



Microsoft Excel 97/98 Session 4

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Introduction

Excel Session 4 is a course created for CAL PACT participants to learn more about the features of Excel. The course covers simple introductory material and applies to both the Windows and Macintosh computer platforms. This document serves as a supplement and future reference to the class.

What you will need to know to take this class

- how to use the mouse
- how to use the Macintosh or Windows computing environment
- the material covered within the CAL PACT Excel 1 and 2 classes.

Specifically: data entry
editing
formatting
formula entry
printing

What you will learn in this class

- How to record a macro.
- Making a macro accessible.
- Random tips and tricks in Excel.

Conventions used in this document

Menus and menu commands are separated by a vertical bar (|). In the document they will appear as **Menu | Command**. An example of this is "Select **File | New...**"

Automating Repeated Tasks

Macros are a series of commands that Excel automatically executes. Macros are best used when there is a series of tasks that are repeatedly performed using the same sequence of actions and commands. Macros in Excel are constructed using the Visual Basic programming language; however, it is not necessary to understand computer programming to begin. Excel includes a *Macro Recorder* which creates the Visual Basic code. Using the Macro Recorder is good for automating simple tasks, but often enough, macros need to be edited and customized. This documentation will cover the process of recording macros and begin the basics of tailoring the macro.

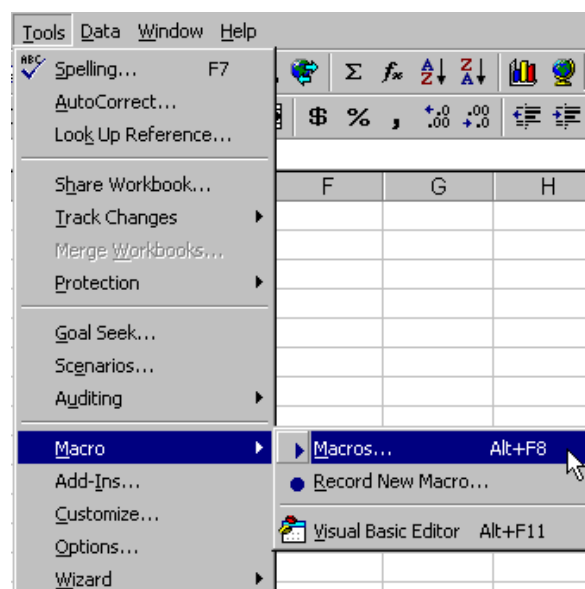
The Macro Recorder

The Macro Recorder is used to store any sequence of commands which are performed repeatedly. Once a macro has been recorded, run the macro to automatically repeat the commands that were recorded. The Macro Recorder works similar to a video camera. Just as a video camera records the performed actions, the Macro Recorder records that commands performed. Run the macro and the Macro Recorder plays back the commands just as a video tape plays back the actions.

Steps to Recording a Macro

To record a macro:

1. Choose **Tools | Macro | Record New Macro**.



2. Type in a name for the macro in the Macro Name field. The name must begin with a letter and can only contain letters, numbers, and underscores. The name cannot contain spaces or punctuation marks.
3. Type in a description for the macro in the Description field if desired.
4. Create shortcut keys for the macro.
5. Use the Store in fields to choose the location where the macro will be saved. Choosing This Workbook will save the macro in the current workbook. Choosing New Workbook will cause Excel to open a new workbook and save the macro inside. Choosing Personal Macro Workbook will cause Excel to save the macro in a special workbook that is always open and hidden. This option will be covered more in depth later.
6. Choose the OK button to start recording the macro.
 - The Windows Dialog box will disappear and the Stop Macro button will appear on the screen. In the Status Bar, the word Recording will also appear to indicate that the Macro Recorder is running.
 - Choose whether or not the macros will be relative or absolute. Relative referencing will make the macro run wherever the active cell is. Absolute referencing will run the macro across the same cells every time.
7. Perform the actions to record using keystrokes or the mouse to select menus or toolbar buttons. The Macro Recorder will record every action, mistakes included.
8. Click the Stop Macro button on the screen to stop the Macro Recorder.

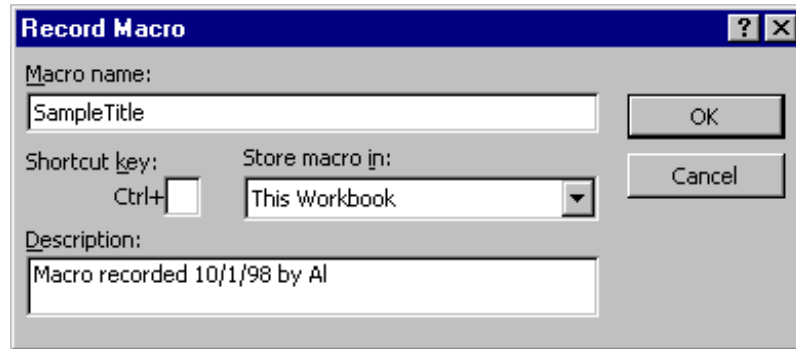


Example:

Following is an example of a general macro that will set up a worksheet.

Begin Recording the Sample Macro:

1. Select **Tools | Macro | Record New Macro**.
2. In the Macro Name field type "SampleTitle." Remember that the name must be one continuous word because Excel does not allow spaces.
3. In the Description field type what this macro will do.




4. Choose the OK button.
5. The macro is now recording. From here on, all the actions performed are recorded until the macro is stopped.

Turning off the gridlines on the sheet:

1. Choose **Tools | Options** and click on the View tab.
2. Under Window Options click on the Gridlines box to clear the gridlines.
3. Choose OK.

Entering the title and applying custom formats:

1. Select cell A1, type "Sample Report", and then press the Enter key.
2. Select cell A1 again and change the font to "Times New Roman".
3. Change the font size to 16.
4. Boldface and underline the title.
5. Highlight cells A1 through I1 and click on .
6. Click the Stop Macro button.

Running a Macro

After a macro has been recorded, run the macro at any time. Excel will repeat the commands inside the macro to perform the designated actions.

To run a macro:

1. Choose **Tools | Macro | Macros**.
2. In the Macro/Reference field, type or select the macro name to run.

3. Choose the Run button.

Running the SampleTitle macro:

1. Switch to a new worksheet in the workbook.
2. Choose **Tools | Macro | Macros**.
3. In the Macro/Reference box, type or select "SampleTitle."
4. Choose the Run button.

Making the Macro Accessible

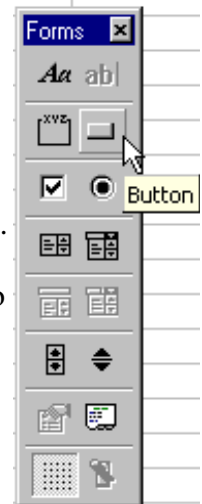
Now that a macro has been recorded, it can be made more accessible by attaching it to graphical buttons.

Assigning a Macro to a Button on a Sheet

A macro can be assigned to a graphical button on the worksheet. The button will only appear on the worksheet that it was created on.

Creating a button and assigning a macro to it:

1. Select **View | Toolbars | Forms**. The Forms Toolbar will appear on the worksheet.
2. Select the button icon and the cursor will become crosshairs.
3. Drag out the size of the button and let go. The Assign Macro dialog box will appear.
4. Select from pre-existing macros or type the macro name in the Macro Name field and click OK.



Removing the button or re-assigning the macro assignment:

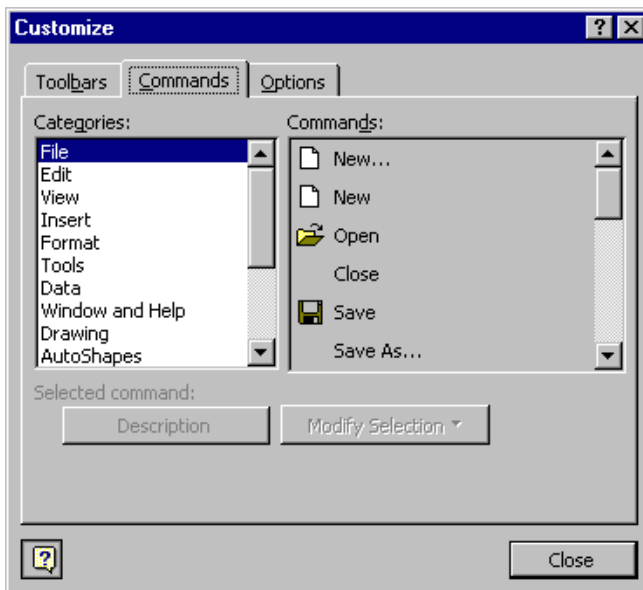
1. Right-click on the button to select the button and view the quick menu.
2. To remove the button, select Cut. You can also hit the Delete key if the button is selected (patched border around it).
3. To re-assign the button, select Assign Macro and select a new macro in the Macro Name field. Click OK after a new macro has been selected.

Assigning a Macro to a Button on the Toolbar

The last option for assigning a macro is to assign the macro to a button on toolbar. This allows the macro to be accessible to every worksheet and workbook as long as the toolbar is displayed. If the workbook that stores the macro is not open at the time that the macro is selected, Excel will automatically open the workbook.

Creating a toolbar button and assigning a macro to it:

1. Choose **View | Toolbars | Customize**.
2. The Customize dialog box will appear. Select the Commands tab.



3. Choose a button and click and drag the button to the toolbar. Release the mouse button when the toolbar button is in the desired location.
4. Right click the icon on the toolbar. Click Assign Macro, it will appear at the end of the menu
5. To assign the button to a pre-existing macro, type or select the macro name in the Macro Name field and click OK.
6. Click on Close and the Customize dialog box will close.

Removing a toolbar button or re-assigning the macro assignment:

1. Right click on the toolbar button and choose Customize.
2. Once the Customize dialog box appears right click on the toolbar button

again and choose delete to remove it.

3. To re-assign the button right click the toolbar button while the Customize dialog box is up and choose Assign Macros. Choose the appropriate macro and click OK.

The Personal Macro Workbook

The workbook that stores the macro must always be open for the macro to be used. This makes it difficult to manage many macros used in a variety of workbooks. A solution exists for this by saving all of the macros in the Personal Macro Workbook. This workbook is hidden from view and is always opened whenever Excel is in use. Recorded macros can be saved into this Personal Macro Workbook by selecting the option in the Record New Macro dialog box that specifies the location to save the macro. When the first macro is saved, Excel creates a file called PERSONAL.XLS in the startup folder of the Excel directory. In order to view the Personal Macro Workbook to edit or add new macros using Visual Basic, choose **Window | Unhide** and select PERSONAL.XLS or the selection for Personal Macro Workbook.