Welcome to the final tutorial in this series on how to Create Accessible Documents. We are going to take a change in pace here from previous videos. We are to look at forms, not must Microsoft Office or specifically Word. But we will also take a peek in Forms in PDF, and in HTML. Now the creation of forms is a complex process in any of these three programs. There are courses that are days long that cover all of the intricacies of adding fields and managing data. This tutorial is far too brief to cover these concepts in any detail.

However, there are some general principles which apply to all forms. And this tutorial therefore will be examining three of the most important guideline to keep in mind when designing a form. The first will be how to indicate required fields. Then we will look at proper labelling to help assist those who are using assistive technologies with input.

And finally we are going to look at how to control tab order. Let’s start by discussing the process for including a required field in our forms. I have Adobe Acrobat Pro here so we will examine how to add a required field in PDF. The first thing you will have to do is indicate that the field is required in the actual label of the field. You will see that I have Name and in parenthesis required. Now this could also be a star if the * or asterisk was explained earlier indicating that this was a required field. Now there is more I can do in Adobe in order to indicate a required field. You may see the red outline appearing here as a result of the fact of a property that I have set. I go back into editing in Forms mode and then I am going to double click on the Name Field in order to indicate programmatically that the Name Field is required I simply have to check this box, Required. When the Field is submitted, if the box is left empty, the person filling it out, whether they are using an assistive technology or not will be warned that the Field has been left blank.
Let’s have a look at the process in HTML. Once again you can see here that I have some required Fields set up, First Name, Last Name, Email. This time however, I have them in red, with an *. The * is very important when it comes to accessibility because we cannot use colour alone to indicate information. The key difference here however is what happens programmatically. I’m going to pop over to the code and here we can see in the code that the spam style set to this field to change it to the colour red. There is at this time no programmatic way in HTML to enforce the filling of a required field. However, this is coming in HTML 5.

We have a similar situation to HTML. We can visually indicate that the Field is required, using both the word ‘required’ or *, and a colour. However, from a programmatic point of view, there are no setting to allow us to force the filling of this Field without using additional scripting.

So we are going to click on this field and go and look at the properties in the Developer tab, and you can see under the Properties, there is no option for creating a required Field. So as you can see, although PDF does offer a programmatic option for enforcing completion of a required Field, both HTML and Word require additional scripting in order to force it. In the meantime, we can indicate it through our tags, and through our text.

This bring us to our next point, Labelling. In PDF, in order to properly guide the user to enter information in the correct format, like a required Field, it is recommended we include the instructions as part of the actual label, as you can see here. Additionally, if I open up the Date properties, I can see that the Tooltip has been enhanced to add that formatting information as well. In HTML, the labelling of Fields can happen in two ways. Implicitly or Explicitly. Implicitly wraps the Input Field with the Label tag. However, for accessibility purposes, it is
recommended that we explicit labels. That is labels that include the ‘for’ which connects to the Input id. In this way, the accessible technology will correctly link the name listed in the Label Field, to the Field to which it is attached. Once again this name can include specifics regarding the format to be entered.

In the cases where a label cannot be used, however, ‘Title’ is appropriate and allowed, especially if it includes additional instructions such as we see here that indicate which digits of the phone number need to be entered in a particular phone field.

And finally in Word, we actually have two types of Fields here. We have the Field that has been included in Microsoft Word 2010 and beyond. And the so called legacy Fields, and each of them treat labelling in a slightly different way. I am going to click inside the newer Fields here, the 2010 version. And I am going to click ‘Properties’. I open up ‘Properties’ and I can see here my tag can be used once again to add additional details to the label. The title can also reflect the actual name. If however, I go into a Legacy Field, and I am going to double click to open the properties here, you can see that there is no tagging available in the Main window. You actually have to go into text window to indicate the status bar message for Field Help Text. You can also add that message to the F1 key for that Field to instructions or additional information for formatting.

Finally let’s discuss the Tab index, or the order in which Fields will be presented to someone using assistive technology.

There is nothing better than a function test, so I am going to pop out, I am going to go into Preview mode and I am going to use my Tab key to navigate from one Field to the next. And everything appears to be working fine on this one. If, however, I do need to make a change, I’ll go back into the Edit view and I can see over in my Field listing that there is a Tab order dropdown, but selecting this, I can choose to automatically rearrange the tab order by structure row or column, or manually, or show Tab numbers. If we decide to show tab numbers we will be prompted to change to manual ordering. I am going to click ok there, and you can see here that the numbers actually show up as part my document.
In HTML, it is recommended that the Tab order be maintained horizontally, and then vertically. However, in cases where the Tab order as presented physically on the page does not match the tab order that actually must be followed, the use of the Tab index attribute in the Input Field would allow for a change in that order. If you do find yourself in need of the Tab Index, first reconsider whether you should redesign your form to make the flow more logical.

Finally, in Word, the tab order should also be logical and physical. That is, it should proceed form the top of the page through to the bottom. However, if you do find the need to change the tab order, the use of a table for that purpose is, in fact, recommended. You see here that I can simply tab the various fields in order to fill out my form.