Technical report example

This is a suggested template for the project report together with specific requirements for each chapter and its sections. Variation of the template is allowed; and appropriate adaptation to your project is highly recommended.

Note that every part of the report (Title, Abstract, Table of Contents, all chapters, Appendices, and References) should start from a new page.

"Title page" includes the project title, the course name, the date, and authors' names

"Abstract page" presents the abstract, summary the project

"Table of Contents"

"1. Introduction"

- "1.1 Background"
- "1.2 Purpose of the project"
- "1.3 Project specifications"
- "1.4 Work distribution and planning"

"2. Theory (or Working principle)"

Present the theory or the working principle underlying your project with the clear explanation of all components that are related to the project

"3. Implementation"

"3.1. Overview of the system"

"3.2. Hardware and components"

"3.3. Integrated Development Environment (IDE)"

Give a comprehensive summary on IDE, and discuss specific important functions related to the project. Provide a reference on it, and cite it somewhere in this section.

"3.4. Development tools"

Give a comprehensive summary on development tools (e.g., debugger, programmer, etc.) and discuss specific important functions related to the project. Provide a reference on it, and cite it somewhere in this section.

"3.5. Implementation"

Present the setups and source codes, and discuss the problems (you met with) and how they were solved (solutions you found).

"4. Results and discussions"

Present the results with specific parameters and performance values associated with the specifications and discuss how well the results fulfil the specifications, what problems you encountered and how you found solutions and solved them, etc.

"5. Conclusions"

Conclude how well the project has been done, and how well the system/project performs (in other words how well the finished system/project fulfils the specification). Summarize how the knowledge you learned is applied to the project, …

"Appendices"

"References"

Report writing format

The text of the report uses the above style.

- The figures, pictures and illustrations are numbered in the form of Fig. 1.1, Fig. 1.2, …, (in which the first digit in the number is related to the chapter number) for the figures in the first chapter, and cited in the form of Fig. 1.1, Fig. 1.2, …, or Figs. 2.3 and 2.5 when citing more than one figure, as shown in Fig. 1.10.

Fig. 1.10 Three penguins on the snow beach [4].

- Equations and mathematic expressions are numbered in the form of (1.1), (1.2), …; and cited in the form of Eq. (1.1), Eq. (1.2), …, and Eqs. (2.9) and (2.10) when citing more than one equation. For example, the number of penguins in Fig. 1.10 is calculated using Eq. (1.1)

$$\text{One penguin in the middle + two penguins on the sides = three penguins} \qquad (1.1)$$

- The format for References follows the IEEE style in the following way, and cited in the way as shown in the caption of Fig. 1.10. (http://www.ieee.org/documents/ieeecitationref.pdf)

[1] G. Eason, B. Noble, and I. N. Sneddon, “On certain integrals of Lipschitz-Hankel type involving products of Bessel functions,” Phil. Trans. Roy. Soc. London, vol. A247, pp. 529–551, April 1955.

[2] J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68–73.

[3] G. G. Raju. (2003). Dielectrics in Electric Fields. [Online]. Available: http://www.engnetbase.com/.

[4] NP Staff (2013). Penguin 2.1 is Now Live–What to Expect from Google’s Newest Data Refresh. http://www.nationalpositions.com/penguin-2-1-what-to-expect/.