

Google sheets

- Coursera

Module 1 :-

This course follows a fictional customer called
"On the Rise"

→ The size of the employee base is increased.

AGENDA

Module 1: Introduction to Google Sheets

Module 2: Manage data using Google Sheets

Module 3: Format a Google Sheets
spreadsheet

Module 4: Basic formulas, functions, and
charts

Module 5: Share your Google Sheets
spreadsheets

Module 6: Collaborate with Google Sheets

Business challenge: Details in the data

Introduction to Google Sheets

Google Sheets is an online spreadsheet program included as part of Google Workspace. It is for storing, analysing and presenting data.

`sheets.new` - web url (shortcut to open instant new spreadsheet).

We also have a template gallery provided by Google and we can also import from Microsoft Excel sheet.

For fast access, we can name it and star it and use it from the Google Drive. We can also make the document access offline.

MODULE - 2 Manage data using Google Sheets

- Add data
- Paste data
- Import data

- Sort data
- Filter data

Spreadsheet data is contained in cells.

Cells are identified by their location / address in the spreadsheet by column & row.

Horizontal rows - represented by numbers

Vertical columns - represented by letters

We can also directly paste data from another sheet just by copying (Ctrl + C)

To paste, we can directly use (Ctrl + V) or we can format the pasting of data by going to Edit → Paste special and choose one of the options

The screenshot shows a Google Sheets interface with a context menu open over a range of cells. The menu is titled 'On the Rise forecast repo_HARSAYAZHENI'. The 'Edit' tab is selected. The 'Paste special' option is highlighted. A submenu titled 'Paste special' lists several options:

- Values only
- Format only
- Formula only
- Conditional formatting only
- Data validation only
- Transposed
- Column width only
- All except borders

The main sheet area displays a table with data for various cities and months. The columns are labeled D through S, and the rows are numbered 1 through 15. The data includes city names like City, Manha, Queens, Staten, Benson, William, Albany, Buffalo, Orlando, Savannah, Atlanta, Charleston, Wilmington, and Raleigh, along with their corresponding values for each month from January to March.

We can import data from File → Import data.

The screenshot shows a Google Sheets spreadsheet titled "On the Rise forecast repo_HARSAYAZHENI". The spreadsheet contains data about cities and their forecasts. A modal dialog box titled "Import file" is open over the spreadsheet. The dialog box has the following fields:

- File: MOCK_DATA (1).csv
- Import location: Create new spreadsheet
- Separator type: Detect automatically
- Buttons: Import data (green), Cancel

The background spreadsheet shows columns M through S with data for various cities like Manhattan, New York City, Queens, Staten Island, Bensonhurst, Williamsburg, Albany, Buffalo, Orlando, Savannah, Atlanta, Charleston, Wilmington, and Raleigh, along with their respective forecasts for different months.

This screenshot is similar to the one above, but the "Separator type" dropdown in the "Import file" dialog box is set to "Tab". The rest of the dialog and the background spreadsheet are identical to the first screenshot.

When we are using large datasets we can sort for faster access of data.

The sort option is present in Data → Sort sheet

We can also sort by selecting a column and sort based on a particular column.

Filtering data can also help analysing a subset of the data in your spreadsheet. Select a range of cells to filter.

A screenshot of a Google Sheets document titled "On the Rise forecast repo_HARSAYAZHENI". The document contains a table with data from A1 to S15. The first column (A) lists cities: Albany, Atlanta, Austin, Bangalore, Bangkok, Barcelona, Baton Rouge, Bensonhurst, New York, Berlin, Birmingham, Bogota, Boston, Brussels, and Buenos Aires. The second column (B) contains numerical values. The rest of the columns (C-S) contain categorical data like months and bread types. A context menu is open over the first row of the table, specifically over the 'Sort by condition' option. This menu shows several filtering options: Text contains, Text does not contain, Text starts with, Text ends with, Text is exactly, and Date is. The 'Text starts with' option is currently selected. The browser's address bar shows the URL of the Google Sheets document.

Filter views - When we're working with large datasets, the filter view allows you to see the data that's important.

It's just a temporary view to sort in a range or view in a range.

The screenshot shows a Google Sheets spreadsheet titled "On the Rise forecast repo_HARSAYAZHENI". A temporary filter is applied to the range A1:A997, specifically targeting the "City" column. The filter results are displayed in the main grid, showing data for various cities like Manhattan, New York City; Queens, New York City; Staten Island, New York; Bensonhurst, New York; Williamsburg, New York; Albany; Buffalo; Orlando; Savannah; Atlanta; Charleston; and Wilmington. The columns represent time periods from January to March, and product categories like Cinnamon, Rye bread, etc. The interface includes standard Google Sheets tools like file menu, search, and share buttons at the top, and a toolbar with various icons below. The status bar at the bottom right shows the date as 18-12-2025 and the time as 09:34.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
1				Cinnamon	Cinnamon	Cinnamon	Cinnamon	Cinnamon	Cinnamon	Cinnamon	Cinnamon	Cinnamon	Cinnamon	Cinnamon	Cinnamon	Rye bread	Rye bread	Rye bread	
2	City	State/Prov	Country	Region	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March
3	Manhattan, New York City	NY	USA	North America - East	121526	137088	130775	138924	142008	150373	121693	132901	137489	143289	149843	131891	144561	141823	12600
4	Queens, New York City	NY	USA	North America - East	132387	149234	143156	137937	141205	124963	127500	136066	135520	136501	128600	137757	147550	136426	14158
5	Staten Island, New York	NY	USA	North America - East	133404	131702	127882	147870	147574	150468	121572	128377	129227	135337	119416	144232	148958	121863	12828
6	Bensonhurst, New York	NY	USA	North America - East	144600	138581	143270	138799	144712	144857	127001	125939	150988	133839	126161	129756	128812	120343	13399
7	Williamsburg, New York	NY	USA	North America - East	135646	120562	142166	120863	140649	135326	147990	147886	149424	137861	134928	132462	127656	123667	12731
8	Albany	NY	USA	North America - East	4069	5748	5001	4830	4165	4536	5438	4305	3593	4444	4133	5990	5017	5220	387
9	Buffalo	NY	USA	North America - East	4704	5623	4885	5246	3437	4827	4449	3834	4714	5772	6012	5111	4044	3961	520
10	Orlando	FL	USA	North America - East	10437	11477	10910	9930	10409	10514	10271	10314	9975	10814	11636	9931	11616	10243	1164
11	Savannah	GA	USA	North America - East	3757	5083	4093	3920	4255	5702	6075	4961	5583	6025	4172	3982	5609	5356	494
12	Atlanta	GA	USA	North America - East	112312	114102	120938	112317	121251	113044	114652	126354	120729	126460	120371	114638	109623	117531	11053
13	Charleston	SC	USA	North America - East	4481	3685	4862	5052	5511	4562	4340	3959	4438	5187	4147	5759	4515	4935	504
14	Wilmington	NC	USA	North America - East	5676	3848	4051	4048	3952	5017	4989	5165	5693	4462	3475	3743	5217	5550	450

Module - 3 Format a Google Sheets spreadsheet

- Format a google sheet
- Manage multiple tabs and sheets
- Cell type formats
- Add, move, duplicate and hide sheets
- Freeze rows and columns
- Protect a sheet

We can change the color of the cell / range of cells by going to fill color icon and choose the desired color. The option is directly present in the toolbar itself.

We can also apply alternating colors and apply conditional formatting which assigns a color based on rules for cell contents.

Ctrl + B - Bold text

We can change the border by clicking the cell/ column and going to the toolbar for the border options. Here, we can change the color of the border and the thickness and style of the border.

Merging cells - Cells can be merged horizontally, vertically or both.

To align the cell data, we can directly choose the option from the toolkit or click the cell and select format → align and choose the options.

For data wrapping, we have three options, overflow - will allow to go to adjacent cell.

Wrap - will resize the cell to accomodate the data entered into it.

clip - will display a portion of the data although all the data will still be figured into formulas & functions.

Text rotation options - tilt up, tilt down, stack vertically, rotate up & rotate down. A custom angle can also be applied in the cell.

Cell type formats :-

- Automatic
- plain text
- Number
- Currency
- Date time

Cells can also be frozen. If we want view a header row, when we scroll through the data, select a row / column / both, Open view menu → hover over freeze & select 1 row / column or any other. A thick gray line will appear at the end of frozen rows or columns.

Manage multiple sheet

A single spreadsheet can have more than 1 sheet, it is used to manage large amounts of data.

We can edit the name, delete, duplicate, copy and even protect the sheet in the below dropdown of the sheet bar. We can hide the sheet & unhide it from the view menu.

Module 4 : Basic Formulas, functions & charts.

- Formulas & functions
- Charts
- Data types
- Named ranges

To begin with a formula, we should start by clicking the cell and putting equals (" = ") symbol. Sheets will automatically suggest formulas and functions.

Open parenthesis is used for applying range in the formula. The separator between the ranges is ":"

eg: = SUM (A3 : A10)

SUM :- Used to sum up the series of cells.

AVERAGE :- Returns the numerical average value in a dataset ignoring text

= AVERAGE (C3 : C15)

Summarize data with charts

The chart types in google sheets include line, column, bar, pie, histogram and scatter.

To create a new chart select the relevant range of cells & Insert menu and select chart.

The setup menu of the chart has many options for the type of chart and customizations to visually represent the data.

To present the chart inside the cell, we have SPARKLINE

Eg: =SPARKLINE (B2 : M2)

Import, Export, data types and more ...

Export & publishing a chart.

We have various options such as edit chart, delete, download, publish, copy chart etc..

Date types - There are many ways to express dates in a spreadsheet. Select the cell → format menu → Number → Date & time formats.

Named ranges → We can also name the ranges between the cells. eg: Rather than using $=\text{SUM}(A3:A15)$ we can use
 $=\text{SUM}(\text{monthly-sales})$

To do this, open Data menu → named ranges
→ add a name range → select the cells.

MODULE - 5 Share your Google Sheets Spreadsheets.

Top right → Share

The sharing window offers options to choose who can access your spreadsheets. When you share, you are the owner. You can view, edit, comment & give access to the file according to the role.

Permissions can be changed anytime, including removing collaborators entirely / transferring the ownership to another editor.

Version History - Google Sheets keeps track of all the changes made to the spreadsheet.

File → version history

MODULE b - Collaborate with Google Sheets

To add a comment, select a cell in the spreadsheet and from the Insert menu, choose comment. Cells with comments have a small triangle in the right top. Comments can be edited & deleted.