

Orange Digital Center

Lesson 1: Introduction to Excel: Interface, Formatting, and Basics

Aprilie - Iunie 2025



Cuprins

- Vom enumera câteva dintre cele mai utilizate aplicații de calcul tabelar disponibile
- Vom învăța care sunt funcționalitățile esențiale ale foilor de calcul
- Vom discuta de ce aceste aplicații sunt un instrument valoros pentru un Data Analyst
- Vom discuta care sunt componentele de baza și terminologii
- Ne vom familiariza cum să navigăm, să utilizăm meniul și ribbon, și cum să selectăm datele

Common Spreadsheet Applications



Excel

- Cea mai cunoscută și utilizată;
- Cea mai complexă
- Disponibilă în versiune desktop (plătită)
- Online (gratuită, cu funcționalități limitate).

Common Spreadsheet Applications



**Google
Sheets**

- Gratuită cu un account Google
- Doar versiunea Web
- Se integrează ușor cu alte aplicații Google.

Common Spreadsheet Applications



**Libre
Office**

- Gratuită
- Open - source
- Desktop versiune
- Set de functionalitati mai limitat

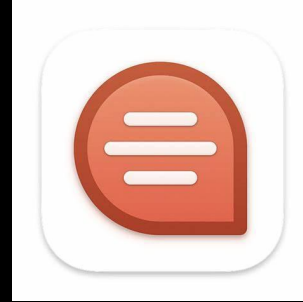
Common Spreadsheet Applications



**ZOHO
Sheet**



**Open
Office**



Quip



Smartsheet

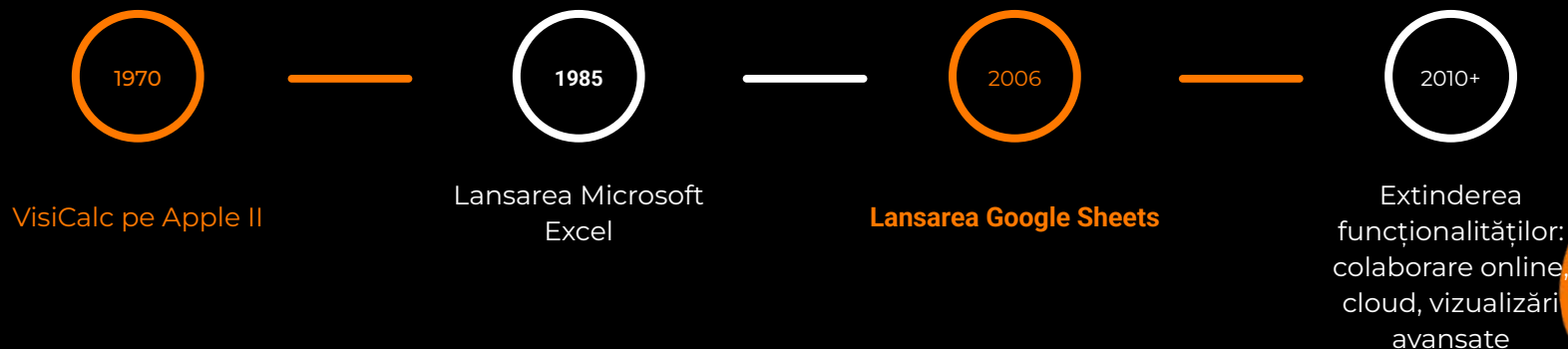


Numbers

Advantages of using Spreadsheets

- Datele tale sunt bine **organizate** și ușor **accesibile**.
- Informațiile pot fi **formatate**, **filtrate** și **sortate** cu ușurință, în funcție de nevoi.
- Dacă faci greșeli în introducerea datelor sau în formule, poți **corecta rapid**, **anula modificările** sau folosi instrumente de **verificare a erorilor**.
- În plus, poți **analiza datele** și **crea grafice**, **diagrame** și **rapoarte** care te ajută să **vizualizezi rezultatele analizelor** într-un mod clar și intuitiv.

History of the Spreadsheets



Common Business use for Spreadsheets

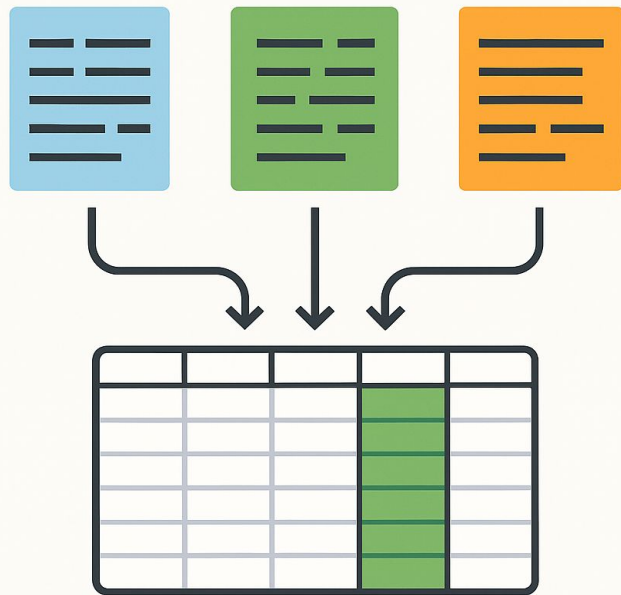
- Introducerea și stocarea datelor
- Compararea seturilor mari de date
- Modelare și planificare
- Crearea de grafice și diagrame
- Identificarea tendințelor
- Realizarea de scheme logice pentru procesele de business
- Monitorizarea vânzărilor
- Previziuni financiare
- Analize statistice
- Calculul profitului și pierderilor
- Realizarea bugetelor
- Audit financiar (forensic)
- Calculul salariilor și raportarea taxelor
- Emiterea facturilor
- Programarea activităților

Common Personal use for Spreadsheets

- Evidența cheltuielilor personale
- Bugetul gospodăriei
- Organizarea rețetelor culinare
- Monitorizarea activității fizice și a greutății corporale
- Numărarea kaloriilor
- Gestionarea ligilor sportive (ex: Fantasy Football)
- Catalogarea colecțiilor muzicale
- Liste de contacte
- Liste de cumpărături
- Liste pentru felicitări de Crăciun sau alte evenimente

How A Data Analyst use Spreadsheets

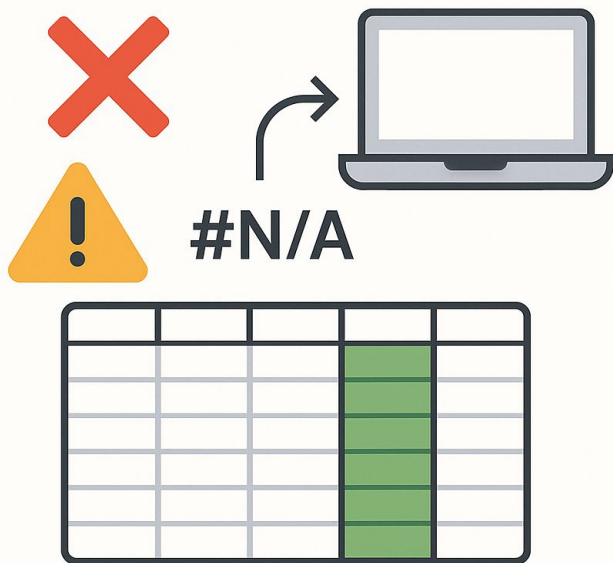
Collecting and harvesting data



Colectarea și centralizarea datelor din una sau mai multe surse diferite și distribuite

How A Data Analyst use Spreadsheets

Curățarea datelor



Curățarea datelor, prin eliminarea duplicatelor, corectarea erorilor, gestionarea valorilor lipsă și îmbunătățirea calității datelor

How A Data Analyst use Spreadsheets

Analiza datelor



Analiza datelor, prin filtrare, sortare și interpretare pentru a extrage informații valoroase

How A Data Analyst use Spreadsheets

Vizualizarea datelor



Vizualizarea datelor, prin grafice și rapoarte care te ajută să construiești povești clare și convingătoare despre rezultatele analizei

How A Data Analyst use Spreadsheets



Prezentarea concluziilor către stakeholderii din companie sau alte părți interesate

Componentele de baza si terminologii

Info

Open

Save As

Print

Export

Close

Feedback

Options

Q

	A	B	C
1			
2			
3			
4			
5			
6			
7			

Blank workbook

 f_x 

Spring

	Jan	Feb	March	April	May
Total expenses	\$0	\$0	\$0	\$0	\$0
Cash short/extra	\$0	\$0	\$0	\$0	\$0
Income					
Wages					
Interest/dividends					
Miscellaneous					
Total	\$0	\$0	\$0	\$0	\$0
Expenses					
Income					




Seasonal illustrated any year cal...

September							20XX
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
26	27	28	29	30	01	02	03
09	10	11	12	13	14	15	16
23	24	25	26	27	28	29	30

CANTERO GROUP

MONTHLY BUDGET

BUDGET ITEM	ESTIMATED	ACTUAL	VARIANCE
Income	\$1,000.00	\$1,000.00	\$0.00
Expenses	\$4,000.00	\$4,000.00	\$0.00
Balance (Income minus expenses)	\$3,000.00	\$3,000.00	\$0.00

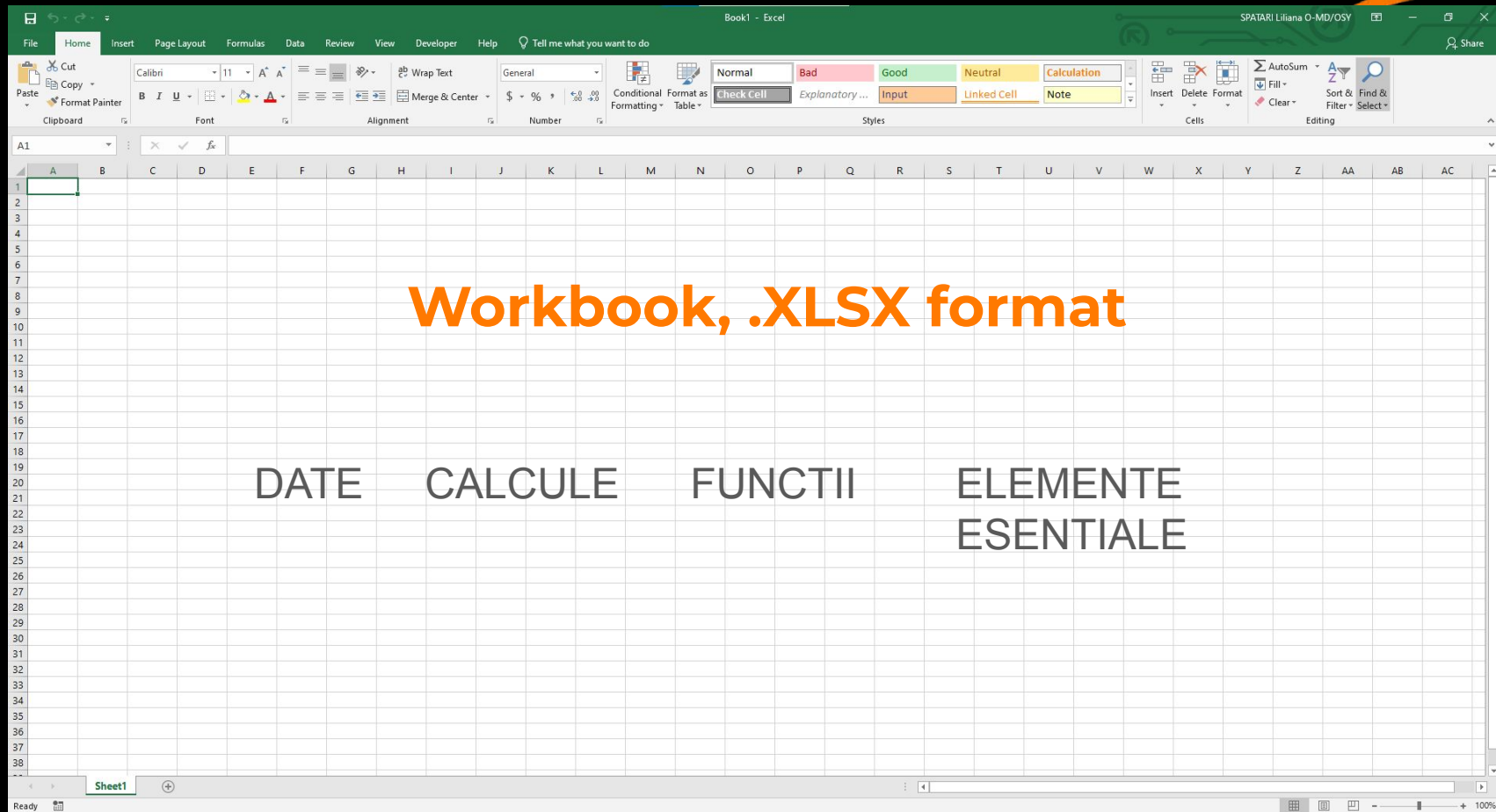


BUDGET OVERVIEW	
Projected balance	\$1,585
Actual balance	\$1,740

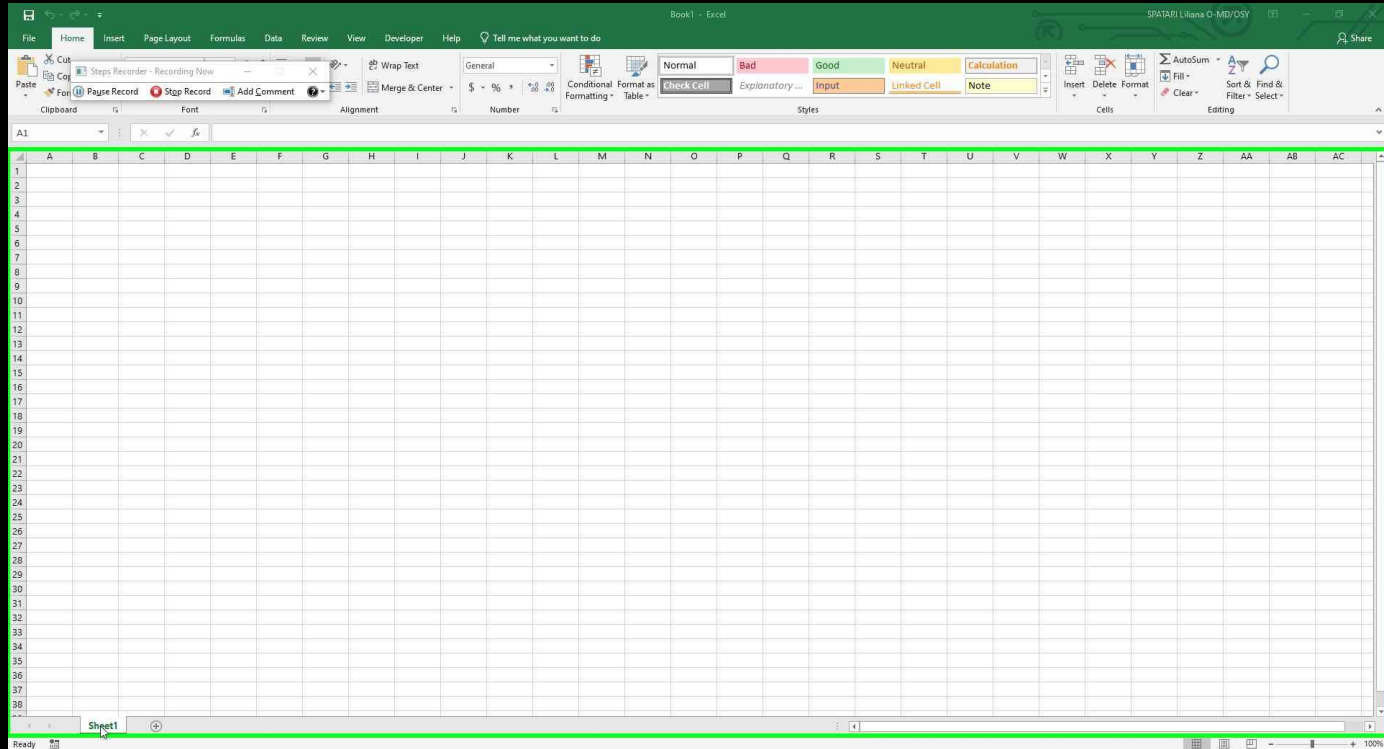
CONFERENCE / TRAINING SESSION
SPONSORED BY CANNED GROUP

See the below schedule for all conference/training session dates, times, and locations.

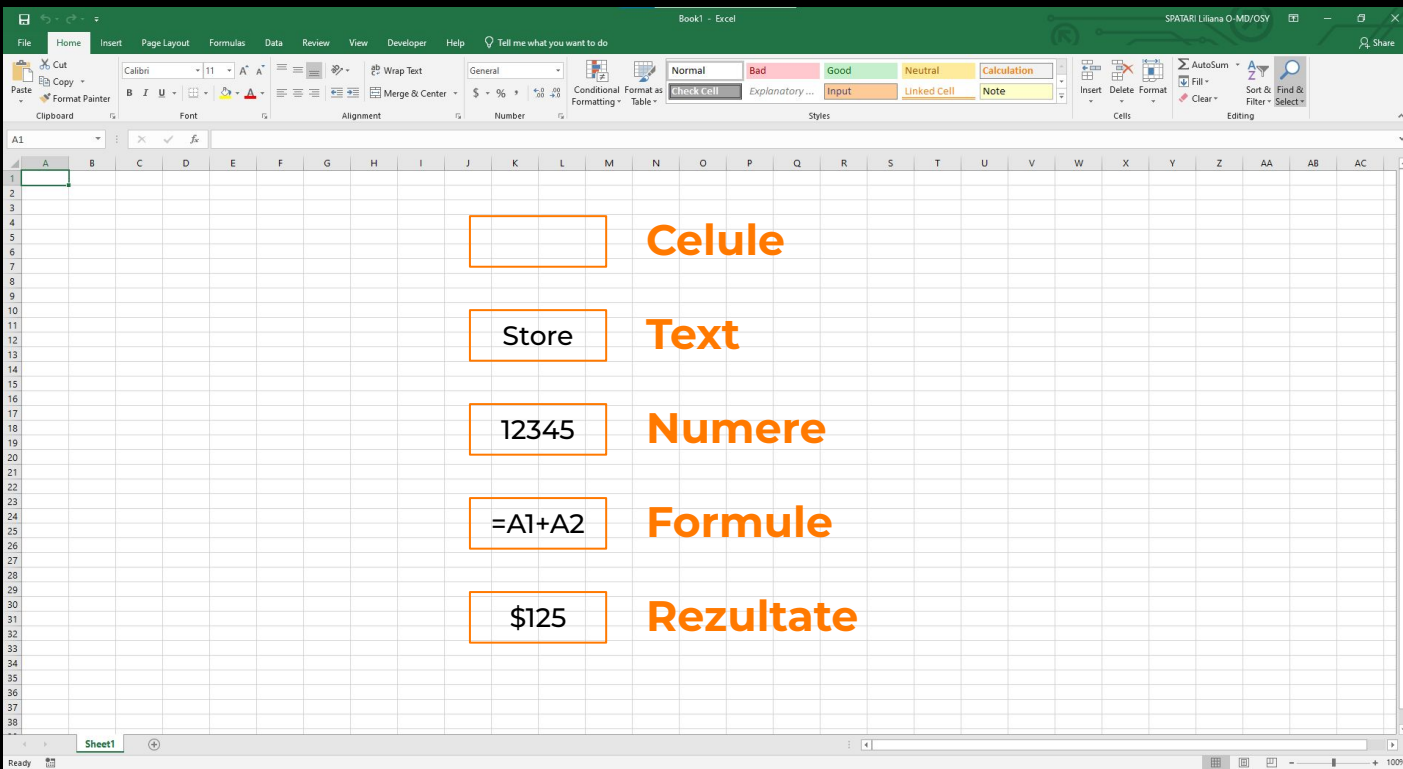
10/5/2015	10/6/2015	10/7/2015	10/8/2015	10/9/2015
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Practice



Cells



Book1 - Excel

SPATARI Liliana O-MD/OSY

File Home Insert Page Layout Formulas Data Review View Developer Help Tell me what you want to do

Clipboard Font Alignment Number Conditional Formatting Format as Table Styles Cells Editing

Coloane

randuri

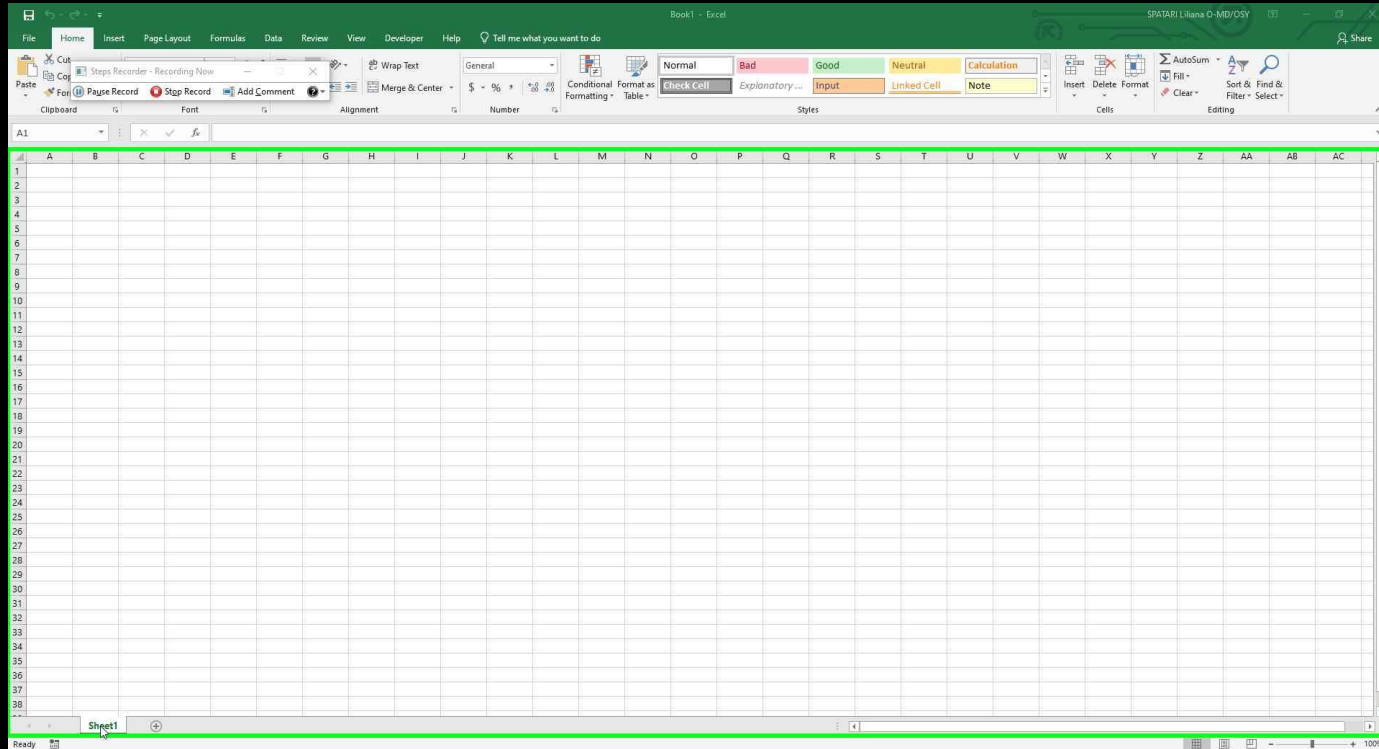
Coloane: Vin pe verticala si sunt reprezentate printr-un sistem de litere

Randuri: Vin pe orizontala si sunt reprezentate printr-un sistem numeric

Sheet1

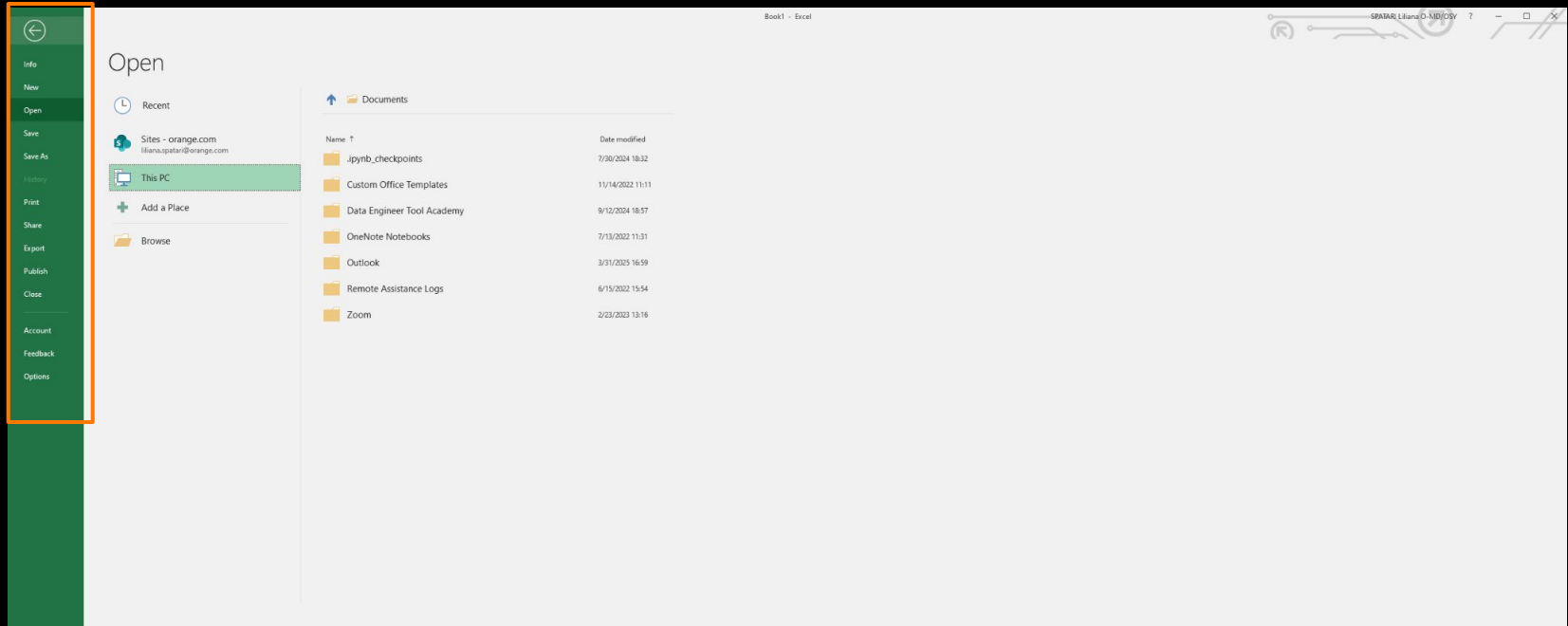
Ready

Practice - Open Excel



Navigare
Meniu
Ribbon
Selectie de date

Practice - Open Excel

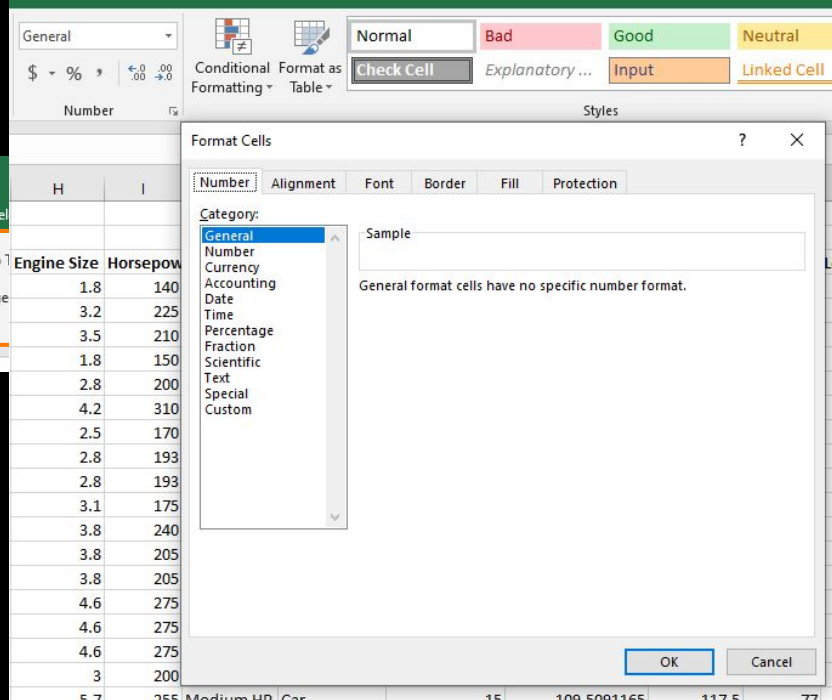
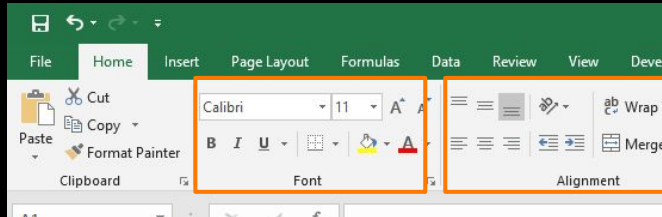


Familiarizare cu Ribbon și meniurile

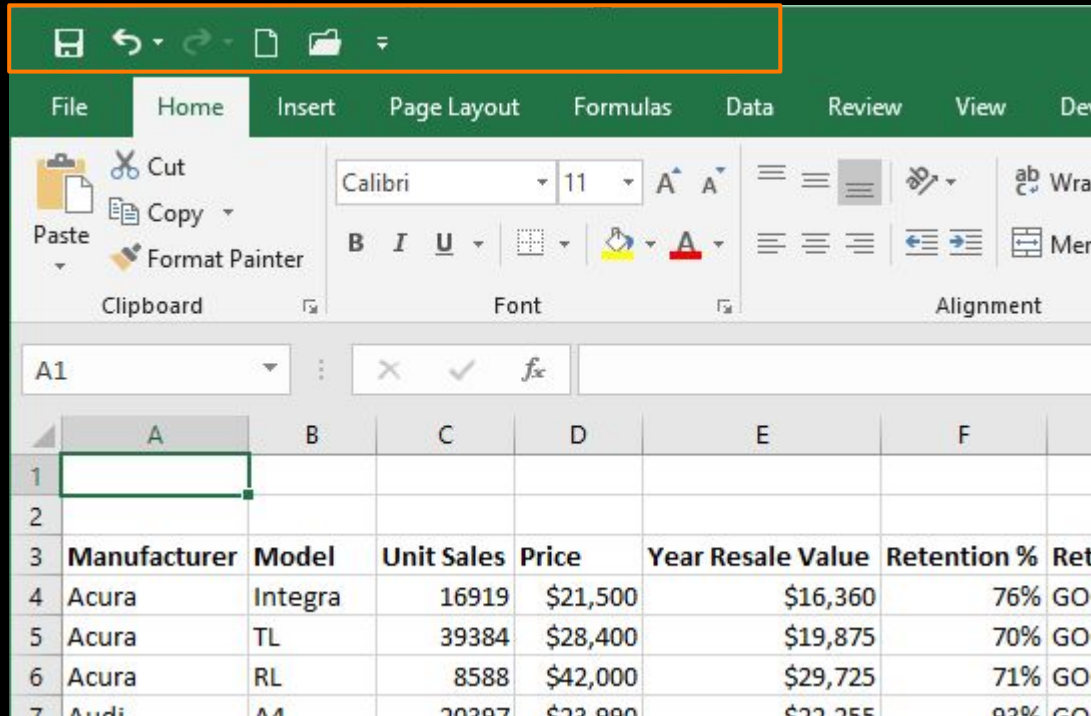
The screenshot displays the Microsoft Excel interface. The Ribbon at the top includes the following tabs: File, Home, Insert, Page Layout, Formulas, Data, Review, View, Developer, and Help. The 'Home' tab is currently selected, showing sub-tabs for Clipboard, Font, Alignment, Number, and Styles. The Styles sub-tab is active, displaying various cell styles like Normal, Bad, Good, Neutral, Calculation, and Check Cell. The main workspace shows a data table with 26 rows and 19 columns. The first row is a header, and the subsequent rows contain data for various car models and their specifications.

Manufacturer	Model	Unit Sales	Price	Year Resale Value	Retention %	Retention Value	Engine Size	Horsepower	HP Level	Vehicle_type	Fuel Efficiency	Power Perf Factor	Wheelbase	Width	Length	Curb Weight	Fuel Capacity	Latest Launch
Acura	Integra	16919	\$21,500	\$16,360	76%	GOOD	1.8	140	Medium HP	Passenger	28	58.28014952	101.2	67.3	172.4	2.639	13.2	02.02.2012
Acura	TL	39384	\$28,400	\$19,875	70%	GOOD	3.2	225	Medium HP	Passenger	25	91.37077766	108.1	70.3	192.9	3.517	17.2	03.06.2011
Acura	RL	8588	\$42,000	\$29,725	71%	GOOD	3.5	210	Medium HP	Passenger	22	91.38977933	114.6	71.4	196.6	3.85	18	10.03.2011
Audi	A4	20397	\$23,990	\$22,255	93%	GOOD	1.8	150	Medium HP	Passenger	27	62.7776392	102.6	68.2	178	2.998	16.4	08.10.2011
Audi	A6	18780	\$33,950	\$23,555	69%	GOOD	2.8	200	Medium HP	Passenger	22	84.56510502	108.7	76.1	192	3.561	18.5	09.08.2011
Audi	A8	1380	\$62,000	\$39,000	63%	POOR	4.2	310	High HP	Passenger	21	134.6568582	113	74	198.2	3.902	23.7	27.02.2012
BMW	323i	19747	\$26,990	\$24,500	91%	GOOD	2.5	170	Medium HP	Passenger	26	71.19120671	107.3	68.4	176	3.179	16.6	28.06.2011
BMW	328i	9231	\$33,400	\$28,675	86%	GOOD	2.8	193	Medium HP	Passenger	24	81.87706856	107.3	68.5	176	3.197	16.6	29.01.2012
BMW	528i	17527	\$38,900	\$36,125	93%	GOOD	2.8	193	Medium HP	Passenger	25	83.9987238	111.4	70.9	188	3.472	18.5	04.04.2011
Buick	Century	91561	\$21,975	\$12,475	57%	POOR	3.1	175	Medium HP	Passenger	25	71.18145132	109	72.7	194.6	3.368	17.5	02.11.2011
Buick	Regal	39350	\$25,300	\$13,740	54%	POOR	3.8	240	Medium HP	Passenger	23	95.63670253	109	72.7	196.2	3.543	17.5	03.09.2011
Buick	Park Aven	27851	\$31,965	\$20,190	63%	POOR	3.8	205	Medium HP	Passenger	24	85.82840825	113.8	74.7	206.8	3.778	18.5	23.03.2012
Buick	LeSabre	83257	\$27,885	\$13,360	48%	POOR	3.8	205	Medium HP	Passenger	25	84.25452581	112.2	73.5	200	3.591	17.5	23.07.2011
Cadillac	DeVille	63729	\$39,895	\$22,525	56%	POOR	4.6	275	Medium HP	Passenger	22	113.8545976	115.3	74.5	207.2	3.978	18.5	23.02.2012
Cadillac	Seville	15943	\$44,475	\$27,100	61%	POOR	4.6	275	Medium HP	Passenger	22	115.6213578	112.2	75	201	3.875	18.5	29.04.2011
Cadillac	Eldorado	6536	\$39,665	\$25,725	65%	POOR	4.6	275	Medium HP	Passenger	22	113.7658739	108	75.5	200.6	3.843	19	27.11.2011
Cadillac	Catera	11185	\$31,010	\$18,225	59%	POOR	3	200	Medium HP	Passenger	22	83.48309358	107.4	70.3	194.8	3.77	18	28.09.2011
Cadillac	Escalade	14785	\$46,225	\$31,245	68%	POOR	5.7	255	Medium HP	Car	15	109.5091165	117.5	77	201.2	5.572	30	17.04.2012
Chevrolet	Cavalier	145519	\$13,260	\$9,250	70%	GOOD	2.2	115	Medium HP	Passenger	27	46.36334747	104.1	67.9	180.9	2.676	14.3	17.08.2011
Chevrolet	Malibu	135126	\$16,535	\$11,225	68%	POOR	3.1	170	Medium HP	Passenger	25	67.31446216	107	69.4	190.4	3.051	15	19.03.2012
Chevrolet	Lumina	24629	\$18,890	\$10,310	55%	POOR	3.1	175	Medium HP	Passenger	25	69.9913956	107.5	72.5	200.9	3.33	16.6	24.05.2011
Chevrolet	Monte Cai	42593	\$19,390	\$11,525	59%	POOR	3.4	180	Medium HP	Passenger	27	72.03091719	110.5	72.7	197.9	3.34	17	22.12.2011
Chevrolet	Camaro	26402	\$24,340	\$13,025	54%	POOR	3.8	200	Medium HP	Passeneer	25	81.11854333	101.1	74.1	193.2	3.5	16.8	23.10.2011

Ribbon

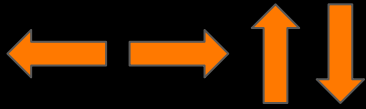


Quick Access Toolbar



Worksheet Navigation

MOVE



MOVE

PageDown,
PageUp

MOVE

Vertical Scroll,
Horizontal Scroll

UTIL: Comenzi Rapide (Shortcuts)

CTRL + Home

Merge la Celula A1

CTRL + End

Merge la ultima celula cu date

CTRL + ↓

Merge la ultima celula ocupata din coloana

CTRL + ↑

Revine la prima celula ocupata din coloana

Selecting Data (Selectarea Datelor)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Manufacturer	Model	Sales_in_thousands	year_resale_value	Vehicle_type	Price_in_thousands	Engine_size	Horsepower	Wheelbase	Width	Length	Curb_weight	Fuel_capacity	Fuel_efficiency	Latest_Launch	Power_perf_factor
4	Acura	Integra	16.919	16.36	Passenger	21.5	1.8	140	101.2	67.3	172.4	2.639	13.2	28	02.02.2012 00:00	58.28014952
5	Acura	TL	39.384	19.875	Passenger	28.4	3.2	225	108.1	70.3	192.9	3.517	17.2	25	03.06.2011 00:00	91.37077766
6	Acura	CL	14.114	18.225	Passenger		3.2	225	106.9	70.6	192	3.47	17.2	26	04.01.2012 00:00	
7	Acura	RL	8.588	29.725	Passenger	42	3.5	210	114.6	71.4	196.6	3.85	18	22	10.03.2011 00:00	91.38977933
8	Audi	A4	20.397	22.255	Passenger	23.99	1.8	150	102.6	68.2	178	2.998	16.4	27	08.10.2011 00:00	62.7776392
9	Audi	A6	18.78	23.555	Passenger	33.95	2.8	200	108.7	76.1	192	3.561	18.5	22	09.08.2011 00:00	84.56510502
0	Audi	A8	1.38	39	Passenger	62	4.2	310	113	74	198.2	3.902	23.7	21	27.02.2012 00:00	134.6568582
1	BMW	323i	19.747		Passenger	26.99	2.5	170	107.3	68.4	176	3.179	16.6	26	28.06.2011 00:00	71.19120671
2	BMW	328i	9.231	28.675	Passenger	33.4	2.8	193	107.3	68.5	176	3.197	16.6	24	29.01.2012 00:00	81.87706856
3	BMW	528i	17.527	36.125	Passenger	38.9	2.8	193	111.4	70.9	188	3.472	18.5	25	04.04.2011 00:00	83.9987238
4	Buick	Century	91.561	12.475	Passenger	21.975	3.1	175	109	72.7	194.6	3.368	17.5	25	02.11.2011 00:00	71.18145132
5	Buick	Regal	39.35	13.74	Passenger	25.3	3.8	240	109	72.7	196.2	3.543	17.5	23	03.09.2011 00:00	95.63670253
6	Buick	Park Avenue	27.851	20.19	Passenger	31.965	3.8	205	113.8	74.7	206.8	3.778	18.5	24	23.03.2012 00:00	85.82840825
7	Buick	LeSabre	83.257	13.36	Passenger	27.885	3.8	205	112.2	73.5	200	3.591	17.5	25	23.07.2011 00:00	84.25452581
8	Cadillac	DeVille	63.729	22.525	Passenger	39.895	4.6	275	115.3	74.5	207.2	3.978	18.5	22	23.02.2012 00:00	113.8545976
9	Cadillac	Seville	15.943	27.1	Passenger	44.475	4.6	275	112.2	75	201		18.5	22	29.04.2011 00:00	115.6213578
0	Cadillac	Eldorado	6.536	25.725	Passenger	39.665	4.6	275	108	75.5	200.6	3.843	19	22	27.11.2011 00:00	113.7658739
1	Cadillac	Catera	11.185	18.225	Passenger	31.01	3	200	107.4	70.3	194.8	3.77	18	22	28.09.2011 00:00	83.48309358
2	Cadillac	Escalade	14.785		Car	46.225	5.7	255	117.5	77	201.2	5.572	30	15	17.04.2012 00:00	109.5091165
3	Chevrolet	Cavalier	145.519	9.25	Passenger	13.26	2.2	115	104.1	67.9	180.9	2.676	14.3	27	17.08.2011 00:00	46.36334747
4	Chevrolet	Malibu	135.126	11.225	Passenger	16.535	3.1	170	107	69.4	190.4	3.051	15	25	19.03.2012 00:00	67.31446216
5	Chevrolet	Lumina	24.629	10.31	Passenger	18.89	3.1	175	107.5	72.5	200.9	3.33	16.6	25	24.05.2011 00:00	69.9913956
6	Chevrolet	Monte Carlo	42.593	11.525	Passenger	19.39	3.4	180	110.5	72.7	197.9	3.34	17	27	22.12.2011 00:00	72.03091719
7	Chevrolet	Camaro	26.402	13.025	Passenger	24.34	3.8	200	101.1	74.1	193.2	3.5	16.8	25	23.10.2011 00:00	81.11854333
8	Chevrolet	Corvette	17.947	36.225	Passenger	45.705	5.7	345	104.5	73.6	179.7	3.21	19.1	22	12.05.2012 00:00	141.14115
9	Chevrolet	Prizm	32.299	9.125	Passenger	13.96	1.8	120	97.1	66.7	174.3	2.398	13.2	33	11.09.2011 00:00	48.2976361
0	Chevrolet	Metro	21.855	5.16	Passenger	9.235	1	55	93.1	62.6	149.4	1.895	10.3	45	13.04.2012 00:00	23.27627233
1	Chevrolet	Impala	107.995		Passenger	18.89	3.4	180	110.5	73	200	3.389	17	27	18.06.2011 00:00	71.83803944
2	Chrysler	Sebring Coupe	7.854	12.36	Passenger	19.84	2.5	163	103.7	69.7	190.9	2.967	15.9	24	16.01.2012 00:00	65.95718396
3	Chrysler	Sebring Conv.	32.775	14.18	Passenger	24.495	2.5	168	106	69.2	193	3.332	16	24	17.11.2011 00:00	69.52135505
4	Chrysler	Concorde	31.148	13.725	Passenger	22.245	2.7	200	113	74.4	209.1	3.452	17	26	06.06.2012 00:00	80.02378204
5	Chrysler	Cirrus	32.306	12.64	Passenger	16.48	2	132	108	71	186	2.911	16	27	06.10.2011 00:00	53.56619987
6	Chrysler	LHS	13.462	17.325	Passenger	28.34	3.5	253	113	74.4	207.7	3.564	17	23	08.05.2012 00:00	101.3292807

3 Types of cross symbol

Cruce albă mare

Simbol de selectare

Cruce neagră
subțire cu săgeți

Simbol de mutare

Cruce neagră mica
în colțul celulei

Fill Handle

Definitii si recapitulare

- **Workbook** = registru de lucru
- **Worksheet** = foaie de lucru
- **Celulă** = unitatea de bază
- **Range** = grup de celule
- **Referință 3D** = link către altă foaie

Q&A