

FINN CAREER CENTER



USING MACROS, CONTROLS AND VBA WITH EXCEL

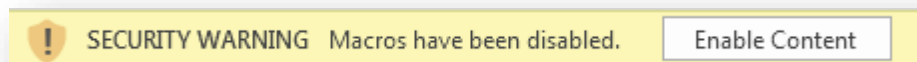
PROJECT DESCRIPTION

Patrick Fitzgerald is the director of Career Development at Finn Technical Institute, a local community college. The Institute offers workshops on resume writing, interview techniques, and networking skills, along with job placement services for students at their on-campus career center, Finn Career Center. Patrick has asked for your assistance streamlining the process of entering workshop data into the Finn Career Center online listing. He would also like your help streamlining the form used to update the Center's mailing list.

GETTING STARTED

- Download the following file from the SAM website:
 - **SC_Excel2013_C10_P1a_FirstLastName_1.xlsm**
- Open the file you just downloaded and save it with the name:
 - **SC_Excel2013_C10_P1a_FirstLastName_2.xlsm**
 - *Hint:* If you do not see the **.xlsm** file extension in the Save file dialog box, do not type it. Excel will add the file extension for you automatically.
- With the file **SC_Excel2013_C10_P1a_FirstLastName_2.xlsm** still open, ensure that your first and last name is displayed in cell B6 of the Documentation sheet. If cell B6 does not display your name, delete the file and download a new copy from the SAM website.
- If you see a Message Bar with a security warning at top of the Excel window, click the *Enable Content* button in the Message Bar to enable the macros contained in the file (refer to **Figure 1**).

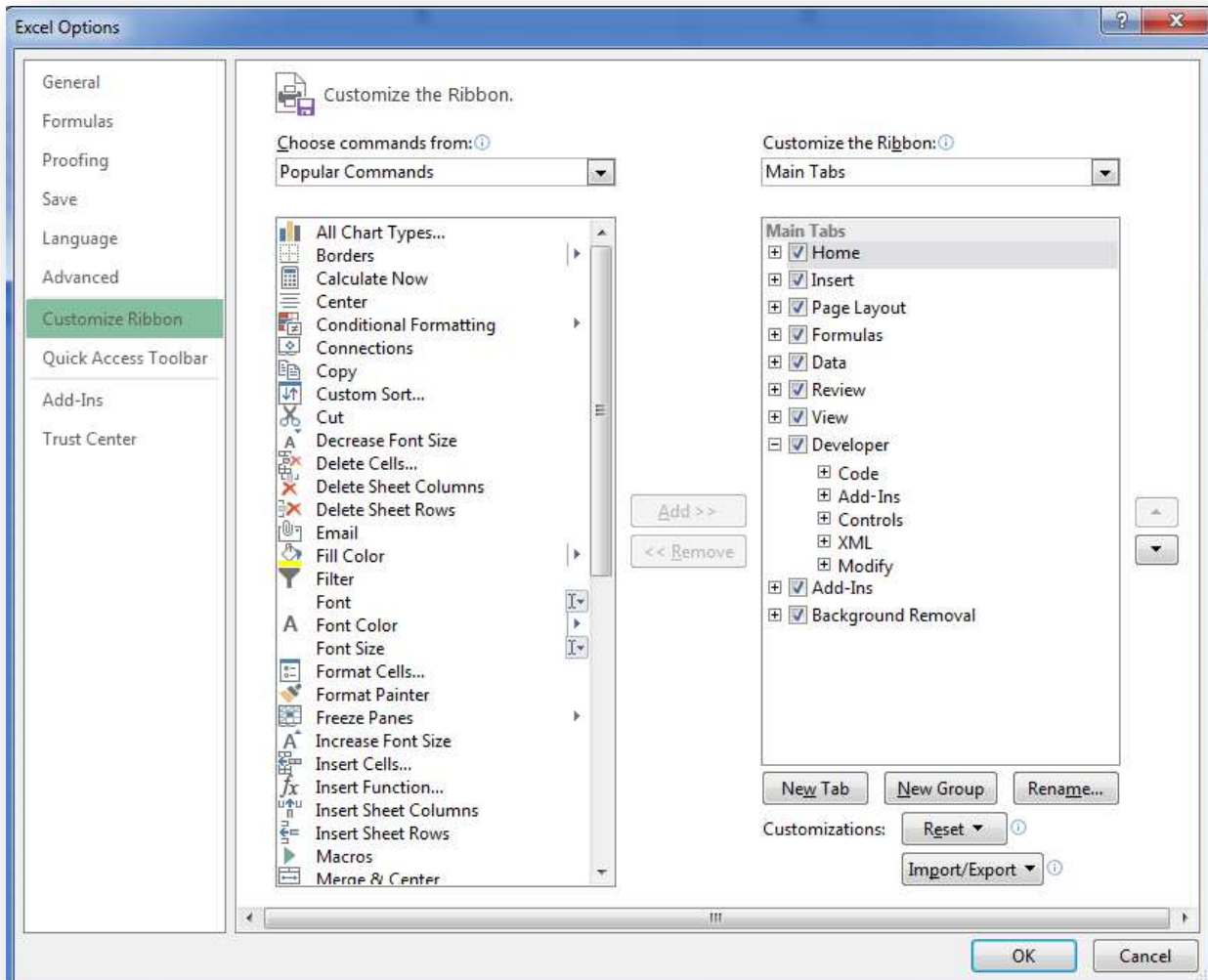
Figure 1: Security Warning Message Bar



Microsoft product screenshots used with permission from Microsoft Corporation.
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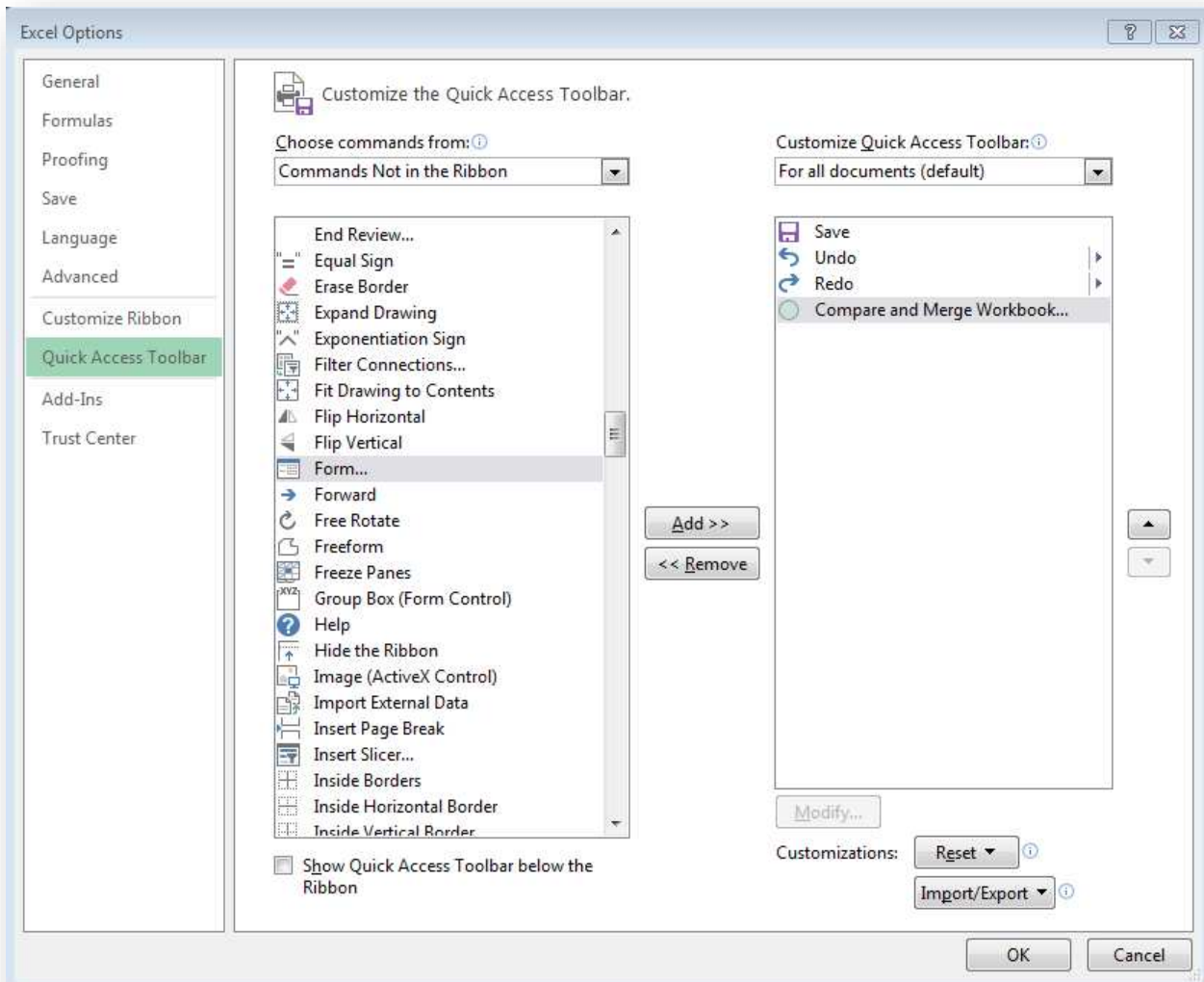
- To complete this project you will need to display the Developer tab. To add this tab to the Excel ribbon, click on the File tab to open Backstage view and then click Options. In the Excel Options dialog box, click on the Customize Ribbon option and click the Developer check box (see **Figure 2**). Click the OK button to close the Excel Options dialog box and confirm the Developer tab appears in the Excel Ribbon.

Figure 2: Customize Ribbon section of Excel Options Dialog Box



- To complete this project you will need to display the Form button to the Quick Access toolbar. Follow the steps below to add this button to the Quick Access toolbar:
 - Right click on the Quick Access toolbar and select the Customize Quick Access Toolbar.
 - Select the Commands not in the Ribbon option from the Choose commands from list.
 - Find the Form option on the command list (see **Figure 3**), select it, and then click the Add button to add the Form command to the Quick Access Toolbar.
 - Click the OK button to close the Excel Options dialog box and confirm the Form option appears in the Quick Access Toolbar.

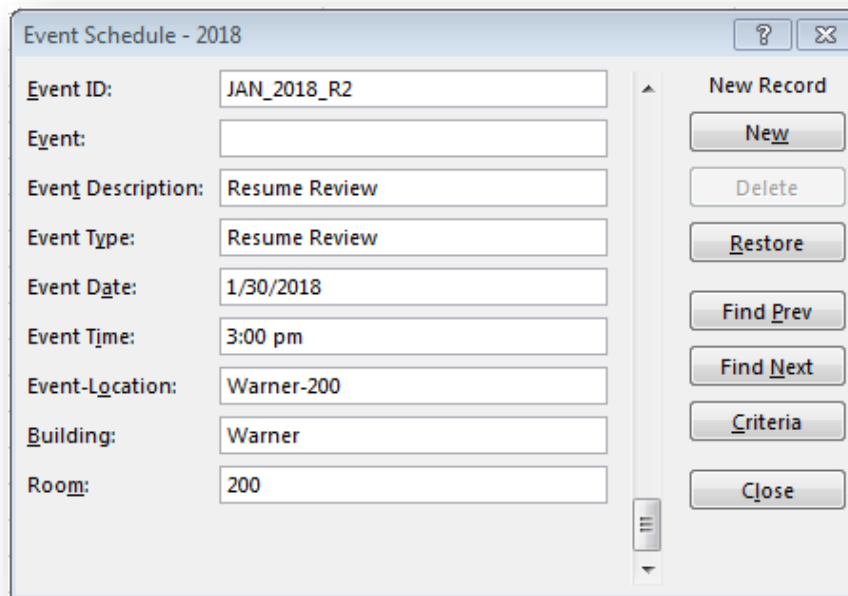
Figure 3: Customize Quick Access Toolbar section of Excel Options Dialog Box



PROJECT STEPS

1. Go to the *Event Schedule – 2018* worksheet and use the password **J@Nuary18** to unprotect the worksheet.
2. Select cell A4 and use a **Data Form** to enter a new record shown (using the information shown in **Figure 4**) into the *Event Schedule - 2018* worksheet. The Event field value is intentionally left blank.

Figure 4: New Record for Event Schedule – 2018 Worksheet



Field	Value
Event ID:	JAN_2018_R2
Event:	
Event Description:	Resume Review
Event Type:	Resume Review
Event Date:	1/30/2018
Event Time:	3:00 pm
Event-Location:	Warner-200
Building:	Warner
Room:	200

New Record

- New
- Delete
- Restore
- Find Prev
- Find Next
- Criteria
- Close

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3. In cell **B4**, enter a formula using the **PROPER** function that converts the text in cell **C4** to proper case. Copy the formula into the range **B5:B11**. Adjust the width of **Column B** to **best fit** the content it contains and then **hide Column C**.
4. Select cell **J7**. Make sure the **Use Relative References** option (in the Code section of the Developer tab) is active and then begin recording a macro as described below:
 - a. Set the name of the Macro to **Event_Cleanup**.
 - b. Set the shortcut key for the macro to **Ctrl+ Shift+ L** (by pressing the Shift and L keys at the same time).
 - c. Store the macro in the current workbook.
 - d. Set the description of the macro to **This macro splits the Event-Location entry into a Building and a Room entry**. (including the period).

- e. With the macro recording, enter the formula = **SEARCH("-",G7)** into cell **J7**.
- f. Move to cell **I7** and enter the formula = **RIGHT(G7,3)** into the cell.
- g. Copy then paste the **Value** of cell **I7** into cell **I7** so that the cell contains just a number, rather than a formula. (*Hint: Ignore the error about the number being stored as text.*)
- h. Move to cell **H7** and enter the formula = **LEFT(G7, J7-1)** into the cell.
- i. Copy and then paste the **Value** of cell **H7** into cell **H7** so that the cell contains a value, rather than a formula.
- j. Stop recording the macro.
- k. Assign the macro to the macro button labeled Entry Cleanup.
- l. Confirm the macro works by selecting the cell **J8** and running the **Entry_Cleanup macro** (either using the macro button or the shortcut command).
- m. Select cell **J10** and run **the Entry_Cleanup** macro again to clean up another entry in the *Event Schedule - 2018* worksheet.

Use **Figure 5** as a guide while formatting the Center Signup Form in steps 5-10.

Figure 5: Center Signup Form Worksheet

The screenshot shows an Excel spreadsheet with a form titled "FINN CAREER CENTER" and "Workshop Mailing List". The form is located in the range of cells from A6 to H26. At the top of the spreadsheet, there are three buttons: "Click to Enter Contact Information.", "Click to Submit Information.", and "Click to Clear Information.". The form fields are as follows:

- First Name** (row 9, column A)
- Street** (row 10, column A)
- City** (row 11, column A)
- Daytime Phone** (row 13, column A)
- Email** (row 14, column A)
- Last Name** (row 9, column D)
- State** (row 10, column D)
- Zip Code** (row 11, column D)
- Evening Phone** (row 13, column D)
- Contact By:** (row 9, column F)
 - Email
 - Daytime Phone
 - Evening Phone
 - U.S. Mail
- Request:** (row 18, column A)
 - Add to List
 - Update Information
 - Remove from List
- Select the topics you be interested in learning more about at the Finn Career Center:** (row 21, column A)
 - Writing Resumes
 - Writing Cover Letters
 - Interview Techniques
 - Networking Skills
 - Job Search Tools
 - Other

5. Go to the Center Signup Form worksheet. Add an **Option Button (Form Control)** to the worksheet, using **Figure 5** as a guide. (*Hint:* The button should be located in the range **D18:E19**.)
 - a. Edit the text in the control to read **Remove from List**.
 - b. If necessary, resize and reposition the control so that the control text is completely visible and completely within the Group Box 9 control.
6. Select the option button labeled Option Button 8 and then edit the text to read **U.S. Mail** (as shown in Figure 5).
7. Select the four option buttons in the range **F9:G15**. Align the option buttons using the **Left** option and then **vertically distribute** the buttons.
8. Add a **Group Box (Form Control)** that completely encloses the four option buttons in the range **F9:G15**, using **Figure 5** as a guide. (*Hint:* Your Group Box control may have a different label than the one shown in Figure 5.) Make sure that the Group Box control completely encloses the four option buttons' text fields, which may be wider than the text displayed for each button.
9. Format the option button control labeled **Email**, so that it has a cell link to **\$K\$45**.
10. Add a **Check Box (Form Control)** into the worksheet, using **Figure 5** as a guide (*Hint:* The Check box control should be located in the range **D24:E24**). Update the Check Box Control as identified below:
 - a. Edit the text in the control to read **Other**.
 - b. If necessary, resize and reposition the check box control so that the control text is completely visible and the check box control is located within the range **D24:E24**.
 - c. Format the Check Box control so that it has a cell link of **\$R\$44**.
11. In cell **L44**, use the **INDEX** function to return the value from the named range **Request_Type** (which represents the range V44:V46) based on value in cell **L45**.

Use **Figure 6** as a guide when adding a record in step 11.

Figure 6: Center Signup Form Worksheet with New Record

The screenshot shows a spreadsheet with columns A through H and rows 1 through 27. The form content is as follows:

FINN CAREER CENTER	
Workshop Mailing List	
First Name	Finn
Last Name	Callahan
Street	234 W. Main St.
State	Oklahoma
City	Norman
Zip Code	73000
Daytime Phone	405-555-2313
Evening Phone	405-555-0003
Email	Finn_Callahan@example.fcc.edu
Contact By:	<input type="radio"/> Email
	<input checked="" type="radio"/> Daytime Phone
	<input type="radio"/> Evening Phone
	<input type="radio"/> U.S. Mail
Request:	Group Box 9 <input checked="" type="radio"/> Add to List <input type="radio"/> Update Information <input type="radio"/> Remove from List
Select the topics you be interested in learning more about at the Finn Career Center:	
<input checked="" type="checkbox"/> Writing Resumes	<input type="checkbox"/> Writing Cover Letters <input type="checkbox"/> Interview Techniques
<input checked="" type="checkbox"/> Networking Skills	<input checked="" type="checkbox"/> Job Search Tools <input type="checkbox"/> Other

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12. Add a record to the Center Mailing List by completing the following steps:
 - a. Use the button labeled **Click to Enter Contact Information** to enter the information shown in **Table 1**.

Table 1: Center Signup Form Information

Field	Value
First Name	Finn
Last Name	Callahan
Street	234 W. Main St.
City	Norman
State	Oklahoma
ZIP code	73000
Daytime Phone	405-555-2313
Evening Phone	405-555-0003
Email	Finn_Callahan@example.fcc.edu

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- b. Select the **Daytime Phone** for the **Contact By** option. (*Hint: You will need to manually select this option – you will not be prompted by message boxes.*)
 - c. If necessary, select **Add to List** for the Request option.
 - d. Select the **Writing Resumes, Networking Skills, and Job Search Tools** check boxes.
 - e. Confirm that your worksheet matches **Figure 6** and then click the button labeled **Click to Submit Information**.
13. Switch to the Visual Basic Editor view. (*Hint: Click the View Code button in the Controls section of the Developer tab.*) Open the immediate window and run the following code:

`Sheets(“Center Signup Form”).groupboxes.visible= false`

Then, switch back to the Center Signup Form worksheet and confirm that the Group Box borders are no longer visible. (*Hint: If the code above produces an error, you can also try using the code **activesheet.groupboxes.visible= false** to produce the same outcome. For this code to work, the Center Signup Form worksheet will need to be the active worksheet.*)

14. With the Center Signup Form worksheet active, turn on Design Mode. Select the button labeled **Click to Clear Information** (on the Center Signup Form worksheet) and view the code associated with this button. Enter VBA code shown in **Figure 7** as the procedure that will occur when CommandButton3 is clicked. (*Hint: Remember there are no spaces before or after the parentheses in the VBA code, even if it appears that way in **Figure 7**.*)

Figure 7: CommandButton3_Click() Procedure

```
Private Sub CommandButton3_Click()
    'Enter VBA code to Clear Data below
    Range("B44:J44").ClearContents
    Range("K45:L45").ClearContents
    Range("M44:R44").ClearContents
    Range("B6").Select
End Sub
```

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Confirm your VBA code is correct by switching back to the Center Signup Form, turning off Design Mode, and clicking the button labeled Click to Clear Information. The range **B9:G24** should be blank and none of the controls should be checked.

Your workbook should look like the Final Figures on the following pages. Save your changes, close the workbook, and exit Excel. Follow the directions on the SAM website to submit your completed project.

Final Figure 1: Event Schedule – 2018 Worksheet

	A	B	D	E	F	G	H	I	J
1								Entry Cleanup	
2									
3	Event ID	Event	Event Type	Event Date	Event Time	Event-Location	Building	Room	
4	JAN_2018_R1	Resume Writing: Maximizing Your First Impression	Resume Writing	Wednesday, January 10, 2018	5:00 PM		Warner	280	
5	JAN_2018_N1	Networking Skills: Discovering Your Hidden Network	Networking Skills	Sunday, January 14, 2018	3:00 PM		Warner	380	
6	JAN_2018_C1	Writing Cover Letters: Rising Above The Pack	Writing Cover Letters	Wednesday, January 17, 2018	5:00 PM		Warner	280	
7	JAN_2018_I1	Interviewing Techniques: Tips And Techniques	Interview Technique	Wednesday, January 17, 2018	7:00 PM	Lyons-110	Lyons	110	6
8	JAN_2018_N2	Networking Skills: Alumni Event	Networking Skills	Friday, January 19, 2018	5:00 PM	Smithfield-100	Smithfield	100	11
9	JAN_2018_C1	Writing Cover Letters: One-On-One Reviews And Critiques	Writing Cover Letters	Sunday, January 21, 2018	5:00 PM	Warner-280	Warner	280	
10	JAN_2018_O1	The Job Search: Preparing For A Marathon, Not A Sprint	Other	Sunday, January 28, 2018	3:00 PM	Warner-280	Warner	280	7
11	JAN_2018_R2	Resume Review	Resume Review	Tuesday, January 30, 2018	3:00 PM	Warner-200	Warner	200	
12									
13									

Final Figure 2: Center Signup Form Worksheet

Click to Enter Contact Information. Click to Submit Information. Click to Clear Information.

FINN CAREER CENTER

Workshop Mailing List

First Name	Last Name	Contact By:
Street	State	<input type="radio"/> Email
City	Zip Code	<input type="radio"/> Daytime Phone
Daytime Phone	Evening Phone	<input type="radio"/> Evening Phone
Email		<input type="radio"/> U.S. Mail

Request: Add to List Update Information Remove from List

Select the topics you be interested in learning more about at the Finn Career Center:

<input type="checkbox"/> Writing Resumes	<input type="checkbox"/> Writing Cover Letters	<input type="checkbox"/> Interview Techniques
<input type="checkbox"/> Networking Skills	<input type="checkbox"/> Job Search Tools	<input type="checkbox"/> Other