## Assignment 4

Download the zipped folder "**Assignment 4.zip**", save to your computer, and then extract the files (right click and "Extract All"). This folder contains starter and grader files for Assignment 4.

Assignment 4.zip

IMPORTANT: All subroutines (macros) and functions must be named exactly as indicated in the problem statement(s). Otherwise, the grading file will not recognize your procedures. For each assignment, I have placed one or more starter files that contain the **Sub/End Sub** or **Function/End Function** with the correct procedure names.

Assignment 4 has a starter file available.

## **Problem Statement**

In this assignment, you are going to create a user form that allows the user to manage (add, edit, and delete) the names and phone numbers of contacts. Without too much more work, this could be adapted to something much bigger. This is the most difficult assignment of the course, and you should be proud upon completing it!

Please see the "Assignment 4" screencast for a detailed demonstration of what you are trying to create in this assignment.

In the starter file, we have the seven dwarves and their phone numbers:

	А	В	
1	Doc	111-222-3333	
2	Grumpy	675-876-4543	
3	Нарру	111-111-1111	
4	Sleepy	783-562-8976	
5	Bashful	101-010-1010	
6	Sneezy	333-444-5555	
7	Dopey	098-765-4321	
8			

Obviously, with so few records it would be easy just to edit the cells/spreadsheet directly. However, if you had hundreds or thousands of records (rows) and perhaps a dozen or two columns of data, it would be more difficult to modify/update the data. Therefore, it's nice to manage/organize the data in a central user form. The drop-down list here could easily be modified to be a search tool by utilizing what you have learned in the course.

**Module1** of the file "Assignment 4 – STARTER.xlsm" has 5 separate subroutines:

- RunForm the on-sheet button is linked to this sub, which simply opens up the NameForm user form.
- PopulateComboBox Prior to opening NameForm, this sub should populate ComboBox1 on NameForm with the names in column A of the spreadsheet.
- AddName This sub should enable the user to add another record (row). The name of the new contact is entered into the **NewName** text box and when the **AddButton** is clicked, an input box should ask the user for the phone number of the new contact. The new name and phone number should be placed in the next empty row of the spreadsheet with the other data.
- **DeleteItem** After selecting a name from the combo box, the user can delete that contact by clicking on the **DeleteButton**, which will run the **DeleteItem** sub. Make sure to remove the deleted item from **ComboBox1**; otherwise, the deleted item will remain on the drop-down list until the user form is closed. <u>See the second part of</u> the screencast "Introduction to combo boxes" for hints on how to delete items.
- **UpdateNumber** The user can select a name from **ComboBox1** and modify/update the phone number of that contact by clicking on the **PhoneButton**. This should run the **UpdateNumber** sub, which will ask the user for the new number and replace that contact's old number on the spreadsheet with the new number.

It is very important that you not change the names of the objects (text boxes, combo box, and buttons) on the main user form (NameForm) if you want to use the starter file that I've provided. The name of the user form should also remain unchanged.

When you feel that your user form works properly (verify that it does everything in the screencast "Assignment 4") then you can open the "Assignment 4 – GRADER.xlsm" file for grading; if correct, you'll receive the completion code, which you can input into Coursera.