

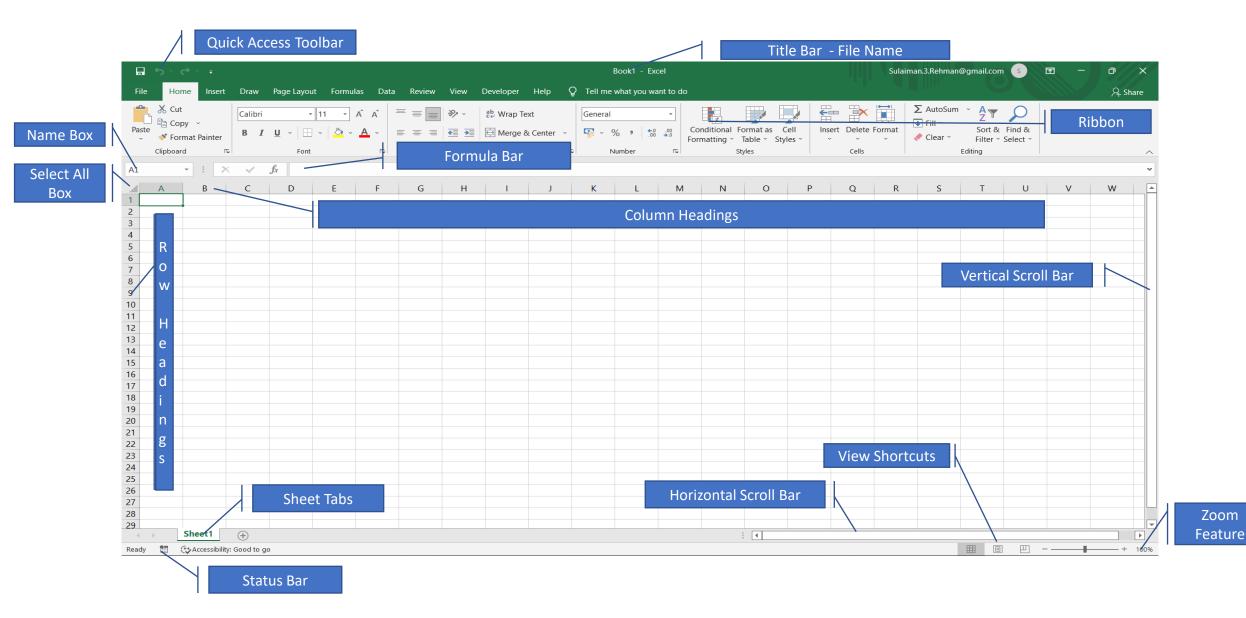
What is Excel

- It is a Database
- 2003 16k Rows 256 Columns
- 2007 10L Rows 16K Columns
- 2010 10L Rows 16k Columns Slicer Sparkline Skydrive PowerPivot
- 2013 10L Rows 16k Columns Timeline FlashFill
- 2016 10L Rows 16k Columns 3DMaps Forecasting Tab
- 2019 10L Rows 16k Columns xMatch xlookup

What is a Spreadsheet

- A spreadsheet application is a computer program such as Excel, OpenOffice Calc, or Google sheets
- Has a number of built in features and tools, such as functions, formulas, charts, and data analysis tools that
- make it easier to work with large amounts of data
- A spreadsheet is a file used to store various types of data
- The basic storage unit for a spreadsheet file is a table
- In a table, the data is arranged in rows and columns to make it easier to store, organize, and analyze the information
- In Excel an individual spreadsheet file is referred to as a worksheet, which, in Excel, refers to a single page or sheet in a workbook.
- By default, Excel has three worksheets per workbook.

Excel - Screen Layout



Ribbon

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Clipboard 🛛	Font 🗤	Alignment 🛛	Number 🖂	Styles	Cells	Editing	~

• The Ribbon is organized into various tabs such as File, Home, Insert etc., and each tab contains related controls which usually include buttons, lists and check boxes

Hide or Show the Excel Ribbon

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Paste → Format Painter Calibri → 11 → 22		
Clipboard 🖂 Font	🖸 Alignment 🖾 Number 🖾 Styles	Cells Editing ^
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- Clicking the down arrow in the upper right hand corner of the application (near the question mark) will open or close the ribbon interface (as shown above)
- The keyboard shortcut Ctrl + F1 can also be used to minimize or expand the ribbon



File Home Insert Draw Page Layout Formulas Data Review View Developer Help	File	Home	Insert	Draw	Page Layout	Formulas	Data	Review	View	Developer	Help
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• Tabs represent core tasks done in Excel. There are eight\Ten tabs across the top of the Excel window by default

Groups

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Paste V Format Painter	B I <u>U</u> → <u>→</u> → <u>A</u> →	≡ ≡ ≡ 🛃 🛃 🖽 Merge & Center 🗸	• % • .00 .00 • .00 • .00 • .00	Conditional Format as Cell Formatting ~ Table ~ Styles ~	Insert Delete Format	✓ Clear ~ Sort & Find & Filter ~ Select ~
Clipboard 🕞	Font 🖂	Alignment	S Number 🛛	Styles	Cells	Editing

• Groups are set of related commands displayed on Tabs

• A command is a button, a menu, or a box where you enter information

Different type of Tabs

• File File Tab

Display basic commands such as open, save, print and a new Backstage View to options which allow sharing and sending documents

Home Home Tab

Support tasks such as copying, pasting, editing and formatting text, finding and replacing text

Insert Insert Tab

Display items you might want to put on a worksheet - from tables, pictures, diagrams, charts, and text boxes to hyperlinks, headers, and footers

• Page Layout Page Layout Tab

Change the format of data, use rulers to adjust width or height, change page orientation, set margins

Different type of Tabs Cont.

Formulas Formula Tab

Display prewritten formulas in function library, display all formulas

Data Data Tab

Import data from different sources, sort or filter data

Review Review Tab

Find the spelling checker, add comments, track changes. You can create annotations to review the worksheet and then review those comments

• View View Tab

Make a quick switch to page Layout view or page break view, turn on gridlines, zoom selection, freeze panes

Dialog Box Launcher



- A dialog box launcher is a small arrow icon that appears in a group
- Users click this icon to open related dialog boxes or task panes that provide more options that relate to the group
- Indicates more options are available for the group

Quick Access Toolbar

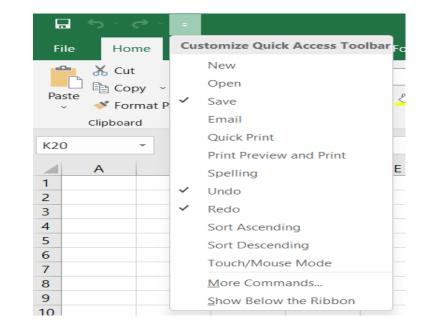
• An area of the user interface that provides quick access to commands

- Designed to reduce the amount of navigation you have to do in the Ribbon to access the features that you use frequently
- Contains three default commands
 - ✓ Save

- ✓ Undo
- ✓ Redo

Quickly add some commands to the QAT

- Click the arrow to the right of the quick access toolbar and choose a command from the menu
- The default 3 commands that appear on the QAT have the 'tick' beside the command



Formula Bar

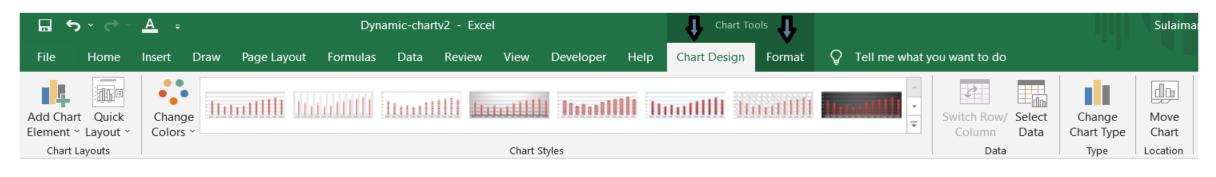
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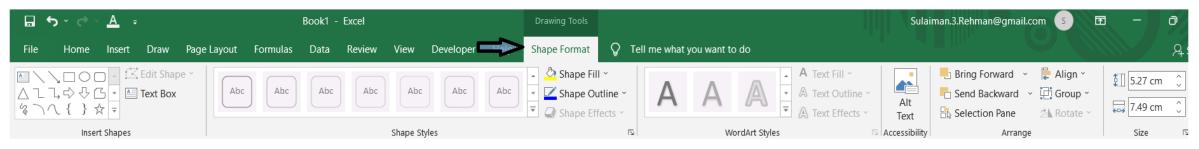
- A toolbar at the top of the Microsoft Excel spreadsheet window
- It is labeled with function symbol (fx)
- The Formula Bar will activate by clicking inside Formula Bar or when you type in a cell
- The formula bar is located above the work area of the spreadsheet
- The formula bar displays the data or formula stored in the active cell

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		Testing						12	25	37	

• The formula bar can be used to enter or edit a formula, a function, or data in a cell

Contextual Tabs



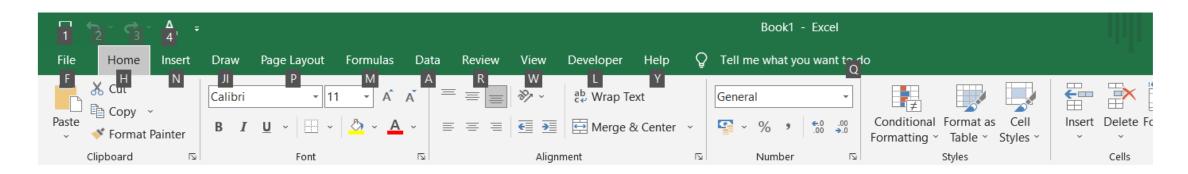


- A Contextual tab is a hidden Tab control that is displayed in the tab row when an object in the application workspace, such as an image or chart is selected
- Contextual tabs typically contain one or more Commands that are applicable to a selected object only
- For example, when you create a chart in Excel, tabs appear on your Ribbon to make it easier to format and modify that chart. As soon as you navigate away from the chart, the extra tabs disappear

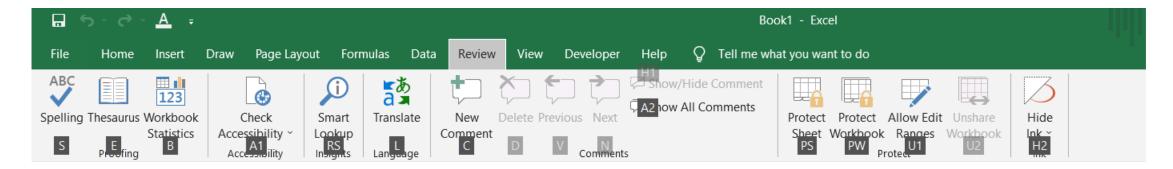
Row Header & Column Header

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Shortcut keys



• The ribbon comes with new shortcuts, called Key Tips. To make the Key Tips appear, press AL



• To display a tab on the ribbon, press the key for the tab - for example, press the letter R for the Review tab or W for the View tab. This makes all the Key Tip badges for that tab's buttons appear. Then, press the key for the button you want.

Custom Lists & Auto Fill

- In Excel, We can use the Custom List feature to create a list with names, locations, or other items and then use the AutoFill to fill these list items in order in a workbook.
- For example, say your company has offices in several locations and you get tired of typing out the sequence in each new worksheet that requires them. After creating a custom list with these locations, you can enter the entire sequence of cities by entering one of the locations in the first cell and then dragging the AutoFill handle to the blank cells where the rest of the locations appear.

• Steps to create a custom list:

- 1. Click the File tab and then click Options. The Excel Options dialog box appears.
- 2. Click the Advanced tab. The Advanced options appear in the right pane.
- 3. Click the Edit Custom Lists button in the General section. The Custom Lists dialog box appears.
- 4. Click inside the List Entries list box and then type each entry (in the desired order), pressing Enter after each list item.
- 5. Click the Add button. The new list appears in the Custom Lists box.
- 6. Click OK to close both dialog boxes

Custom Lists		? ×
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January, February, March, April, Ma Bengaluru, Chennai, Delhi, Mumbai, Import list from cells:	1	l <u>m</u> port
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Custom Lists & Auto Fill Cont.

If you've already entered the list of items in the worksheet, you don't need to type these items again in the List Entries box. Instead, click on Import List and then drag through the range of cells to select the list. Click the Expand Dialog Box button, click the Import button to copy this list into the List Entries box, and click OK two times

• <u>To use a custom list you've created, follow these</u> <u>steps</u>:

- 1. Type one of the list items in a cell and then press Enter. You can type any item from the custom list; it doesn't have to be the first item.
- 2. Select the cell containing the list item.
- 3. Drag the AutoFill handle (in the lower right corner of the cell) in the desired direction to create the list

Bengaluru Chennai	Delhi	Mumbai	Pune	Shimoga
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Delhi				
Mumbai				
Pune				
Shimoga				

Paste Special

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Skip <u>b</u> lanks	Transpos <u>e</u>
Paste <u>L</u> ink	OK Cancel

Microsoft Excel normally copies all the information in the range of cells you select including the format when you paste the data.

We use Excel's Paste Special command to specify other options, such as pasting only the cell contents (without the formatting) or only the formatting (without the cell contents).

Paste Special Cont.

You can specify which parts of the current cell selection to use by selecting the appropriate Paste Special options:

- All to paste all the stuff in the cell selection (formulas, formatting, you name it). This is what happens when you paste normally.
- Formulas to paste all the text, numbers, and formulas in the current cell selection without their formatting.
- Values to convert formulas in the current cell selection to their calculated values.
- Formats to paste only the formatting from the current cell selection, without the cell entries.
- **Comments** to paste only the notes that you attach to their cells (kinda like electronic self-stick notes).
- Validation to paste only the data validation rules into the cell range that you set up with the Data Validation command.
- All Using Source Theme to paste all the information plus the cell styles applied to the cells.
- All Except Borders to paste all the stuff in the cell selection without copying any borders you use there.
- Column Widths to apply the column widths of the cells copied to the Clipboard to the columns where the cells are pasted.
- Formulas and Number Formats to include the number formats assigned to the pasted values and formulas.
- Values and Number Formats to convert formulas to their calculated values and include the number formats you assigned to all the copied or cut values.
- All Merging Conditional Formats to paste conditional formatting into the cell range

Paste Special Cont.

When you paste, you can also perform some simple math calculations based on the value(s) in the copied or cut cell(s) and the value in the target cell(s):

- None: Excel performs no operation between the data entries you cut or copy to the Clipboard and the data entries in the cell range where you paste. This is the default setting.
- Add: Excel adds the values you cut or copy to the Clipboard to the values in the cell range where you paste.
- **Subtract**: Excel subtracts the values you cut or copy to the Clipboard from the values in the cell range where you paste.
- **Multiply**: Excel multiplies the values you cut or copy to the Clipboard by the values in the cell range where you paste.
- **Divide**: Excel divides the values you cut or copy to the Clipboard by the values in the cell range where you paste. Finally, at the bottom of the Paste Special dialog box, you have a few other options:
- Skip Blanks: Select this check box when you want Excel to paste only from the cells that aren't empty.
- **Transpose**: Select this check box when you want Excel to change the orientation of the pasted entries.

For example, if the original cells' entries run down the rows of a single column of the worksheet, the transposed pasted entries will run across

the columns of a single row.

• **Paste Link**: Click this button when you want to establish a link between the copies you're pasting and the original entries. That way, changes to the original cells automatically update in the pasted copies

Paste Special Cont.

Using Paste Options with Copied Data in Excel

Excel displays a Paste Options button at the end of a pasted range. When you click this drop-down button or press the Ctrl key, a palette appears with three groups of buttons (Paste, Paste Values, and Other Paste Options).

You can use these paste options to control or restrict the type of content and formatting that's included in the pasted cell range. The paste options (complete with the hot key sequences you can type to select them) on the Paste Options palette include

- **Paste (P)**: Excel pastes all the stuff in the cell selection (formulas, formatting, you name it).
- Formulas (F): Excel pastes all the text, numbers, and formulas in the current cell selection without their formatting.
- Formulas & Number Formatting (O): Excel pastes the number formats assigned to the copied values along with their formulas.
- Keep Source Formatting (K): Excel copies the formatting from the original cells and pastes this into the destination cells (along with the copied entries).
- No Borders (B): Excel pastes all the stuff in the cell selection without copying any borders applied to its cell range.
- Keep Source Column Widths (W): Excel makes the width of the columns in the destination range the same as those in the source range when it copies their cell entries.
- Transpose (T): Excel changes the orientation of the pasted entries from rows to columns.
- Values (V): Excel pastes only the calculated results of any formulas in the source cell range.
- Values & Number Formatting (A): Excel pastes the calculated results of any formulas along with all the formatting assigned to the labels, values, and formulas in the source cell range into the destination range.
- Values & Source Formatting (E): Excel pastes the calculated results of any formulas along with all formatting assigned to the source cell range.
- Formatting (R): Excel pastes only the formatting (and not the entries) copied from the source cell range to the destination range.
- **Paste Link (N)**: Excel creates linking formulas in the destination range so that any changes that you make to the cell entries in the source range are immediately brought forward and reflected in the corresponding cells of the destination range.
- \circ **Picture (U)**: Excel pastes only a picture of the copied cell selection.
- Linked Picture (I): Excel pastes a picture of the copied cell selection that is linked to the source cells.

