

My Thesis about Something

myFirstname myLastname, theirFirstname theirLastname

Version 0.1, 24.04.2000

some preamble text over multiple lines

Teil I: asciidoc examples

1. Examples

1.1. General syntax principles

attribute defined in head of document: `:attribute-name: attribute content` can be used to insert its content with `{attribute-name}` like attribute content . There are predefined attributes

macro for applying a functionality to the value in brackets: there are block-macros that need to be on a separate line `macroname::[]` and inline-macros `macroname:[]`

an option for configuring something `[%optionname]`

a rule for formatting something `[.rulename]`

1.2. Textstructuring and -formatting

My Thesis about Something

Autor: myFirstname myLastname

Autoren: myFirstname myLastname, theirFirstname theirLastname

Fachhochschule Beispielstadt

Fachbereich XY

Betreuer: Prof. Dr. Beispiel

Jahrgang: Q1, 2024

Version: 0.1 vom 24.04.2000 / 2025-04-27 12:05:21 UTC

<http://xy.com> / my@email.nix

Some empty chapter with explicit page break

a paragraph can continue over multiple lines and linebreaks will not be respected, only an empty line will create a

new paragraph starting here.

```
if a paragraph starts with a blank character indent, then
it will be formatted as monospace,
keeping the breaks and      <- whitespaces
```

similar to a literal block

```
error: 1954 Forbidden search
absolutely fatal: operation lost in the dodecahedron of doom

Would you like to try again? y/n
```

some sidebar

some special info to note

text can be formatted as **bold** or *italic* or **monospaced** or _{subscript} or ^{superscript} or **highlighted** or using **built-in roles** resp. **built-in roles for pdf** for underlined text or ~~strikethrough text~~ or a colored background or a custom role **for special text**.

also special-characters can be used like ☑ ✓ ☐ ☑ ↑ ↑ ↓ ↓ ↔ ↔ « « » »

or explanation of keyboard-keystrokes **Ctrl** + **X** or menu-entries **View** › **Zoom** › **Size** or buttons **[Save]** to click for certain actions

or formulas/stem (see <https://asciimath.org>): $\sqrt{4} = 2\alpha + \text{abs } x$

or matrices $[[a, b], [c, \lambda]] \begin{pmatrix} n \\ k \end{pmatrix}$

or sum $\lim_{n \rightarrow \infty} \sum_{i=1}^n i^3 = \left(\frac{n(n+1)}{2} \right)^2$

or integrals and differentials $\int_0^1 f(x) dx \rightarrow f'(x) = \frac{dy}{dx}$

or logic $\forall x \exists y \subset x = A \wedge (B \vee C)$

or chemistry $H_2O + CO_2 > COOH + OH^+$

unordered list:

- Lorem ipsum dolor sit amet,
 - consectetur adipiscing elit,

- sed do eiusmod tempor incididunt ut
- labore et dolore magna aliqua.
 - Ut enim ad minim veniam

numbered list:

1. Lorem ipsum dolor sit amet,
 - a. consectetur adipiscing elit,
 - i. labore et dolore magna aliqua.
 - b. sed do eiusmod tempor incididunt ut
2. labore et dolore magna aliqua.
 - a. Ut enim ad minim veniam

checklist:

- ☐ not yet checked
- ☒ also checked
- ☐ not checked
- normal list item

interactive checklist:

- ☐ not yet checked
- ☒ also checked
- ☐ not checked

lets look at some quotes ..

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure. [\[ref1\]](#)

— Lorem Ipsum, Collection of Ipsums: Volume 11

This is a block quote

With multiple lines containing empty lines - lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris

nisi ut aliquip ex ea commodo consequat. Duis aute irure.

— author meister, episode II

and admonitions:



please note that ...



this is important ...



you have been warned!



stop!



helpful multiline tip

Lorem ipsum
in a block

and a [font awesome icon](#) for pdf  and folder  or a  question

some linkexample with plain url <http://someurl.nix/path> or specific [text to be shown as link](#) in text

internal cross references are automatically generated for section/chapter-titles and can be used starting with an underline and words separated with underline like see explanation in [Glossary and Abbreviations](#) or [same target but with different text](#)

some footnoteexample in text.^[1] or reusable definition here^[2] and reuse here^[2] without specifying footnote text

same thing via externalilzation in an attribute (eg. in head of document) for each footnote with same footnoteexample in text.^[3] or reusable definition here^[4] and reuse here^[4]

some referenceexample in some text as mentioned in [\[ref1\]](#) or same with [specific text](#)

format a wide range of coding languages with the "rouge" extension (see <https://github.com/rouge-ruby/rouge/blob/master/docs/Languages.md>)

Code 1. Java code

```
public class Stack {  
  
    private int size;  
    private int element;  
  
    public boolean isEmpty() {  
        return size == 0;  
    }  
}
```

```

    }

    public int pop() {
        if (size == 0) {
            throw new EmptyStackPoppedException();
        }
        size--;
        return element;
    }
}

```

Code 2. HTML code

```

<html>
<p><span id="replaceMe">Sample content</span> replaced by Javascript</p>
<script>
document.getElementById('replaceMe').innerHTML = 'New content!'
</script>
</html>

```

Code 3. GIT diff

```

diff --git a/asciidoc-pdf-example/arbeit-einbindung.adoc b/asciidoc-pdf-
example/arbeit-einbindung.adoc
index e69de29..16e3199 100644
--- a/asciidoc-pdf-example/arbeit-einbindung.adoc
+++ b/asciidoc-pdf-example/arbeit-einbindung.adoc
@@ -0,0 +1,3 @@
+Test Einbindung
+
+image::menueleiste-asciidoc-plugin.png[Menueleiste]

```

Code 4. XML code with linenumbers

```

1 /mein/pfad/zum/file.xml:
2
3 <?xml version="1.0" encoding="utf-8" ?>
4 <a>
5     <b codelist="http://standards.iso.org/iso/19139/">
6 xzy
7     </b>
8 </a>

```


Code 5. Ruby code, with explanation and no pagebreak

```
require 'sinatra' ①  
  
get '/hi' do ② ③  
  "Hello World!"  
end
```

① Library import

② URL mapping

③ Response block

By default, images are aligned centered, without floating text. *Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.*

But size can be defined relative to document-width or absolute and alignment can be right or centered with floating text. *Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi*

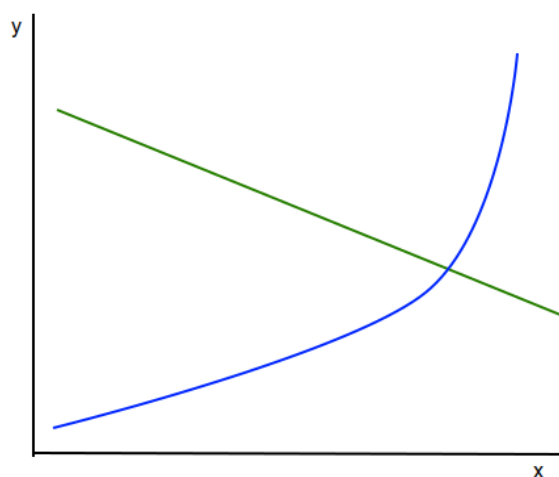


Abbildung 1. Example PNG image a with relative size and alignment right

ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

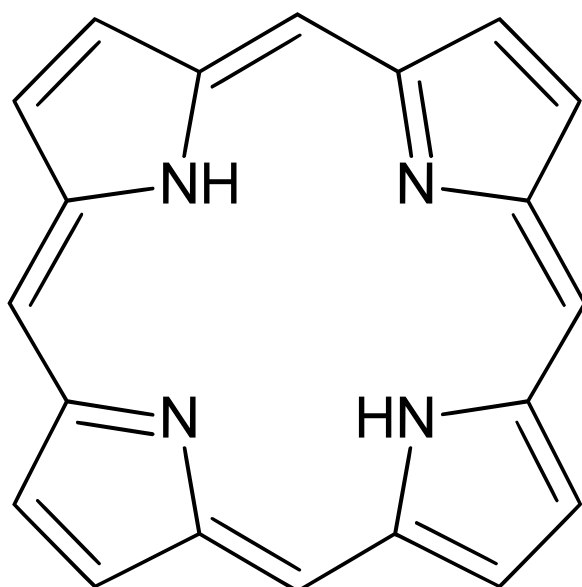


Abbildung 2. Example SVG image b with fixed size and alignment left

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

dolore eu fugiat nulla pariatur. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

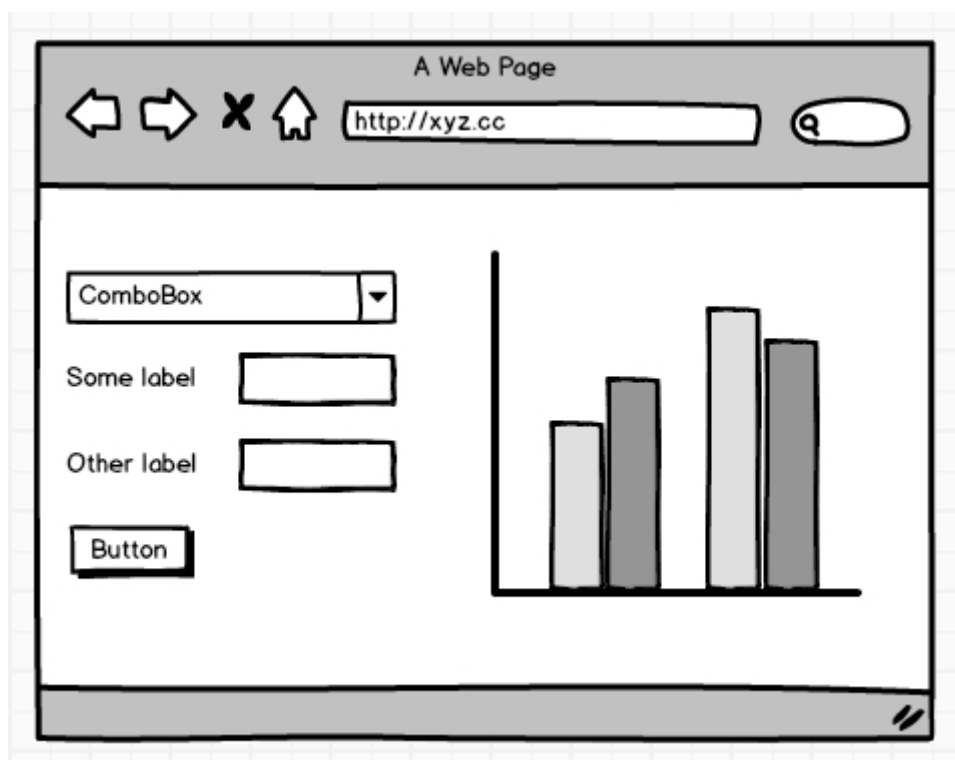


Abbildung 3. Example JPG image c

or specific pages 5,2,3 from a PDF:

not only `.adoc` can be included like this:

Included content from this adoc file.

much more content can be included and formatting accordingly for example:

Code 6. JSON include

```
{
  "object1": {
    "attr1": "aaaa",
    "attr2": "bbbb"
  },
  "objectlist1": [
    {
      "key1": "cccc",
      "key2": 20
    },
    {
      "key1": "eeee",
      "key2": 30
    }
  ]
}
```

Code 7. java-script code include

```
// comparision and condition
var onSale = true,
    inventoryCount = 10,
    discount = 0;

if (inventoryCount > 10 && onSale) {
  console.log("We have plenty left");
}
else if (discount > 0 || onSale) { // "onSale == true" not necessary
  console.log("On Sale!");
}
else {
  console.log("Full price");
}

// circle area
function calcCircleArea(radius) {
  return radius * radius * Math.PI;
}
console.log("Area is: " + calcCircleArea(3));
```

1.3. Tables

Tabelle 1. Table with one-line header and custom column-widths and some formatting

Header 1	Header 2	Header 3	Header 4	Header 5
Col 1, row 1	Col 2, row 1	Col 3, row 1	Col 4, row 1	Col 5, row 1
Col 1, row 2	Col 2, row 2 <div><div>including adoc things like monospace blocks</div><div>and lists<ul style="list-style-type: none">• a• b</div></div>	Col 3, row 2	Col 4, row 2	Col 5, row 2

Tabelle 2. Long table with multiline header (will be repeated after pagebreaks)

Header 1	Header 2 can be very long or so, just to explain is clearly but not shortly
Column 1, row 1	Column 2, row 1
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2

Header 1	Header 2 can be very long or so, just to explain is clearly but not shortly
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2
Column 1, row 2	Column 2, row 2

Tabelle 3. Table from csv

ID	FName	LName	Address	Phone
1	Nemo	Someone	London	+123
2	X	Y	A,B	45678

1.4. Diagrams

Text-based diagrams generated with PlantUML/Graphviz extension

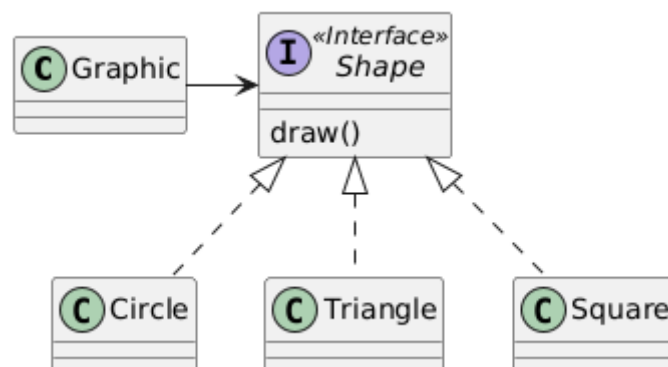


Abbildung 4. Class diagramm with PlantUML

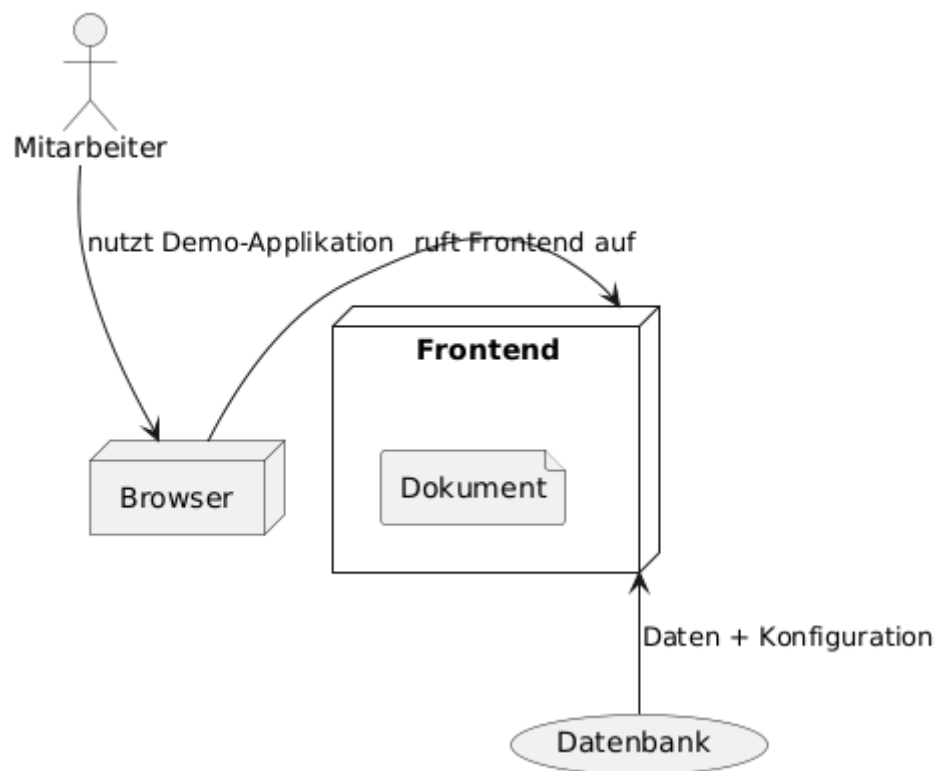


Abbildung 5. UseCase diagram with PlantUML

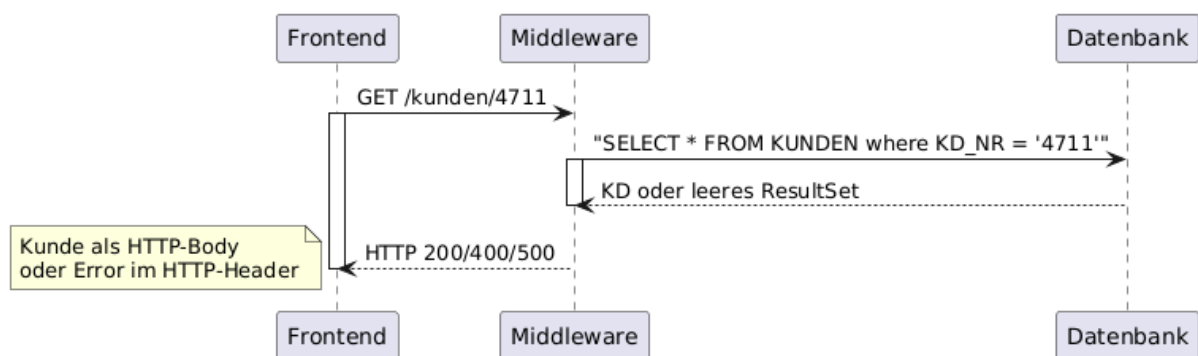


Abbildung 6. Sequence diagram with PlantUML

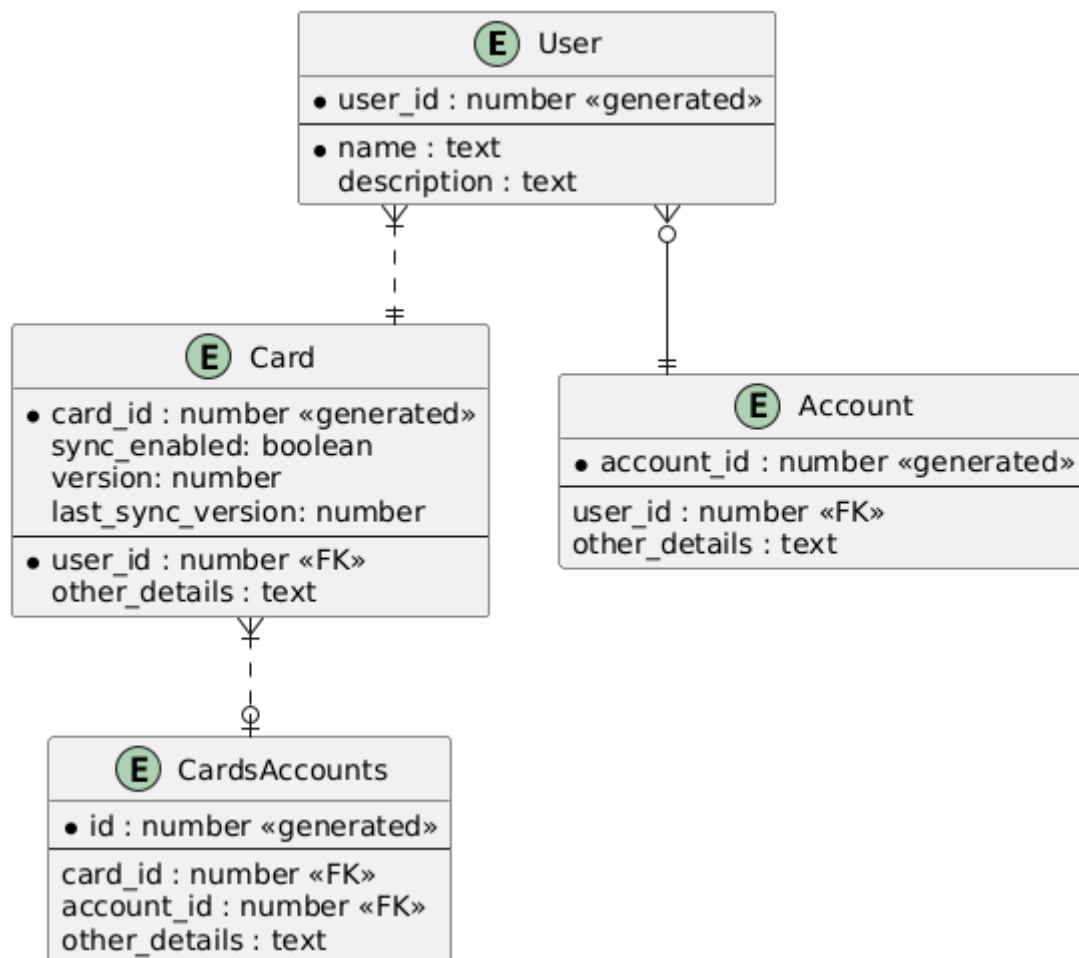


Abbildung 7. ERD with PlantUML

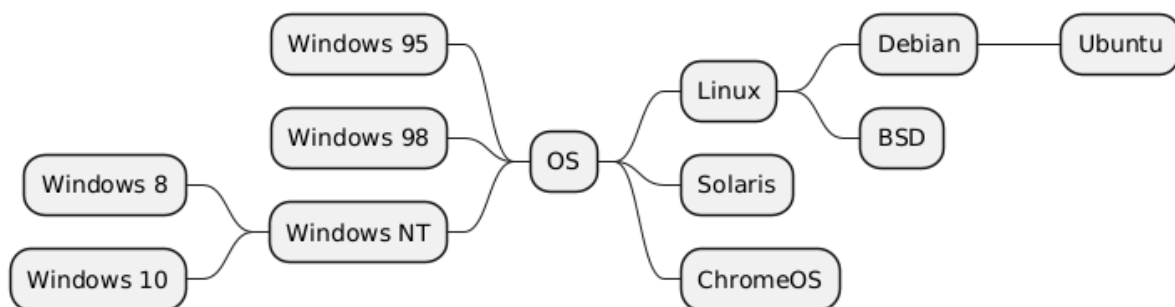


Abbildung 8. Mindmap with PlantUML

1.5. Glossary and Abbreviations

AsciiDoc Eine standardisierte textbasierte Auszeichnungssprache für Dokumentation.

1.6. Q&A

1. *question to ask?*
and its answer
2. *other question to ask?*
and its different answer

1.7. References

- [\[ref1\]](#) autor, titel, quelle(link/verlag), datum

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1.8. List of figures

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Abbildung 5. UseCase diagram with PlantUML

Abbildung 6. Sequence diagram with PlantUML

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Abbildung 8. Mindmap with PlantUML

1.9. List of tables

Tabelle 1. Table with one-line header and custom column-widths and some formatting

Tabelle 2. Long table with multiline header (will be repeated after pagebreaks)

Tabelle 3. Table from csv

1.10. List of codesnippets

Code 1. Java code

Code 2. HTML code

Code 3. GIT diff

Code 4. XML code with linenumbers

Code 5. Ruby code, with explanation and no pagebreak

Code 6. JSON include

Code 7. java-script code include

1.11. List of changes

(doc-as-code → include `git log --date=local --pretty=format:'%h, %an, %ad, "%s"' > doc-changelog.csv`)

4c02cdd	maenuje m	Thu Apr 24 16:07:02 2025	add structured and formatted example content to show basic capabilities
543f18b	maenuje m	Mon Apr 21 21:56:15 2025	add more gems
c44aaa4	maenuje m	Mon Apr 21 21:52:12 2025	add initial content
7b3824f	maenuje m	Mon Apr 21 21:07:29 2025	add initial files

Fussnoten dieses Kapitels

[1] text to be shown in footnotelist-page at end of chapter for footnote without id / used once

[2] text defined once for footnote with id used multiple times

[3] same text to be shown in footnotelist-page at end of chapter for footnote without id / used once

[4] same text defined once for footnote with id used multiple times

Teil II: practical work IPA

BiVo2021



Da für die Experten nur die Doku (plus Beobachtungen bei Besuch³) für die Bewertung anhand der Kriterien benutzt werden darf, gilt "Was nicht in der Doku ist, gibts nicht / wurde nicht gemacht"



Alles nur mögliche Ideen, nicht abschliessend und ohne Gewähr ;)

My Thesis about Something

Individuelle praktische Arbeit

myFirstname myLastname

Firmenname	xx
Abteilung	yy
Berufsschule	xy

Beteiligte Personen

Validexperte	xx
Hauptexperte	xx
Nebenexperte	xx
Verantwortliche Fachkraft	xy
Berufsbildner	xy

Fachrichtung	xy
Projektvorgehensmodell	xx
Jahrgang und Kanton	IPA 2025, Kanton Bern
Ausgabedatum	xx

2. Aufgabenstellung

Titel der Arbeit und Thematik

2.1. Ausgangslage

(pkorg1:1)

2.2. Detaillierte Aufgabenstellung

(pkorg1:1)

2.3. Mittel und Methoden

(pkorg1:1)

2.4. Vorkenntnisse

(pkorg1:1)

2.5. Vorarbeiten

(aktualisiert)

2.6. Neue Lerninhalte

(pkorg1:1)

2.7. Arbeiten in den letzten 6 Monaten

(pkorg1:1)

3. Standards

(Coding, Tools/Technologien,... → Anhang)

4. IPA-Schutzbedarfsanalyse

(Daten: Doku und Produkt/Systeme)

5. Organisation der IPA-Ergebnisse

(K:A9, Doku und Code: Versionierung und Backup > Nachweis im Anhang, Arbeitsmethodiken wie TODO/Kriteriencheck/Risikocochecks, KI, HW/SW:Versionen,..)

6. Projektmethode

(K:A1, was warum für IPA wie angewendet) (Scrum: Refinement/Planning, Daily, Review, Retro, Product Backlog → Sprint Backlog, UserStory → Feature und Story mit Schätzung und Priorisierung, DoD, QS)

7. Projektaufbauorganisation

(K:A11, Rollen in IPA und in Methode, Personen mit Kontaktangaben)

8. Zeitplan

(K:A4) image::mediafiles/zeitplan.png[]

9. Arbeitsjournal

(K:Doc7, A5, A7, A10)

9.1. Tag x, 01.01.2000

Tätigkeiten

Tätigkeiten	Beteiligte Personen	Aufwand Plan	Aufwand Ist	Differenz
x	x	x	x	x
Zeitaufwand total		x	x	x

Tagesablauf

Hilfestellungen und Entscheide

(Herausforderung und Lösung)

Reflexion

Was lief gut?

Was lief weniger gut?

Erkenntnisse und Massnahmen

Nächste Schritte

10. Persönliches Fazit

(K:Doc8, Vergleich Soll/Ist, Reflexion und Fazit/TakeAway)

11. Kurzfassung der Arbeit

(K:Doc6, A5)

11.1. Ausgangssituation

11.2. Umsetzung

11.3. Ergebnis und Ausblick

12. .. the main Part ..

(K:Doc1, Doc2, Doc5, A2, A3, A9, Doc4, A8, A12,..) (

- Inhalt passend zu Projektmethode und für aussenstehende Fachpersonen logisch/verständlich [\[refA\]](#)
- IST und SOLL, Abgrenzung/Rahmenbedingungen, generelle Vorgaben/Prozesse (Umfeld/Umgebung(Entwicklung, Runtime), Codeverwaltung/Deployment, Testing, ...)
- fachlich und technisch: Aufbau/Struktur und Ablauf/Verhalten (<https://arc42.org/overview>)
- UI > Logik(Domain) > Persistenz(API/DB), Rollen/Rechte
- Analyse > Entwurf > Umsetzung > Testing(umgebung/daten/user, testarten/ziele, ..., testfälle[vorbedingung, schritte, ergebnis], protokoll[wer, wann, ergebnis/beleg, massnahme]))

13. Verzeichnisse

13.1. Glossar und Abkürzungen

(K:Doc3)

AsciiDoc

Eine standardisierte textbasierte Auszeichnungssprache für Dokumentation.

13.2. Quellenverzeichnis

- [\[refA\]](#) autor, titel, quelle(link/verlag), datum

13.3. Abbildungsverzeichnis

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[Abbildung 2.](#) Example SVG image b with fixed size and alignment left

[Abbildung 3.](#) Example JPG image c

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[Abbildung 5.](#) UseCase diagram with PlantUML

[Abbildung 6.](#) Sequence diagram with PlantUML

[Abbildung 7.](#) ERD with PlantUML

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13.4. Tabellenverzeichnis

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13.5. Codeverzeichnis

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[Code 6.](#) JSON include

[Code 7.](#) java-script code include

13.6. Änderungsverzeichnis

(doc-as-code → include `git log --date=local --pretty=format:'%h, %an, %ad, "%s"' > doc-changelog.csv`)

4c02cdd	maenujem	Thu Apr 24 16:07:02 2025	add structured and formatted example content to show basic capabilities
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c44aaa4	maenujem	Mon Apr 21 21:52:12 2025	add initial content
7b3824f	maenujem	Mon Apr 21 21:07:29 2025	add initial files

14. Anhang

14.1. Protokolle

(Expertenbesuche, weitere)

14.1.1. Protokoll xy

Datum und Zeit	01.01.2000 10:00-10:30
Ort	Online
Protokollführer	xx
Teilnehmer	xx, yy

Besprochene Punkte

Thema	Bemerkungen / Ergebnis
x	<ul style="list-style-type: none">• yy• zz

Zu erledigende Aufgaben

Aufgabe	Bemerkungen / Ergebnis	wer bis wann
x	yy	z, 01.01.2000

14.2. Nachweis Versionierung und Backup

14.3. Standards (relevante Auszüge)

14.4. Sourcecode

(erstellte/angepasster Code: include git diff und/oder file → .caption mit filename pro file)