MASTER THESIS

Thesis submitted in fulfillment of the requirements for the degree of Master of Science in Engineering at the University of Applied Sciences Technikum Wien - Degree Program Mechatronics/Robotics

Arbeitstitel
Arbeitstitel

By: Titel Vorname Name, Titel

Student Number: XXXXXXXXXXXXXXX

Supervisor: Titel Vorname Name, Titel

Wien, February 1, 2024

Declaration

Wien, February 1, 2024   Signature

Kurzfassung

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Schlagworte: Schlagwort1, Schlagwort2, Schlagwort3, Schlagwort4

Abstract

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Acknowledgements

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Contents

1 Erste Überschrift der Tiefe 1 (chapter)

Etwas Text... Hier kommen noch einige Abkürzunge vor zum Beispiel Alphabet (ABC),world wide web (WWW) und Rolling on floor laughing (ROFL).

1.1 Erste Überschrift Tiefe 2 (section)

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

1.1.1 Erste Überschrift Tiefe 3 (subsection)

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Erste Überschrift Tiefe 4 (subsubsection)

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2 Zweite Überschrift der Tiefe 1 (chapter)

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

2.1 Zweite Überschrift Tiefe 2 (section)

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

2.1.1 Zweite Überschrift Tiefe 3 (subsection)

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

2.1.2 Dritte Überschrift Tiefe 3 (subsection)

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Zweite Überschrift Tiefe 4 (subsubsection)

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Querverweise werden in LaTeX automatisch erzeugt und verwaltet, damit sie leicht aktualisiert werden können. Hier wird zum Beispiel auf Abbildung 1 verwiesen.

Figure 1: Beispiel für die Beschriftung eines Buchrückens.

Figure 2: 2. Beispiel für die Beschriftung eines Buchrückens.

Und hier ist ein Verweis auf Tabelle 1. Das gezeigte Tabellenformat ist nur ein Beispiel. Tabellen können individuell gestaltet werden.

Table 1: Semesterplan der Lehrveranstaltung „Angewandte Mathematik".

Datum	Thema	Raum
20.08.2008	Graphentheorie	HS 3.13
01.10.2008	Biomathematik	HS 1.05

Table 2: 2. Semesterplan der Lehrveranstaltung „Angewandte Mathematik".

Datum	Thema	Raum
20.08.2008	Graphentheorie	HS 3.13
01.10.2008	Biomathematik	HS 1.05

Hier wird auf die Formel 1 verwiesen.

$$x = -\frac{p}{2} \pm \sqrt{\frac{p^2}{4} - q} \tag{1}$$

$$x = -\frac{p}{2} \pm \sqrt{\frac{p^2}{4} - q} \tag{2}$$

Literaturverweise sollten automatisch verwaltet werden, vor allem, wenn es viele Quellen-verweise gibt. Beispiele sind [1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11], [12], [13], [14]. Das verwendete Zitierformat (bzw. das Format des Literaturverzeichnisses) ist entspechend der Vorgaben der Studiengänge zu wählen.

3 Dritte Überschrift der Tiefe 1 (chapter)

Hier wird etwas Quellcode dargestellt:

```cpp
#include <iostream>

void SayHello(void)
{
    // Kommentar
    cout << "Hello World!" << endl;
}

int main(int argc, char **argv)
{
    SayHello();
    return 0;
}
```

Listing 1: Hello-World

3.1 Algorithms

Use a defined environment for algorithms.

Algorithm 1 is an example from the gallery (https://www.overleaf.com/latex/examples/euclids-algorithm-an-example-of-how-to-write-algorithms-in-latex/mbysznrmktqf) .

Algorithm 1 Euclid's algorithm

1: **procedure** EUCLID(a, b)   ▷ The g.c.d. of a and b
2:     $r \leftarrow a \bmod b$
3:     **while** $r \neq 0$ **do**   ▷ We have the answer if r is 0
4:         $a \leftarrow b$
5:         $b \leftarrow r$
6:         $r \leftarrow a \bmod b$
7:     **return** b ▷ The gcd is b

Bibliography

[1] H. Kopka, *LaTeX, Band 1: Einführung*, 3rd ed. München: Pearson Studium, 2005.

[2] H. Kopka, *LaTeX, Band 1: Einführung*, 3rd ed. München: Pearson Studium, 2005. [Online]. Available: http://www.pearson-studium.de (visited on 07/06/2011).

[3] M. Goossens, F. Mittelbach, and A. Samarin, *Der LaTeX Begleiter*. Bonn: Addison-Wesley Deutschland, 2002.

[4] S. Teschl, K. M. Göschka, and G. Essl, *Leitfaden zur Verfassung einer Bachelorarbeit oder Master Thesis*, FH Technikum Wien, 2014. [Online]. Available: www.technikum-wien.at (visited on 08/04/2014).

[5] M. Humenberger, D. Hartermann, and W. Kubinger, "Evaluation of stereo matching systems for real world applications using structured light for ground truth estimation," in *Proceedings of the Tenth IAPR Conference on Machine Vision Applications (MVA2007)*, Tokyo, Japan: MVA Conference Committee, May 16, 2007, pp. 433–436.

[6] M. Humenberger, C. Zinner, M. Weber, W. Kubinger, and M. Vincze, "A fast stereo matching algorithm suitable for embedded real-time systems," *Computer Vision and Image Understanding*, vol. 114, no. 11, pp. 1180–1202, 2010.

[7] C. Zinner, W. Kubinger, and R. Isaacs, "Pfelib: A performance primitives library for embedded vision," *EURASIP Journal on Embedded Systems*, vol. 2007, pp. 1–14, 2007. [Online]. Available: http://downloads.hindawi.com/journals/es/2007/049051.pdf (visited on 07/06/2011).

[8] H. Hemetsberger, *Ait stereo sensor im einsatz während der darpa urban challenge 2007*, AIT Austrian Institute of Technology, 2007.

[9] Siemens Automation Technology, *Simatic*, 2011. [Online]. Available: http://www.automation.siemens.com/mcms/topics/de/simatic/Seiten/Default.aspx (visited on 07/06/2011).

[10] Siemens Automation Technology, *Simatic*, [Online] Verfügbar unter: <http://www.automation.siemens.com/mcms/topics/de/simatic/Seiten/Default.aspx> [Zugang am 17.10.2014], 2014.

[11] International Standards Office, *Iso 690 – information and documentation: Bibliographical references: Electronic documents*, Genf: International Standards Office, 1998.

[12] Atmel Corporation, *Atmel atmega16 – 8-bit microcontroller with 16k bytes in-system programmable flash*, San Jose, United States: Atmel Corporation, 2011. [Online]. Available: http://www.atmel.com/dyn/resources/prod%5C_documents/doc2466.pdf (visited on 07/06/2011).

[13] M. Humenberger, *Real-time stereo matching for embedded systems in robotic applications*, Wien: Technische Universität Wien, Fakultät für Elektrotechnik und Informationstechnik, 2011.

[14] J. Pohn, *Condition monitoring systeme für die zustandorientierte instandhaltung von windkraftanlagen*, Wien: FH Technikum Wien, Masterstudiengang Innovations- und Technologiemanagement, 2010.

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List of Abbreviations

ABC   Alphabet

WWW   world wide web

ROFL   Rolling on floor laughing

A Anhang A

B Anhang B