This is the title of the thesis which can extend over several lines

#### Bachelor's/Master's Thesis

in partial fulfillment of the requirements for the degree of Bachelor/Master of Science (M.Sc.)

in

Hochschule für Technik und Wirtschaft Berlin (HTW Berlin - University of Applied Sciences) Fachbereich 4 Informatik, Kommunikation und Wirtschaft Internationaler Studiengang Medieninformatik

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Date of Submission: February 13, 2022

### Abstract

# acknowledgements

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### Introduction

#### 1.1 Filler Text

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- First itemtext
- Second itemtext
- Last itemtext
- First itemtext
- Second itemtext

### State of Work

#### 2.1 Filler Text

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## Requirements

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## Concept

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## Implementation

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### **Evaluation**

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## Summary and Perspectives

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# Example

The chapter Examples (see chapter 8) demonstrates the possible functions and possibilities of this LaTeX document.

#### 8.1 Source code

Nachfolgend der Source Code 8.1.

```
/**
2 * The HelloWorldApp class implements an application that
3 * simply prints "Hello World!" to standard output.
4 */
5 class HelloWorldApp {
   public static void main(String[] args) {
      System.out.println("Hello World!"); // Display the string.
   }
9 }
```

Source Code 8.1: Hello World

#### 8.2 Picture

The graphic on the right demonstrates the possibilities of the package "wrapfig". Graphics within a "wrapfigure" can be wrapped either left or right of text.

The following Figure 8.2 demonstrates the representation of a "\*.jpg" image within the text (when pasting, the extension can be omitted as long as the name is unique). Additionally, it contains a subtitle which can be linked to the already used label. The subtitle appears in Abbildungsverzeichnis (Abbvz.).



Figure 8.1: sample picture [PEX]

#### 8.3 Text formatting etc

This text contains a footnote<sup>1</sup>

#### **8.3.1** Listen

Lists can be created with bullet points as well as with numbers

- a list with bullet points
- a further element
- 1. a list with numbers
- 2. a further element

<sup>&</sup>lt;sup>1</sup>Footnotes are annotations that are extracted from the continuous text in the print layout to make the text easier to read.

#### 8.3.2 Text Highlighting

The problem with internet quotes is that you can't always depend on their accuracy

— Abraham Lincoln, 1864

Inspiring quotes can be inserted with epigraph

The problem with internet quotes is that you can't always depend on their accuracy

Abraham Lincoln, 1864

line breaks can only be written directly after text, otherwise the latex cannot be compiled.



Figure 8.2: sample picture [PEX]

### **8.4** Table

Nachfolgend Table 8.1.

owner:
Alice
Peer (creator):
Bob
Public key of the owner:
F2 D2 0E ED FA 4E 9E 0A F2 DD 23 8A 32 44 F3 E9
validity:
2015-07-01 - 2016-06-30

Table 8.1: digital certificate

### 8.5 Long-Table

The "Long-Table"can be displayed over defined headers and footers across page breaks.

Version	Codename	API	Verteilung
2.2	Froyo	8	0.1%
2.3.3 - 2.3.7	Gingerbread	10	2.7%
4.0.3 - 4.0.4	Ice Cream Sandwich	15	2.5%
4.1.x	Jelly Bean	16	8.8%
4.2.x		17	11.7%
4.3		18	3.4%
4.4	KitKat	19	35.5%
5.0	Lollipop	21	17.0%
5.1		22	17.1%

continued on next page

... - Distribution of the Android versions (as of 2016-02-01)

Version	Codename	API	Verteilung
6.0	Marshmallow	23	1.2%

Table 8.2: Distribution of the Android versions (as of 2016-02-01)

### 8.6 References

Weil für die alte und die neue Rechtschreibung verschiedene Trennregeln gelten, sind Deutsch mit alter Rechtschreibung und Deutsch mit neuer Rechtschreibung zwei verschiedene Sprachen ([Kna09], S. 192).

### 8.7 References (Online)

see Google.de [Goo].

#### 8.8 Glossaries

The glossary contains the description of terms used for a better understanding towards the reader. Examples are: Berlin, Outsourcing, Application Service Providing, Policy and PCI Express.

#### 8.9 abbreviations

The list of abbreviations lists all abbreviations used. Some examples are Serial Attached SCSI (SAS), Compact Disk (CD), Local Area Network (LAN) and Internationale Organisation für Normung (ISO). The reuse only shows the abbreviation: SAS, CD, LAN and ISO.

# List of Figures

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# List of Source Codes

8.1 Hello World
-----------------

# List of Keywords

$\mathbf{A}$	T
alte	Trennregeln
D	U
Darstellung11	Untertitel11

### Glossar

Application Service Providing Der Application Service Provider (Abkürzung ASP) bzw. Anwendungsdienstleister ist ein Dienstleister, der eine Anwendung (z. B. ein ERP-System) zum Informationsaustausch über ein öffentliches Netz (z. B. Internet) oder über ein privates Datennetz anbietet. Der ASP kümmert sich um die gesamte Administration, wie Datensicherung, das Einspielen von Patches usw. Anders als beim Applikations-Hosting ist Teil der ASP-Dienstleistung auch ein Service (z.B. Benutzerbetreuung) um die Anwendung herum. 14

Berlin ist die Bundeshauptstadt der Bundesrepublik Deutschland und zugleich eines ihrer Länder. Die Stadt Berlin ist mit über 3,4 Millionen Einwohnern die bevölkerungsreichste und mit 892 Quadratkilometern die flächengrößte Gemeinde Deutschlands sowie nach Einwohnern die zweitgrößte der Europäischen Union. Sie bildet das Zentrum der Metropolregion Berlin/Brandenburg (6 Millionen Einw.) und der Agglomeration Berlin (4,4 Millionen Einw.). Der Stadtstaat unterteilt sich in zwölf Bezirke. Neben den Flüssen Spree und Havel befinden sich im Stadtgebiet kleinere Fließgewässer sowie zahlreiche Seen und Wälder. 14

Outsourcing Outsourcing bzw. Auslagerung bezeichnet in der Ökonomie die Abgabe von Unternehmensaufgaben und -strukturen an externe oder interne Dienstleister. Es ist eine spezielle Form des Fremdbezugs von bisher intern erbrachter Leistung, wobei Verträge die Dauer und den Gegenstand der Leistung fixieren. Das grenzt Outsourcing von sonstigen Partnerschaften ab. 14

**PCI Express** PCI Express ("Peripheral Component Interconnect Express", abgekürzt PCIe oder PCI-E) ist ein Standard zur Verbindung von Peripheriegeräten mit dem

Glossar F

Chipsatz eines Hauptprozessors. PCIe ist der Nachfolger von PCI, PCI-X und AGP und bietet im Vergleich zu seinen Vorgängern eine höhere Datenübertragungsrate pro Pin.. 14

**Policy** Im geschäftlichen Bereich bezeichnet Policy eine interne Leit- bzw. Richtlinie, die formal durch das Unternehmen dokumentiert und über ihr Management verantwortet wird. 14

# List of Abbreviations

Abby	<b>vz.</b> Abbildungsverzeichnis	.11
CD	Compact Disk	. 14
ISO	Internationale Organisation für Normung	. 14
LAN	Local Area Network	. 14
SAS	Serial Attached SCSI	.14

# Bibliography

[Kna09] Joerg Knappen. Schnell ans Ziel mit LATEX 2e -. ueberarbeitete und erweiterte Auflage. Muenchen: Oldenbourg Verlag, 2009. ISBN: 978-3-486-59015-9.

# Online References

 $[Goo] \qquad Google. \ \textit{Google}. \ \textit{URL:} \ \texttt{http://www.google.de} \ (visited \ on \ 10/06/2015).$ 

# Image References

[PEX] PEXELS. Black and white branches tree. URL: https://www.pexels.com/photo/black-and-white-branches-tree-high-279/.

# Appendix A

- A.1 Diagram
- A.2 Table
- A.3 Screenshot
- A.4 Graph

# Declaration of Authorship

I hereby declare and confirm that this thesis is entirely the result of my own original work. Where other sources of information have been used, they have been indicated as such and Properly acknowledged. I further declare that this or similar work has not been submitted for credit elsewhere.

Berlin, February 2?, 2021

John Doe