Guidelines for Formatting your Reports in the Course "Programming Design"

Ling-Chieh Kung*

1 Preface

When we are writing an article, typically we want to make it professional by formatting it into a "nice look". What is a nice look depends on what is the purpose of the article. For example, the formats of an article in a sports magazine and another article in an academic journal should certainly be different. Below I just want to share my "personal opinions" about how to format a report (in particular, a technical report). Certainly some guidelines come from my personal tastes, but I believe these suggestions will help you make your report look more formal and professional. These guidelines should also apply to many reports or documents you need to write in the future.

2 Guidelines

1. About the whole article:

    (a) Margins should be large enough. Typically it is preferred that a margin is at least 2 cm.

    (b) Add page numbers to your report. If you have no specific reason of changing it, put the page number at the bottom of a page and place it in the center (just like this article).

    (c) The font families you use for the main text should be consistent throughout the whole report. Typically you should use two font families, one for typical natural language sentences and one for computer-related technical terms (e.g., codes, names of variables in a computer program, a data table's name, the name of a data column in a data table, etc.). A good example is

    > There are two variables `valueCnt` and `values` declared inside the function `findSecondMax()`.

    A bad example is

    > There are two variables valueCnt and values declared inside the function findSecondMax().

    (d) When your report also contains Chinese characters, stick to at most two font families for Chinese.

---

*lckung@ntu.edu.tw; Department of Information Management, National Taiwan University.

(e) The font size of the main text should also be identical throughout the whole report.

(f) When using enumeration items (1, 2, 3, ...) or bullets, indent all the lines belonging to the same item or bullet equally. For example, do what this article does rather than

> 7. When using enumeration items (1, 2, 3, ...) or bullets, indent all the lines belonging to the same item or bullet equally.

2. About tables and figures:

(a) Put your figures or tables horizontally center. Do not put them at the left or the right of the page.

(b) Do not put sentences or paragraphs beside a figure or table. Let the two sides of a figure or a table be empty. However, it is fine to put multiple figures in a row, multiple tables in a row, or some figures and some tables in a row.

(c) Label all tables and figures in your article by giving them appropriate numbers and captions. All tables and figures should be mentioned at least once in your main text.

(d) The style of texts, figures, tables, etc., should be consistent throughout the whole report.

(e) For data plots, do not forget the units of measurement and labels of axes.

3. When there are mathematical symbols in your report, make them in the style of mathematics. In particular, be aware of the following things:

(a) When there is a symbol denoted by an English letter, make it italic. For example, write $a + b = 3$ rather than a + b = 3.

(b) An operator (e.g., +) should not be italic. A function with a well-known name (e.g., log, max and sin) is considered as an operator.

(c) A number should not be italic. For example, it should be $a + b = 3$ rather than $a + b = 3$.

(d) Superscripts or subscripts should be put in the right positions. For example, a_1 and $a1$ are completely different: The former is a variable called a_1 while the latter is actually $a \times 1$.

(e) When there is a subtraction, write $-$ rather than -. For example, write $a - b = 3$ rather than a - $b = 3$. The same thing applies to the negation operator. For example, write $a = -3$ rather than $a = $ -3.

(f) If you want to write down the multiplication operator, write $\times$ rather than *.

(g) For an exponent, write it as a superscript rather than using $^\wedge$. For example, write 10^2 rather than $10^\wedge 2$.

(h) There should be proper space beside a binary operator. For example, it should be $a + b = 3$ rather than $a+b=3$.

4. Do not copy and paste your spreadsheet (e.g., MS Excel) tables to your text editor (e.g., MS Word) without doing any formatting.

3   Conclusions

Hope you will find these suggestions useful! Discussions in any format are always welcome.