Lab 3 Part 2

Microsoft Office Word 2007

Objectives:

- Learn how to insert images and captions into a document
- Learn how to make a table of contents
- Learn how to format text
- Learn how to add footnotes and page numbers

What is Microsoft Word and Why Should I Use It?

Microsoft Word is a word processing application. You will need to use Word to write formal reports, outline projects, and write reviews or other documents. Before you begin, download the Bad Persons Report ("lab3report.docx") from T-Square under "Resources-> Lab 3" and open it using Word 2007.

(Note: in some browsers you will have to right-click on the link and select 'Save Target As'). This will be the document you will edit and turn-in to T-Square before the deadline.

The Assignment (Part 2)

The following items need to be completed for the report:

- 1. Fill in the blanks in the report
- 2. Add an appendix that contains the Excel spreadsheet from part 1
- 3. Import all the plots from part 1 of the lab
- 4. Add figure captions to the plots and cross-references in text
- 5. Create a table of contents that will be automatically updated
- 6. Add page numbers at the bottom of the pages
- 7. Make footnotes about the data

Instructions in bold indicate specific things that you need to put into "lab3report.xlsx."

In the lab3report document, some of the results of the analysis have been left blank. Please fill in the blanks with the results from the completed spreadsheet in the previous section.

Appendix:

Technical reports often have a lot of data and tables that are pertinent to the report, but just too detailed for the average reader. This "scratch work" belongs in the appendix, so that interested parties are privy to the data and intermediate results, but spare the average reader from having to wade through tons of data.

Add an Appendix section to the end of the lab3report document. Import all the spreadsheet data from part 1 of the lab. To do this:

- 1. Highlight the cells in Excel that need to be included
- 2. From the "Home" menu choose "Copy"
- 3. In Word choose where the data table should appear
- 4. From the "Home" menu choose "Paste"

To make the tables fit in the Word document edit the margins and cell size. The data should be on the page and readable.

SAVE BEFORE YOU START THE APPENDIX to ensure that all changes are backed up.

Inserting Plots:

To insert a plot from MATLab, copy the plot by going to the figure window and selecting from the "Home" menu and choosing "Copy Figure."

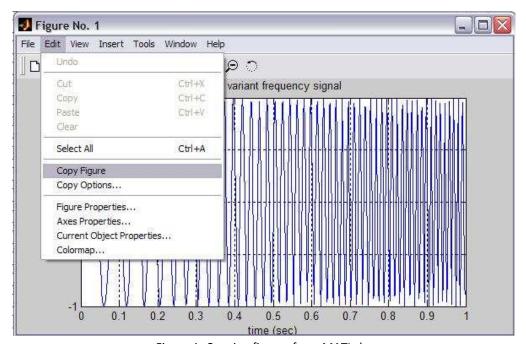


Figure 1: Copying figures from MATLab.

Similarly, click on the Excel plot in part 1 and from the "Home" menu choose "Copy". Once the plot has been copied choose where to paste it in the Word document then from the "Home" menu choose "Paste". All figures and plots

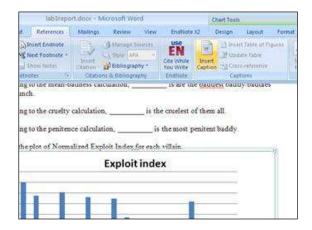
should have a figure number and a short caption. For this lab, paste all the plots from part 1 into the Data Analysis section of lab3report. Be sure to include figure numbers and captions.

Inserting Captions and Cross-Referencing Them:

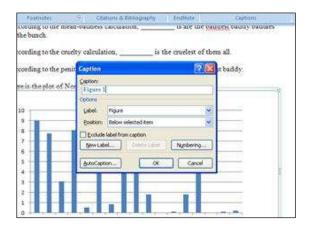
To avoid doing the figure captioning by hand, use Word's built in captioning system. The benefit is that changes will be automatically reflected in captions. For example, if figure 2 changes to figure 3, then all referencing done to figure 2 in the document will automatically be changed to show figure 3.

To set this up:

- 1. Click on the figure to be edited
- 2. From the "References" tab choose "Insert Caption" which will open an option pane

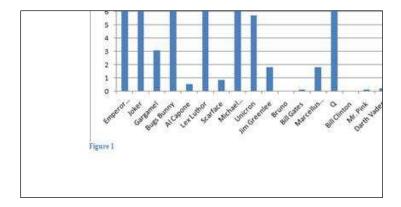


3. From the "Label" pull down menu, select "Figure"



- 4. Enter the caption for the figure in the caption box
- 5. Choose "OK"

The figure has now been referenced.



To cross-reference the figure:

- 1. From the "References" tab choose "Cross-reference" which will open an option pane
- 2. In the "Reference type" drop down menu choose "Figure"

In the option pane the "Insert reference to:" drop down menu chooses the format of the reference, such as only the figure number, or the figure number and the caption.

Creating a Table of Contents

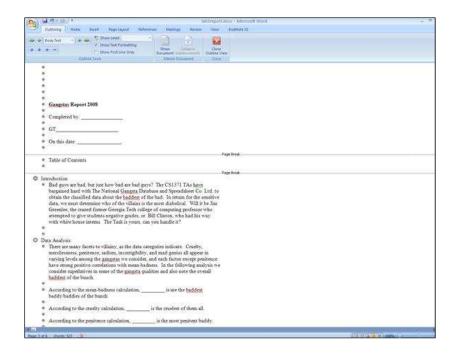
Word can recognize where each section and sub-section starts. Formatting the document will allow the Table of Contents to be automatically updated.

Formatting Your Document

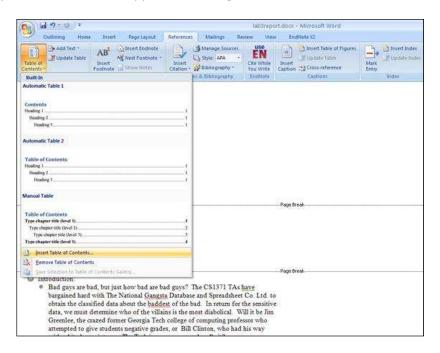
Word recognizes where each section begins based on the level of the text. "Level 1" defines a main section and "Body Text" defines a sub-section. The figure below shows how to get to the Outline view, where the level of the text can be specified. Highlight the section title and then on the drop down menu at the top left of the screen, select "Level 1." Highlight the sub-section titles and set them as "Body Text" in a similar fashion.





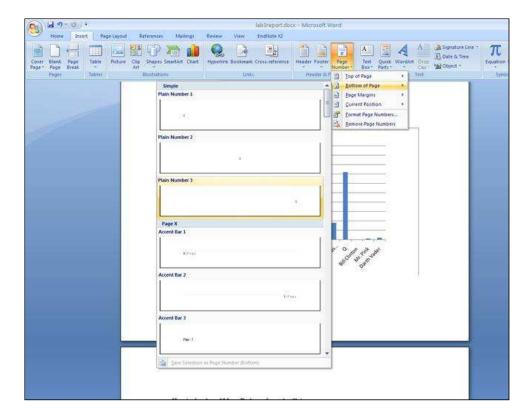


To insert a table, from the "References" menu choose the "Table of Contents" drop down and then "Insert Table of Contents..." which will open an option pane. As in the "Study of Behavior of Wavelets" example, there were two levels of text: main sections and sub-sections. That makes showing 2 levels in the Table of Contents appropriate. For this lab, the Introduction, Data Analysis, Conclusion, and Appendix headings should be made level 1.



Inserting Page Numbers

Page numbers are useful to have, particularly when distributing paper copies of a report. To get Word to automatically insert page numbers, go to the "Insert" menu and select the "Page Numbers..." drop down menu and then choose the location of the page numbers. Choosing "Format Page Numbers..." will open an option pane to format the page number styling and where to begin numbering. The option pane will look similar to the one shown in figure 5. For this lab, just make sure to insert page numbers on the bottom of the page.



Inserting Footnotes for References

The source of any data not obtained personally must be referenced. Any information included in a report that is not the writer's own work needs to be referenced via footnotes.

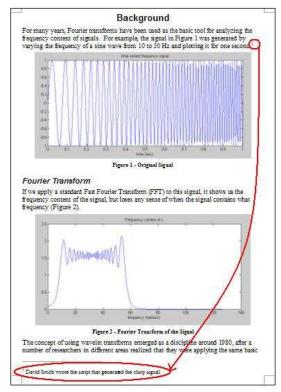


Figure 6: Example footnote.

To insert a footnote:

1. Position the cursor right after the first sentence under the Data Analysis section.

- 2. From the "Reference" menu choose "Insert Footnote"
- 3. To format the footnotes choose the pop out menu from the "Footnotes" section as shown below:
- 4. For this lab make sure the footnote is "Continuous" and appears at the "Bottom of Page."

Be sure to give credit to The National Gangsta Database and Spreadsheet Co. Ltd. for the data.



The Assignment (Part 1 and Part 2)

Checklist of Requirements

- Fill in the blanks in the report
- An appendix with the Excel spreadsheet you completed in part 1.
- All plots from part 1 of the lab.
- All plots have cross-referenced captions.
- A table of contents that can be automatically updated.
- Page numbers at the bottom of the pages.
- Footnote in the Data Analysis section.

Turn in the "lab3excel.xlsx", "lab3report.docx" and "lab3SAT.xlsx" files through T-Square.