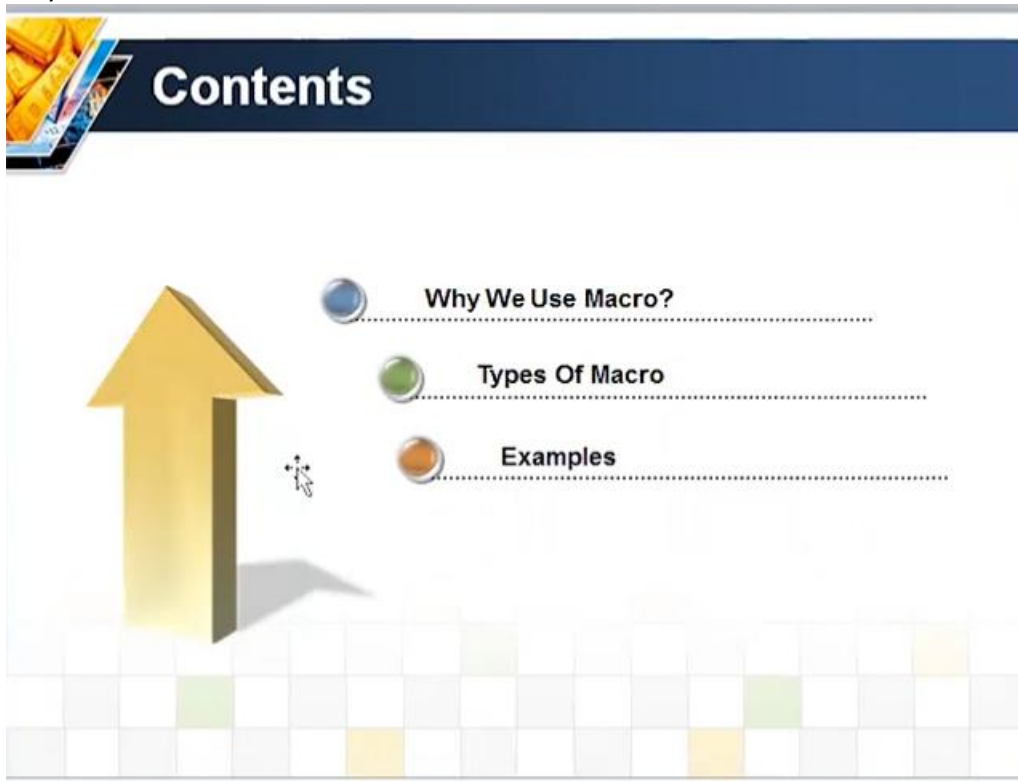


Micro PPT

week -4

day- 11

A presentation slide titled 'Macro' with a dark blue header. On the left, there is a small graphic of a yellow 3D arrow pointing upwards, standing on a grid of white and light gray squares. The main content area is white and contains a bulleted list:

- A **macro** is like an algorithm or a set of actions that we can use or run multiple times.
- A **macro** helps in automating or repeating tasks by recording or storing our input sequences like mouse strokes or keyboard presses.



Macro

- If you have tasks in Microsoft Excel that you do repeatedly, you can record a macro to automate those tasks.
- A macro is an action or a set of actions that you can run as many times as you want. When you create a macro, you are recording your mouse clicks and keystrokes



Types Of Macro

- Recording Macro
- Coding Macro(Using VBA)
- A macro can be created by either recording it using the Macro recorder or writing VBA code in the VB Editor.

Macro

- Security issues about macro usage;
- File extension is .xlsx
- Macro enabled files are .xlsm

Overview of Recording a Macro

- The macro recorder is turned on.
- A name for the macro is entered, it is assigned to a short cut key (optional), it is saved and a description is given to it (optional)
- The recorder is started.

Overview of Recording a Macro

- Steps for the macro are entered.
- The recorder is stopped.
- Security issues about macro usage;
- File extension is .xlsx
- Macro enabled files are .xlsm

Turning on the Macro Recorder

- **Option1:** In the status bar (beside “Ready”).
- – Right click and check Macro Recording
- **Option2:** Under VIEW Tab, there is a MACROS button, then Record Macro...

Turning on the Macro Recorder

1. Select the Macro option
2. The Record Macro dialogue box is displayed and here you can:

- **name** your macro
- **assign** your macro short

Cut keys

- **save** your macro
- **describe** your macro





Naming a Macro

Thumb Rules for Naming a Macro

1.
The name
must begin
with a letter

2.
It must not
contain spaces

3.
The underscore
must be used to
separate words.

Saving a Macro

When a macro is created, it can be saved in one of the following places:

- **This Workbook** (the macro will only be available in the spreadsheet in which it was created).
- **Personal Macro Book** (the macro will be available to all spreadsheets)
- **New Workbook** (the macro will only be available in that Spreadsheet which is newer than previous)



Thanks

Macros

- Macros are little programs that you can create to automate particular tasks that you may want to execute more easily than having to specify all the steps yourself every time you want to perform that task.
- Macros can be created for use in any Microsoft Office application.
- Here we consider macros for Excel.

Click to add title

- Macros are actually written in a programming language called VBA (Visual Basic for Applications).
- But simple macros can be created by just performing the operations once and letting the *macro recorder* in Excel translate your actions into VBA.
- To create a macro this way, use the Tools => Macro => Record New Macro... dialog box.

A macro example

- We create a macro that performs a specific job on the following Excel list:

Microsoft Excel - Employee List.xls

File Edit View Insert Format Tools Data Window Help

100%

Arial 12 B I U A A

	A	B	C	D	E	F	G	H	I
	Name	Location	Title	Salary	Hire Date	Service			
1	Adams	Atlanta	Trainee	\$19,500	November 24, 1993	6.9			
2	Adamson	Chicago	Manager	\$52,000	March 16, 1992	8.6			
3	Brown	Atlanta	Trainee	\$18,500	November 24, 1993	6.9			
4	Charles	Boston	Account Rep	\$40,000	March 16, 1992	8.6			
5	Coulter	Atlanta	Manager	\$100,000	March 16, 1992	8.6			
6	Frank	Miami	Manager	\$75,000	October 31, 1992	7.9			
7	James	Chicago	Account Rep	\$42,500	October 31, 1989	10.9			
8	Johnson	Chicago	Account Rep	\$47,500	October 31, 1990	9.9			
9	Manin	Boston	Account Rep	\$49,500	March 16, 1992	8.6			
10	Marder	Chicago	Account Rep	\$38,500	October 31, 1991	8.9			
11	Milgrom	Boston	Manager	\$57,500	March 16, 1992	8.6			
12	Rubin	Boston	Account Rep	\$45,000	March 16, 1992	8.6			
13	Smith	Atlanta	Account Rep	\$65,000	November 24, 1993	6.9			
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

Chart1 / Sheet5 / Sheet1

Click to add title

- What we want it to do is to identify all the records for managers and display them in red. (Imagine that there are thousands of records, so we don't want to do this manually.)
- We will give this macro the name HighlightManagers.
- Furthermore, we will make it so that to run it we can simply use the keyboard shortcut Ctrl+h.

Click to add title

- The approach we take is to start out creating a macro that highlights *any* record in red.
- Later we will modify it by adding additional VBA code.
- We start out by making any cell in the first column of our data, say A2, the active cell.
- Then we start the Macro Recorder:

Click to add title

Record Macro ? X

Macro name:
HighlightManagers

Shortcut key: Ctrl+ h Store macro in: This Workbook ▼

Description:
Macro recorded 10/5/2000 by Ronald J. Williams

OK Cancel

Click to add title

- In the Stop Recording toolbar we first make sure the Relative Reference button is pushed in.
- Then we click and drag to select cells A2:F2.
- Then we click the arrow next to the Font Color button on the formatting toolbar and select Red.
- Finally, we click the Stop Recording button.

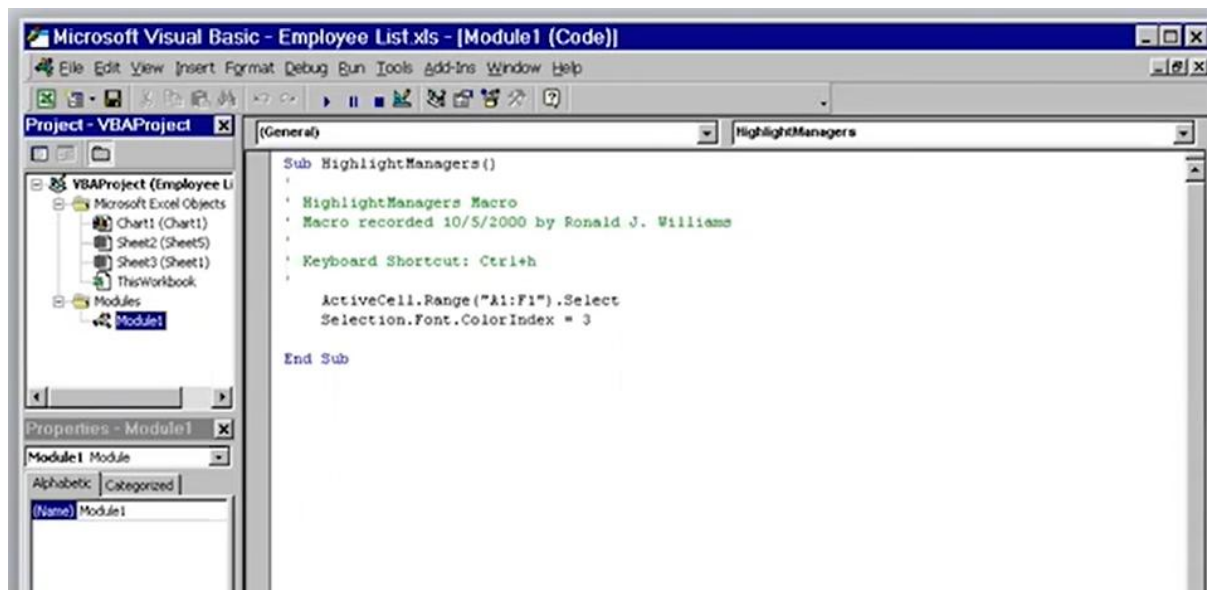
The screenshot shows the Microsoft Excel interface with a spreadsheet titled "Employee List.xls". The spreadsheet contains a table with the following data:

	A	B	C	D	E	F	G	H	I
1	Name	Location	Title	Salary	Hire Date	Service			
2	Adams	Atlanta	Trainee	\$19,500	November 24, 1993	6.9			
3	Adamson	Chicago	Manager	\$52,000	March 16, 1992	8.6			
4	Brown	Atlanta	Trainee	\$18,500	November 24, 1993	6.9			
5	Charles	Boston	Account Rep	\$40,000	March 16, 1992	8.6			
6	Coulter	Atlanta	Manager	\$100,000	March 16, 1992	8.6			
7	Frank	Miami	Manager	\$75,000	October 31, 1992	7.9			
8	James	Chicago	Account Rep	\$42,500	October 31, 1989	10.9			
9	Johnson	Chicago	Account Rep	\$47,500	October 31, 1990	9.9			
10	Manin	Boston	Account Rep	\$49,500	March 16, 1992	8.6			
11	Marder	Chicago	Account Rep	\$38,500	October 31, 1991	8.9			
12	Milgrom	Boston	Manager	\$57,500	March 16, 1992	8.6			
13	Rubin	Boston	Account Rep	\$45,000	March 16, 1992	8.6			
14	Smith	Atlanta	Account Rep	\$65,000	November 24, 1993	6.9			

Below the spreadsheet, a diagram illustrates the "Stop Recording toolbar". It shows two buttons: the "Relative Reference" button (a small square with a plus sign) and the "Stop Recording" button (a small square with a red 'X'). Arrows indicate the sequence of actions: first, the "Relative Reference" button is pushed in, and then the "Stop Recording" button is clicked.

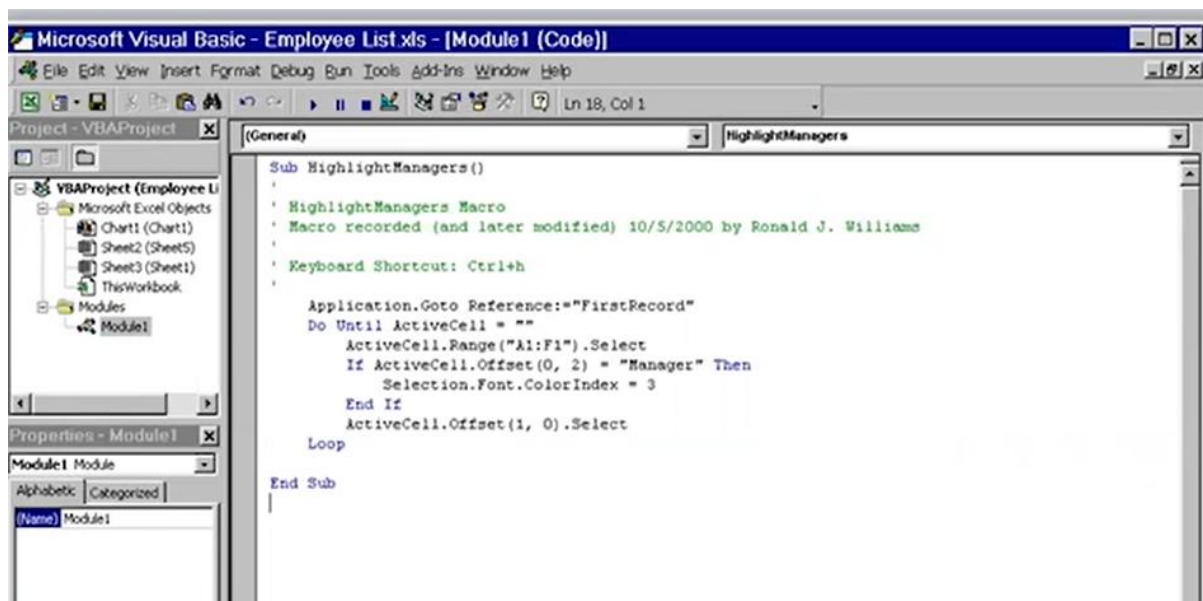
Click to add title

- All this macro does is change the font color to red for 6 cells – whatever cell happens to be the active cell when it is run and the 5 cells to its right in the same row.
- We use the Visual Basic Editor (which we can bring up by Alt+F11) to display the VBA code for this macro:



Click to add title

- Now we add VBA code so that the macro
 - starts with the first record and proceeds through all the records,
 - checking to see that record is that of a manager and only changing the font color if it is.
- For convenience, we have named cell A2 FirstRecord.



- Once we have this macro created correctly (possibly taking advantage of VBA debugging features to get it right) we can then apply it to our list:

it's all about macros function
watches again this video

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