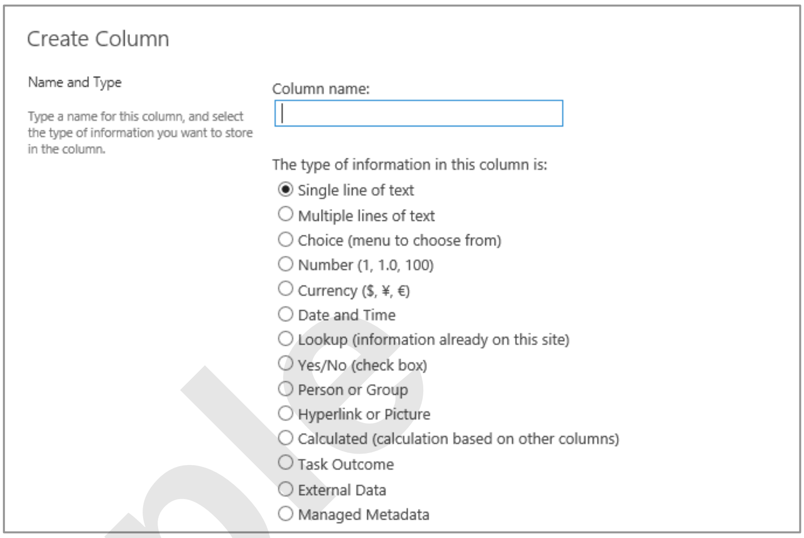
- New custom lists are created with one required column (***Title***) and four other available columns (***Modified***, ***Created***, ***Created By*** and ***Modified By***).

UNDERSTANDING COLUMN TYPES

When you create a new list or library, it may have all of the columns you require and they may even be in the right order. Often, however, you'll want to add extra columns to the list. After naming a new column, you must then select the type of information that will be stored in it, and this choice will affect the other options that you can complete. The built-in column types are described here.

When you create a column, the ***Create Column*** dialog box will display as shown to the right. After choosing the name for the column – this name must be unique in the list – you must select a column type.

The options that appear in the ***Additional Column Settings*** area will depend on which column type you choose. Some options are standard for all types. You can add a description for the column and choose whether or not a column is required (i.e., if you make the column mandatory, the user must complete this column when creating or editing an item). You can also choose whether or not a column should be added to the default view of the list. But, other options will be based on which column type you select and these are described below.



Single line of text	Users can enter simple text in a single line. You can define the maximum number of characters (up to 255) allowed, plus the default value for the column.
Multiple lines of text	Users can enter text in one or more lines. You can specify the number of lines to display in the editing box and whether the text is plain text (unformatted), rich text (formatted) or enhanced rich text (you can add images and tables, and convert text to hyperlinks).
Choice	Users can choose from a list of options that you specify. You can display the options as a drop-down menu, radio buttons or check boxes. You can also specify a default value.
Number	Users must enter a number in this column. You can specify a minimum and maximum value, the number of allowed decimal places, a default value, and whether to display the value as a percentage.
Currency	This is the same as ***Number*** except that you select which currency symbol will precede the number.
Date and Time	Users can specify a date, or a date and time in the column. You can specify a default value.
Lookup	Users can select data from a specific list in the site which you select in ***Get Information From***. You select the linked list's column (most commonly Title) whose data the users will see in ***In This Column***. You can allow the users to select multiple values from the column. You can also choose to display multiple columns from the linked list.
Yes/No	Users can select either Yes or No by selecting or clearing a check box.
Person or Group	Users can choose a person from a list of users or groups. You can allow multiple selections and you can select what will display when a user views the list item, such as the user's ID.
Hyperlink or Picture	Users can type a link to a web page (either SharePoint or internet) or to a picture. You determine how the link will be formatted when viewing the item's properties by selecting Hyperlink or Picture.
Calculated	This column shows data based on a calculation of other columns, e.g., you could show someone's full name by concatenating the First Name and Last Name columns. To build the desired formula in this column, click on the first column under ***Insert Column***, click on ***Add to formula***, type the operator (such as ***&*** to concatenate two text columns), click on the next column, click on ***Add to formula***, and so on. Google ***SharePoint formulas*** for a list of common formulas.
Task Outcome	This column lets you provide custom task outcomes (other than the default Approved or Rejected) to meet the requirements of your workflow.
External Data	Users can select values from a business application that the administrator has set up. This column type is available only if you are using SharePoint Server.
Managed Metadata	Users can display a set of options (from an enterprise repository or a custom term set created in the site collection) in a dialog box or type the option in the text box.

ADDING A COLUMN TO A LIST

SharePoint allows you to quickly add columns to a list in datasheet view. In this view, an empty column appears to the right of the list and you can click on the ***Add Column*** icon above this blank column to insert a new column. Some lists are designed to open automatically in datasheet view, but if a list opens in a standard list format, you simply use the ribbon to switch view formats.

Try This Yourself:

Continue using the previous site with this exercise...

1. Click on ***Site contents***, then click on ***CrsCosts*** to open this list in Quick Edit mode

   Because this list was created from an Excel table, it opens automatically in Quick Edit mode …

2. Click on ***Add Column*** (the **+** icon) to display a menu of options
3. Select **More Column Types** to display the ***Add Column*** dialog box

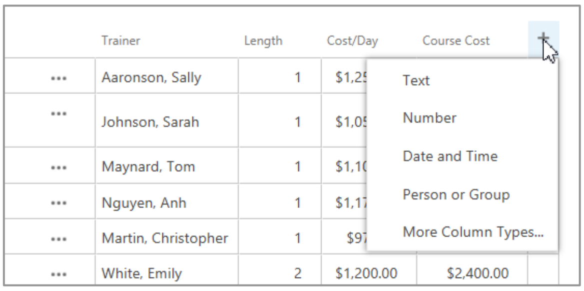
   We want to add a column to calculate the course costs…

4. Type **Cost** in ***Column name***, then click on ***Calculated***

   New fields will appear…

5. Click on ***Cost/Day***, then click on ***Add to formula***
6. Type ***** in the ***Formula*** box, then click on ***Length*** and click ***Add to formula***
7. Click on ***Currency*** under ***The data type returned…***, select ***2*** decimal places, then click on **[OK]**
8. Click on ***Stop*** (editing this list) to save the changes

2



To insert a simple Text, Number, Data and Time, or Person or Group column, select the column type from the menu. The column's name will be in edit mode, ready for you to name it by typing its name and pressing Enter.

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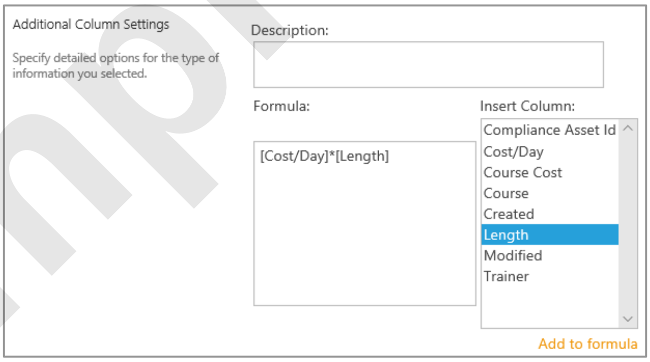

Tip: To rename a column's name in datasheet view, point to the column's name, click on the drop arrow and select Rename Column from the menu.

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For Your Reference…

To ***add*** a ***column*** in ***datasheet view***:

1. Display the list in Quick Edit mode
2. Click on ***Add Column +*** and select the column type
3. Name and complete the options
4. Click on **[OK]**

Handy to Know…

- If you used the ***Custom List in Datasheet View*** app to build a custom list, your list will automatically open in a spreadsheet format ready for you to add columns, enter data, and so on.

ADDING A COLUMN WITH CUSTOM VALIDATION

Most columns allow you to set basic validation rules, such as enforcing unique values in a column. However, some columns also allow you to apply more complex formula-based validation rules similar to the formulas that you can use in Excel. The column validation fields don't display by default but you can quickly reveal them by expanding the ***Column Validation*** heading.

Try This Yourself:

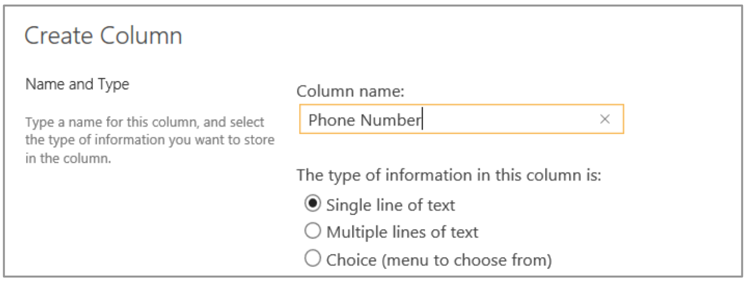
Continue using the previous site with this exercise...

1. Click on ***Site contents*** in the quick launch, click on ***Contacts*** to open this list, then click on the ***LIST*** tab
2. Click on ***Create Column*** in the ***Manage Views*** group, then type **Phone Number** in ***Column name***
3. Click on ***Yes*** in ***Require that this column contains information***, then click on ***Column Validation*** to display the two validation options
4. Click in ***Formula*** and type **=ISNUMBER([Phone Number]+0)**

   This formula will ensure that only numbers can be entered in the Phone Number column…
5. Click in ***User message*** and type **You must enter numbers in this column**

   This message will display if a user attempts to enter text in the Phone Numbers column…
6. Click on **[OK]** to add the column, then click on ***stop*** (editing this list)

2



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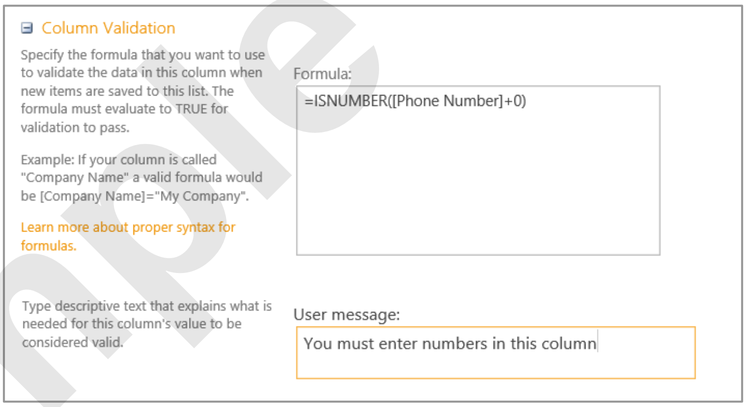

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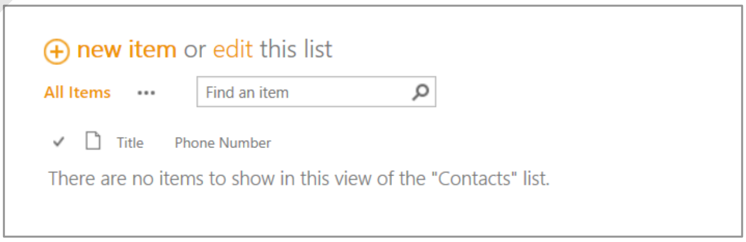


For Your Reference…

To ***apply custom validation*** on a ***column***:

1. Click on the ***LIST/LIBRARY*** tab, then click on ***Create Column***
2. Enter the general details, then click on ***Column Validation*** and complete the two fields
3. Click on **[OK]**

Handy to Know…

- Once you have created a column with no custom validation, you can't edit it later to add validation. You must create a new column, then delete the original column.
- Search the internet for samples of column validation formulas.

THE LIST AND LIBRARY SETTINGS PAGE

When you want to work with and modify a list or library, you will need to open the ***Settings*** page for the list or library. This page provides a summary of the list, such as its name and web address. It also provides links for performing changes such as deleting the list, turning on versioning, working with the columns, creating views, and more.

For the remainder of this chapter you will be modifying various aspects of a list or library. To perform these functions, you will need to display the ***Settings*** page from the ***LIST*** or ***LIBRARY*** tab (see below for an example of this page for the ***Contacts*** list) and then select the appropriate link.

A summary of the list or library appears at the top of the page under List Information.

The General Settings area contains links for performing common changes to lists and libraries. E.g., you can change a list's name or its description using the Title, description and navigation link.

The Permissions and Management links let you perform changes such as deleting the list, altering the permissions for a list, and creating workflows for the list.

You can edit any of the columns in the list or library by clicking on their name.

This area also lets you create new columns, re-order columns, and more.

The Views area displays all views defined for the list or library. You can create new views from here and edit existing views by clicking on their name.

MODIFYING A COLUMN IN A LIST OR LIBRARY

It is very easy to modify the settings of a column in a list or library. For example, you can change the title of a column, add or remove choices for a choice column, or change the default value for the column. When you click on the name of the column in the ***Settings*** page, its current options will display in the ***Edit Column*** page where you can change them as desired.

Try This Yourself:

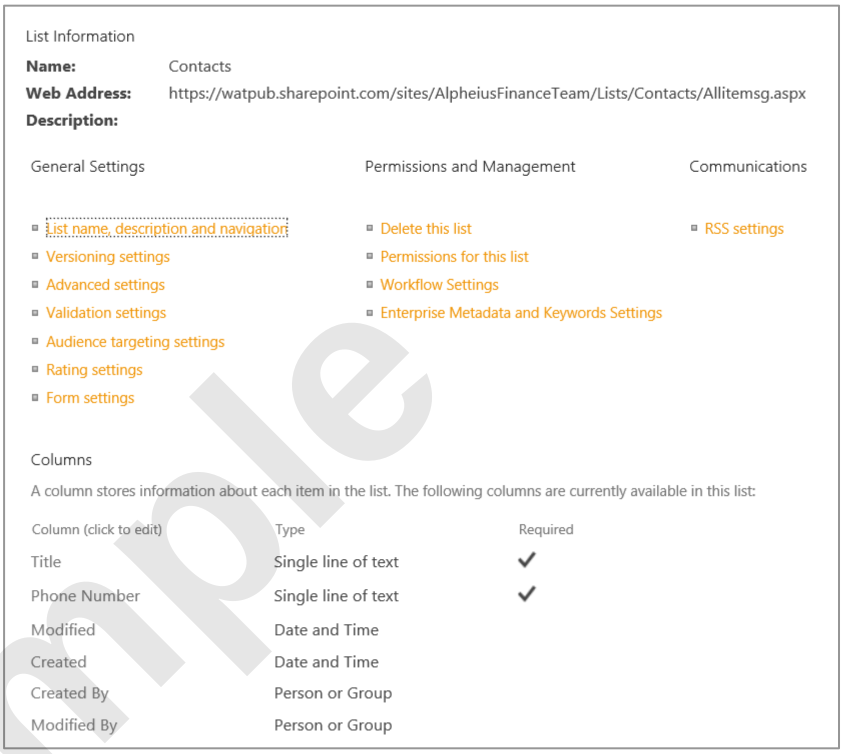
Continue using the previous site with this exercise...

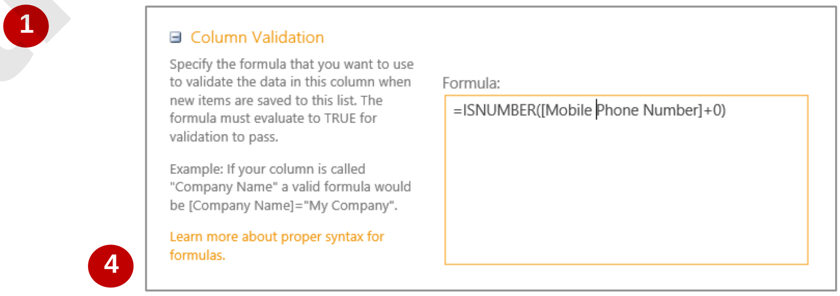
1. Open the ***Contacts*** list, click on the ***LIST*** tab, then click on ***List Settings*** in the ***Settings*** group to open the ***Settings*** page
2. In the ***Columns*** section, click on ***Phone Number*** under ***Column (click to edit)*** to open the ***Edit Column*** page

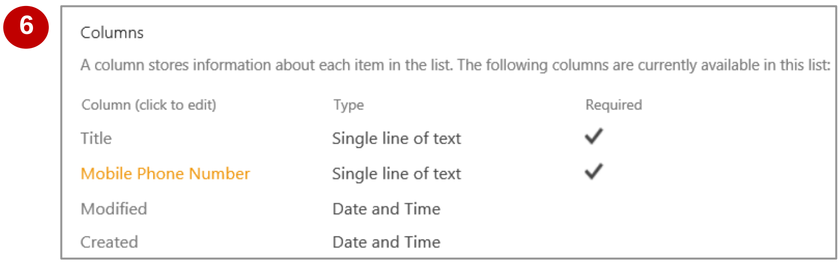
   The Columns section displays all columns in the list and shows whether or not they're required. Let's rename this column and enforce unique values…
3. Type **Mobile Phone Number** in ***Column name***, then click on ***Yes*** in ***Enforce unique values***

   Because we've renamed the column, you must also change the formula…
4. Change the ***Formula*** to ***=ISNUMBER([Mobile Phone Number]+0)***
5. Click on **[OK]**

   A message will display informing you that the column must be indexed to enforce unique values…
6. Click on **[OK]** to return to the ***Settings*** page







For Your Reference…

To ***modify*** a ***column*** in a ***list*** or ***library***:

1. Open the list or library
2. On the ***LIST*** or ***LIBRARY*** tab, click on ***List*** or ***Library Settings*** in the ***Settings*** group
3. Click on the column's name
4. Make the desired changes and click on **[OK]**

Handy to Know…

- You can change the column type for some columns, but you have to be careful as you could lose data. For example, if you change a column to a ***Choice*** type, any existing data that is not one of the choices in the new ***Choice*** list will be lost.

DELETING A COLUMN FROM A LIST OR LIBRARY

Some lists created from predefined apps may include columns that you don't need (e.g., the ***Contacts*** app includes the ***Home Phone*** property). You can either choose to ignore these columns and not populate them, or delete them. Here, we will delete a column from the ***CrsCosts*** list which was made redundant when we added a new calculated column in another exercise.

Try This Yourself:

Continue using the previous site with this exercise...

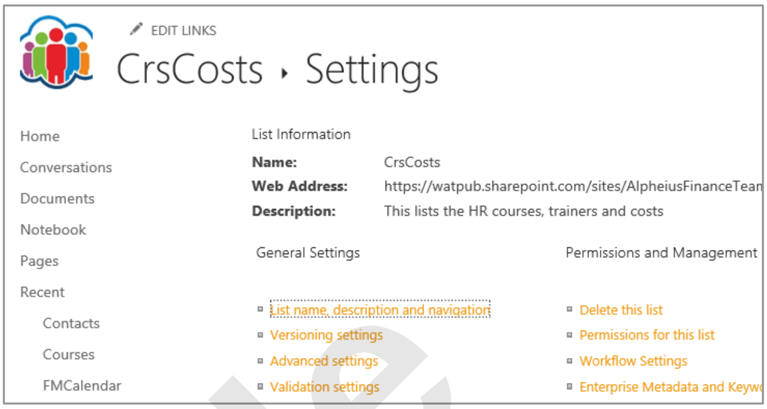
1. Click on ***Site Contents***, then click on ***CrsCosts*** to open this list
2. Click on the ***LIST*** tab, then click on ***List Settings*** in the ***Settings*** group to open the ***Settings*** page

   Because we added the Cost column in an earlier exercise to add a formula to the column, the Course Cost column is now superfluous and needs to be deleted…

3. In the ***Columns*** section, click on ***Course Cost*** under ***Column (click to edit)*** to display the ***Edit Column*** page
4. Scroll to the bottom of the page, then click on **[Delete]**

   A message will display letting you know that this column and its data will be permanently deleted…

5. Click on **[OK]** to delete the column, click on ***CrsCosts*** to return to the ***CrsCosts*** list, then click on ***Stop*** (editing this list)



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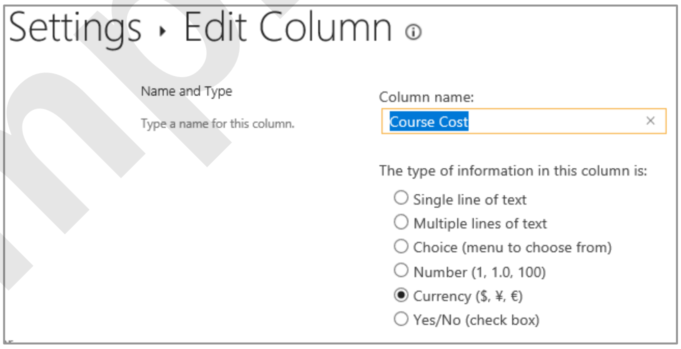
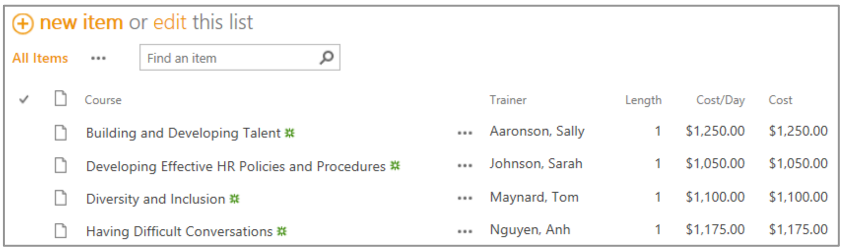




5

For Your Reference…

To ***delete*** a ***column*** from a ***list*** or ***library***:

1. Open the list or library
2. On the ***LIST*** or ***LIBRARY*** tab, click on ***List*** or ***Library Settings*** in the ***Settings*** group
3. Click on the column's name
4. Click on **[Delete]**

Handy to Know…

- Some columns, such as ***Title***, ***Modified By*** and ***Created By***, cannot be deleted because they are considered to be an integral part of the specific list or library. When a column cannot be deleted, the **[Delete]** command does not display at the bottom of the ***Edit Column*** page for that column.

RE-ORDERING COLUMNS IN A LIST OR LIBRARY

You can change the order of the columns in a list or library. For instance, to make it quicker and easier to add the required (or mandatory) properties, you could change these columns to be the first ones to complete when adding a new item or editing an existing item. Re-ordering the columns doesn't affect their order when you view the list, just when you edit the list.

Try This Yourself:

Continue using the previous site with this exercise and ensure you created the Courses list as described at the start of this manual...

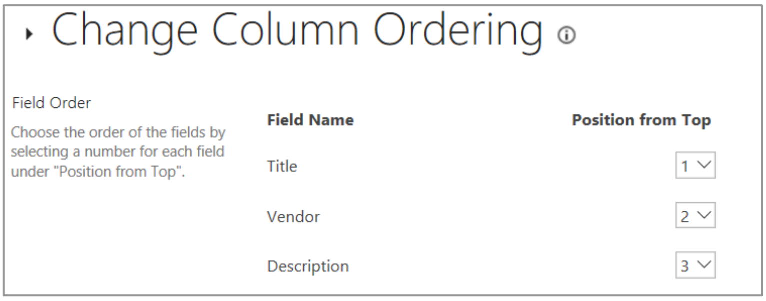
1. Open the ***Courses*** list – let's start by quickly adding two columns
2. Click on ***Quick Edit*** to change to datasheet view
3. Click on ***Add Column*** to display a menu of options, select **Text,** type **Vendor**, then press Enter
4. Add another **Text** column called ***Description***, then click on ***Done***

   Let's re-order the columns…
5. Click on ***Settings***, select **List settings**, then click on ***Column ordering*** (which is below the list of columns)

   The order of the three columns is shown, numbered 1 to 3…
6. Click on the drop arrow for ***Vendor*** and select **3**

   The last two columns will be automatically renumbered and repositioned in the list…
7. Click on **[OK]**, then redisplay the ***Courses*** list

   The column order doesn't appear to have changed
8. Click on ***New***– here's where you see the new order, then click on **[Cancel]**



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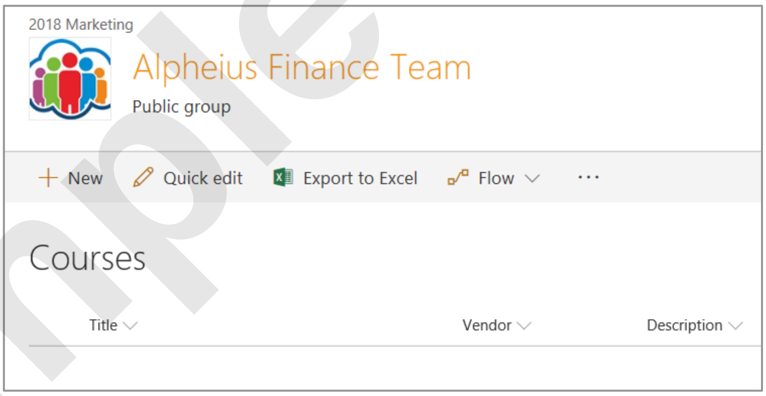

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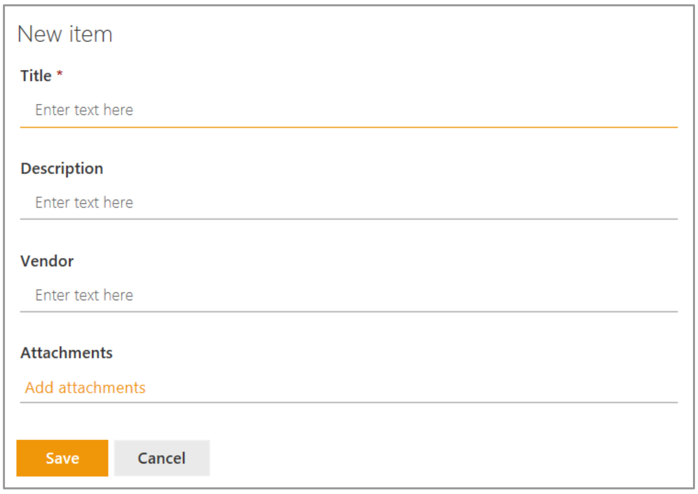

For Your Reference…

To ***re-order columns*** in a ***list*** or ***library***:

1. Open the list or library
2. Click on ***Settings*** and select **List** or **Library settings**
3. Click on ***Column ordering***
4. Make the desired changes and click on **[OK]**

Handy to Know…

- To change the order of the columns in a view, select the desired view in ***Current View*** on the ***LIST*** tab, then click on ***Modify View*** to open the ***Edit View*** page. Select the columns to display and alter their position from left as desired, then click on **[OK]**.