Assignment 2 - preperation for bachelor thesis

Amanda Juhl Hansen

March 18, 2021

Contents

List of Figures

List of Tables

1 Task 1

Find requirements of bachelor thesis. Write a LATEX document explaining your findings. Document your sources.

Da besvarelsen skal være brugbar for os som studerende,har vi valgt at tage udgangspunkt i CPH Business krav til vores kommende bachelor projekt. [3]

Krav til Rapporten

- Da en bachelor svarer til 15 ECTS points, forventes det at den studerende bruger 412,5 time på bachelor projektet.

$$15 * 27,4 timer = 412,5 timer$$

- Det maksimale antal sider afhænger af gruppens størrelse og udregnes således: $maksantalsider = 40 + 20 * antalstuderende$
- Hvis rapporten er under 2/3 af det maksimale antal sider, anses den for at være kort. Der er dog ikke et officelt minimumskrav.
- Rapporten skal skrives på enten dansk eller engelsk.
- Rapporten skal indeholde en gennemgående beskrivelse af det udarbejdede projekt, samt evaluering og refleksion over dette.

Rapportens indhold

1. Forside (titel, studerendes navne og id, skole og vejleder)
2. Abstract (ca. 4 linjer og skrives til aller sidst)
3. Indholdsfortegnelse
4. Introduktion
    - Motivation
    - Forventede resultat
    - Opgaver for at kunne opnå det forventede resultat
    - Scope
    - Kort beskrivelse af hvert afsnit efterfølgende
5. Undersøgelse og redegørelse af teknologier og teori
6. Krav specfikationer og design
7. Implementation og udvikling
8. Konklusion

9. Litteartur liste og bilag
10. Præsentation (eventuelt powerpoint)

2 Task 2

Produce a template (in LATEX, of course) that you can use in your bachelor thesis. It should be rich with examples of the following (ie. one of each):

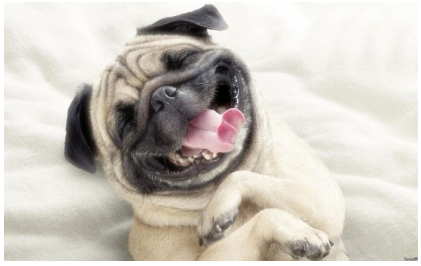
2.1 Danish letters

æ ø å

2.2 Graphics

Figure 1: Caption above image

(a) This is a tired dog



(b) This is a happy dog

Figure 2: This is two doggies

2.3 Reference

Figure 1 on page 5 shows a picture of a cat.

2.4 Paragraphs

Paragraph This is an example of a paragraph

Subparagraph This is an example of a subparagraph

2.5 Lists

2.5.1 Bullet points and enumerate

1. The labels consists of sequential numbers.
    - This is a bullet point.
    - This is another bullet point.
        - This is the second level
2. The numbers starts at 1 with every call to the enumerate environment.
    (a) Second level of this list
    (b) Second level

2.5.2 Alternative bullet points

□ Custom made bullet point

2.6 Tables

2.6.1 Various horizontal alignments in columns (left, right, centered)

one	two	three
four	five	six
seven	eight	nine

Table 1: This is a description about the table

2.6.2 Cell spanning multiple columns

Name Dropping	
Frontname	Year of birth
Lisa	1997
Kenny	1943
Else Pelse	2015
Ani	2000
Verner	1982

2.6.3 Reference

Table 1 is on page 8

2.7 Code listing - emphasized key words

Java is a popular programming language, created in 1995. It is owned by *Oracle*, and more than **3 billion** devices run Java. It is *open-source*, furthermore it's easy to learn and simple to use.

2.8 Math equations

2.8.1 Inline equations (in text)

You can only use pythagoras, $a^2+b^2 = c^2$ for calculatings on 90 degree triangles. To find area of a triangle you use this formula: $\frac{b*h}{2}$. And last but not least, finding the volume of a box you use this formula: $V = l * b * h$.

2.8.2 Display equations (on separate line)

Examples of fractions, summations, products, roots, powers

This is an example of a fraction:

$$\frac{1}{2}$$

This is an example of a summation:

$$\sum_{n=2}^{\infty} 2^{-n} = 1$$

This is an example of products:

$$\prod_{i=a}^{b} f(i)$$

This is an example of roots:

$$\sqrt{25}$$

This is an example of powers:

$$x^2$$

2.9 Todo notes

This is a todo note.

2.10 Bibliography of book, article and internet link

Let's cite! [1] Let's cite! [2] Let's cite! [4]

References

[1] James Clear. "When the 80/20 Rule Fails: The Downside of Being Effective". In: ().

[2] Michel Goossens, Frank Mittelbach, and Alexander Samarin. *The LaTeX Companion*. Reading, Massachusetts: Addison-Wesley, 1993.

[3] Soft instructors. *Bachelor Projekt*. November 2020. URL: `https://datsoftlyngby.github.io/soft2020fall/resources/bbe51cf2-bachelorProject.pdf`.

[4] Donald Knuth. *Knuth: Computers and Typesetting*. URL: `http://www-cs-faculty.stanford.edu/%5C~%7B%7Duno/abcde.html`.