Chapter 7

Form Control

Okay, let's talk about form controls, they are very different and they are like an object that
sits over the top of your sheet.

The first one I am going to talk about are combo box and drop down boxes. You probably
already know how to do a data validation drop down box, which is basically changing the
value of the cell itself and restricting the entry into the cells so that you can create it, you
can only chose certain inputs into that cell. A combo box drop down is something
completely different and that's an object that sits over the top of the worksheet and it
doesn't actually contain any data itself.

VLOOK UP

Let's look at the differences between those two different types of drop down boxes. Have a
look at the example here; if you have created a sheet that looks like this and you have put in
a vlookup formula in there and then you can change it to "pears" for example and the
formula would automatically update, of course we know that if you type pears and space
(key) that's not going to work. So what we need to do is to restrict the entries, I imagine you
already know how to use a data validation drop down in this version of excel, it's available
on the data tab or if you are using the previous version it would just be under data and then
validation.

If you just go in there and then you can say change it to list and say allow a list and you
would say it has to be one of those and then create a little drop down box so that you
cannot put in pears and space (key) for example. So you would have to choose one of the
predefined options and so that's a data validation drop down box. That's actually changing
the value inside the cell itself, what we are talking about today though is using a combo box

drop down which is not actually changing the cell, it's not actually storing data, it's an object that sits over the top of the page.

In order to create a combo box, if you using one of the later versions of excel you will need to have the developer tab in the ribbon. You may not have that, it doesn't actually come as standard, you only have to do this once and once you have done it, it will always be there whenever you open up excel. If you go to a different computer or if you re-install excel you will need to do it again. I will show you how to do it and you won't have to do it again. You will also need this if you are going to record Macros as well.

If you are using 2010, you need to go to 'customise quick access tool bar' and then go to 'more commands' and that will actually customise the ribbon which is the "customised ribbon" and see there where it says "developer", you just need to make sure that been "ticked" and then once its ticked you actually get this "developer tab" in the ribbon.

Let's have a look on how to do this in 2007, because this is one of those few instances where the instructions for 2007 and 2010 are just slightly different. Going to the excel options and then just there see where it says "show developer tab" in the ribbon and the instructions for that are quite similar in a Mac as well and it shows you how to do all this stuff in chapter 7 of the book by the way. And if you are using 2003, you don't have to worry about this because there is no ribbon so you don't need to have the "developer tab". I mean if you are using 2003 will just have – it will just be a tool bar that actually forms tool bar.

So once you have got the "developer tab" up in the ribbon you need to this "insert controls" just ignore "Active X controls" that's a more advanced, we don't need that for our purposes, we just going to use "form controls". So if you click on the "form controls" like that and then draw it and that is going to create a "drop down box". So it's very-very similar to this "drop down box", it looks the same but it is completely different. It doesn't actually contain any data, it's literally just a – I guess it's just a condo; it actually just has data moving in it. It doesn't actually store anything. You need to tell it where you want to – if I want to move it I just hold the "Ctrl" key and move it like that, I am just going to move that down a little bit there. So you need to tell it where is the data that you want to appear in the "drop down list" and you also need to tell it where is the "outcome". Where do you need it – where is it that you want to put the data?

So "right-hand click" and go to "format control" and you need to give it an "input range" so you need to tell it what's going to appear in the drop down list and also a "cell link" which is the "output", what do you want to do with the result. So the "input range" in this case is going to be those and the "cell link" is going to be – just choose the cell – any cell. So I click on there, nothing is going to happen just yet, click away from it and then when you go – it would suddenly appear with what you created, what you put in the "drop down list". So if

you choose the first option, the "output" cell would say "1". If you choose the second option, it will say "2", so this is really-really quite different. When you are creating a formula with the "data validation drop down box", you can just link your formula directly to that cell that contains the "data validation". It is quite different when you are using a "combo box" because you can't actually link something to that "combo box" because it is not a cell it's actually just an object.

So what you need to do is link your "formula" to the "output" cell, which is a little bit hard to get your head around. It's a bit more difficult from your perspective, from a developer's perspective. For the user, for somebody coming along and using this model, if you open up this model and you see "ah drop down box, I know what I am suppose to do with that" you see it straight away. Whereas with the "data validation" you don't see it until you actually click on it. So you click on the cell and go "ah drop down box, yes I know what to do". So either of those is fine, they will from the users perspective will work very similarly.

A "combo box drop down" is a bit more work, it is a bit more difficult for you to build but it is a bit more easier from the user perspective. So you can use either of those depending on what you want to do. Let's just have a look if I go over to the next page here and in this case I want to make this – I got some months going across here – I can easily do a "data validation drop down box" by going into like that say "allow a list" and then say the "source" and that's absolutely fine. That will create a drop down list and something would link to that and that will all work.

If I wanted to create a "data validation drop box" though, "form controls" and then going to there – "input range", highlight this. That is not going to work, because the "combo box" will only work when the data is vertically orientated, it doesn't work horizontally. So that's a bit of limitation when it comes to creating a "combo box".

The advantage though using a "combo box" is that you can – as I said you can see it straight away, you can also insert it into charts, so you can have a little drop down box in the corner of your chart, change the drop down and then you can have all the numbers changing and the chart changing. So that's quite a cool option, you can also assign "macros" to the "drop down box" as well which is quite funky. So when you use a change or something from the "drop down box" it will automatically launch a "macro" which is attached to that "combo box" which is quite nice as well.

So "combo boxes" are quite nice. Just a couple of other things while we are on the subject "form controls", probably "drop down boxes" are the most commonly used sort of "form controls". But the other one I quite like is using a "tick box" which is handy also, so you can say little "tick box" or "check boxes" I call you can say "do you want to include tax?" and then somebody can say "Yes include the tax" or "No". Nothing is going to happen to it

though until you actually program it, so you need to "right-hand click" again go into "format control" and will say "cell link", so it's there and so if it is "true", if it's "ticked" or "false" if it is "not ticked". So you can use billion – billion logics your "1" and "0" and you can have something linking to that. So you could have – what we often do is say "if we wanted to include the tax" so you could say something so far "tax was 10%" up here, so that "multiplied by" the "10%" "multiplied by" this one here.

So I am just going to use my "format painter" which is - I like the format there so I am just going to paste my formatting in there. So if I copy that down, fix my referencing, copy it down like that, that's not including any tax because it is "false". What I have done here is I have actually "multiplied" that by "0" because it is "false", so there is no tax been included. If I say include tax, it's going to say "true", which the value of "true" is a "1" and the value of "false" is a "0". So if I "multiply" everything by "1", it will include it. If I "multiply" it by "0" it would "0" it out. So you can toggle between include tax or don't include tax for example. That's just an example of how you could use a "tick box".

The other things that are quite useful in there are – you could use a slider which works in a similar way, so you click on those to go up, click on them to go down, you can also have sliders and all other sort of fancy things which are quite nice to include in your models. Mostly all of these stuff is for – is to make your model easier to use for the user just to kind of make it a little bit more interactive and easy for them to use.