Structured MS Word Documents

Read this first: The goal of this lab exercise is to demonstrate how **paragraph styles** can be used for creating structured MS Word documents. Starting with a plain ASCII/Unicode text file, step by step we design and apply styles to each paragraph. Then we generate automatically a table of contents and an index. At the end we save the styles in a MS Word template.

I. Initial Settings

Step 1. Open http://www.csis.ul.ie/coursemodule/CS4146/?wkid=2 in a browser and download the file **exampletext.txt**.

Step 2. Open exampletext.txt with MS Word. Before you do anything else make sure you have the **Standard** and **Formatting** toolbars on in MS Word (check the menu item **View>Toolbars**).

Step 3. Select **Print Layout** from the **View** menu (alternatively press the **Print Layout View** button in the bottom-left corner of the MS Word window).

Step 4. Open the menu item **File>Page Setup** and set up the document margins as follows:

```
Top: 1" (2.54 cm), Bottom: 1" (2.54 cm), Left: 1.25" (3 cm), Right: 1" (2.54 cm)
Gutter: 0" (0 cm), Header: 0.5" (1.25 cm), Footer: 0.5" (1.25 cm)
Apply to: Whole document
```

Step 5. Save the document as **lab01.doc**. What is the size of the file **lab01.doc**? **Ans.**:……...

II. Design and Application of Styles

Step 6. Press the ¶ button in the standard toolbar. When it is **ON** it makes some of the hidden formatting marks (which will not be printed) in your document visible.
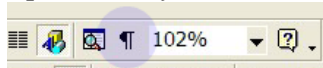

Alternatively, you can specify which hidden symbols to be shown in **Tools>Options>View>Formatting Marks**. Having the formatting marks displayed helps format a document more precisely.

Step 7. The ¶ symbols in your document mark the end of each paragraph. **Note that each title in a MS Word document is a paragraph!** Now we will format the title of the document "Ninja Rope Game Design Document". Make it:

```
centred, font: Times New Roman, fontsize: 24, bold
```

Step 8. Make sure the cursor is somewhere in the title. Click in the **style box** and type **Lab01Title** in it. Press Enter. This way we record the format of the title paragraph under the name Lab01Title.
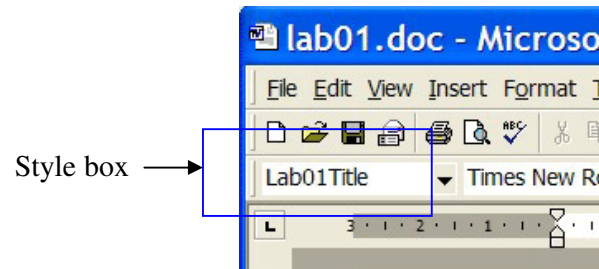
Step 9. It is always a good idea to leave some space above and below a title. We will do it by changing the properties of the style **Lab01Title**. Open **Format>Styles and Formatting**, select the style **Lab01Title** from the list and choose **Modify** from the drop-down menu. In the next dialog box press the **Format** button and select **Paragraph**. Then set the following parameters:

```
Before: 36pt; After: 18pt
```

Press **OK**, **OK** and **APPLY**.

Step 10. The next paragraph, the title *"Aims"*, is a title of a section. Format it as

```
left-aligned, font: Times New Roman, fontsize: 14, bold, italic
```

Then place the cursor in *"Aims"* without selecting any text; click in the style box and record the format as **Lab01SectionTitle**.

Step 11. Open **Format>Styles and Formatting** and modify **Lab01SectionTitle** as follows:

```
Before: 24pt; After: 6pt
```

Before you press **OK** switch to **Line and Page Breaks** and set **Keep with next** on to make sure that a section title will not be the last paragraph at the bottom of a page.
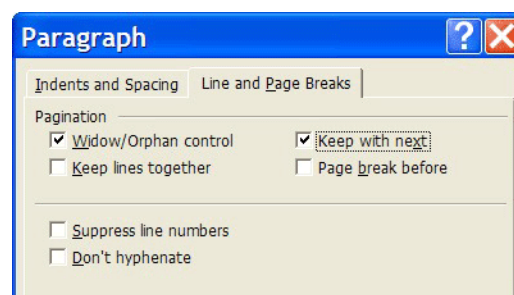
Step 12. The next paragraph *"Produce an original, simple…"* is a normal text paragraph. Format it as:

```
Justified, font: Times New Roman, fontsize: 10, Spacing After:
                              6pt
```

And record the paragraph format as **Lab01Normal** style.

Step 13. Now we will apply style **Lab01SectionTitle** to paragraph *"Premise"*. Place the cursor in the paragraph *"Premise"* and select style **Lab01SectionTitle** from the style box list. Similarly apply style **Lab01Normal** to the next paragraph and style **Lab01SectionTitle** to the paragraph *"Basic Vocabulary"*. Then select all following paragraphs until the single-line paragraph *"Complex Goals"* and apply to them style **Lab01Normal**.

Step 14. Apply style **Lab01SectionTitle** to *"Complex Goals"* and style **Lab01Normal** to the next paragraph. Paragraph *"Plunge Match"* is a title of a subsection. Format it as:

```
left-aligned, font: Times New Roman, fontsize: 12, bold
Before: 12pt; After: 6pt, Keep with next
```

Then record the format as **Lab01SubSectionTitle** style.

Step 15. Apply the new **Lab01SubSectionTitle** style to paragraph *"Ribbon Match"* and style **Lab01Normal** to the paragraphs before and after it.

Step 16. For the rest of the text apply styles as follows. Apply style **Lab01SectionTitle** to paragraphs
- *"Visualization"*
- *"Sound and Music"*

Apply style **Lab01SubSectionTitle** to paragraphs:
- *"Overview"*
- *"Visual Style"*
- *"Animation"*
- *"Camera Concerns"*

Apply **Lab01Normal** to the rest of the paragraphs.

Step 17. Save your file.

Step 18. Now we will create two new styles based on **Lab01Normal** in order to distinguish normal text paragraph in a section from normal text paragraph in a subsection. Return to the top of the document and place the cursor in the first normal text paragraph, *"Produce an original…"* Then select from the menu `Format>Style`…. Click the button `New…` and give the name **Lab01SectionNormal** to the new style. Leave the other fields as they are and click `OK` followed by `APPLY`.

Step 19. Apply the new style **Lab01SectionNormal** to all normal text paragraphs that are not in a subsection.

Step 20. Place the cursor in the first normal text paragraph which is in a subsection, *"Rounds are played out…"* Open again `Format>Style`…, then click on `New…` and give the name **Lab01SubSectionNormal** to the new style. Leave the other fields as they are and click `OK` followed by `APPLY`.

Step 21. Apply style **Lab01SubSectionNormal** to all normal text paragraphs within a subsection.

Now by modifying Lab01SectionNormal we will modify all normal text paragraphs that are not in a subsection. By modifying Lab01SubSectionNormal we will modify all normal text paragraphs that are in a subsection. And by modifying their common ancestor Lab01Normal we will modify all normal text paragraphs in the document.

Step 22. Place the cursor in the first subtitle *"Plunge Match"* and change the left indent to 0.5" (or 1cm) by using the horizontal ruler.
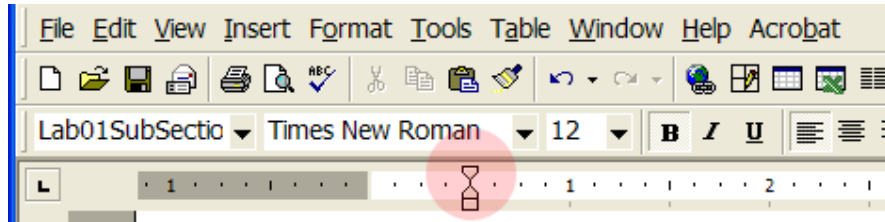
Update style **Lab01SubSectionTitle**.

Step 23. Similarly, change the left indent of the following paragraph *"Rounds are played…"* to 0.5" (or 1cm) and update style **Lab01SubSectionNormal**.

Step 24. Now we will change the fontsize of all normal text paragraphs by modifying style **Lab01Normal**. Select `Format>Style` from the menu. Then choose to modify style **Lab01Normal**. Select to format the font and set the fontsize to 12. Click `OK`, `OK` and `CLOSE`. All normal text paragraphs should have fontsize 12 now. All subsection paragraphs and titles should have left indent 0,5" (or 1cm).

Step 25. Save your file and check its size. **Ans.:**………………….

III. Table of Contents and Index

Once you have defined the structure of a document in terms of styles it is easy to create a table of contents (TOC).

Step 26. We will place the TOC below the title and above the section *"Aims"*. Place the cursor in front of the section title *"Aims"*.

Step 27. Select from the menu `Insert>Index and Tables`. Then click on `Table of Contents` to bring up the TOC form. Now we will define which paragraphs should be considered titles and thus included in the TOC. Click the button `Options…`

Step 28. You see a list of all styles available in your document. Currently, styles **Heading1**, **Heading2** and **Heading3** are marked as TOC styles. Delete the numbers (1, 2 and 3) in the fields next to them. Then, type in 1 next to **Lab01SectionTitle** and 2 next to **Lab01SubSectionTitle**. Click `OK`, `OK`. You should see now the TOC at the top of your document.

Step 29. Now we will create an index. In order to have an index we need to mark all the entries in the index in advance. Normally, this should be done in the course of writing the document. To

create an index entry select any word in the document, say we select the word *"Ninja"* in the beginning of the second section. Then choose from the menu **Insert>Index and Tables** and make sure the index form is on the top.

Step 30. Click the button `Mark Entry` and in the form that will come up click the button `Mark`. **Do NOT close the form.**

Step 31. Arrange the desktop so that you can see both your document and the `Mark Index Entry` dialog box. Choose any word in the text, click inside the `Mark Index Entry` dialog box to make it active, and finally click the button `Mark`. Repeat the same for another 10 words.

Step 32. After you have marked about 10 words close the `Mark Index Entry` dialog box. Place the cursor at the end of the document. Then select again `Insert>Index and Tables` from the menu and make sure the `Index` dialog box is on the top. Click `OK` to insert an index.

Step 33. Insert a title *"Index"* at the top of the index and apply style **Lab01SectionTitle** to it.

Step 34. Now move to the top of the document and place the cursor in the TOC. Press `F9` on the keyboard to update the TOC. When asked choose to `update entire table`. The result is that the Index title is appended to the TOC.

Step 35. Save your file and check its size. **Ans.:**………………….

Step 36. Compare the values you have recorded at steps 5, 25 and 35 to the size of the plain text file, `example.txt`.

IV. Lab01 Template

Step 37. Delete the entire content of the document `lab01.doc` and save it as `lab01.dot`. You can re-use the styles that we have designed in a new document by applying the template `lab01.dot` to it.

Step 38. Select `File>New` from the menu and choose to open a new file based on the template `lab01.dot`. Make sure that all the styles we have created are available in the new document.