The Book of Magne

INF222 Crashcourse - v2022

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UNIVERSITY OF BERGEN
Faculty of Mathematics and Natural Scien

Scan me

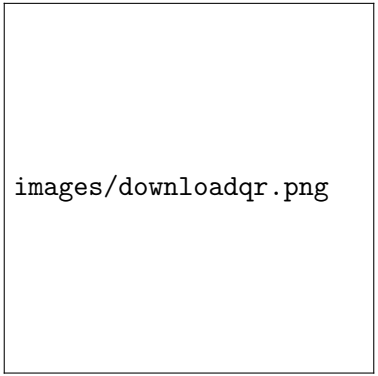

Figure: https://tinyurl.com/mnf130v22

Structure

- Every section appears in the table of contents and as a navigation title in the upper bar
- Every subsection gets shown in the blue box under the main bar
- Use a star after (sub)section to not show it in the table of contents
- Every slide is represented in its own *frame environment*

Tables

StudentNr	Name	Address	KursNr	KursName
580	Ola NordmaNN	5075 Bergen Fv 14	INF237	Algorithm Engineering
580	Ola NordmaNN	5075 Bergen Fv 14	INF273	Meta Heuristics
580	Ola NordmaNN	5075 Bergen Fv 14	INF227	Logic
256	Max MustermaNN	5055 Bergen Lv 85	INF237	Algorithm Engineering

To make a table, one uses the tabular environment as in normal LaTeX
You can write normal text before and after the table, remember to use newline

Multiple tables on one slide

StudentNr	Name	Address
580	Ola NordmaNN	5075 Bergen Fv 14
256	Max MustermaNN	5055 Bergen Lv 85

KursNr	KursName
INF237	Algorithm Engineering
INF273	Meta Heuristikker
INF227	Logikk

StudentNr	KursNr
580	INF237
580	INF273
580	INF227
256	INF237

Questions?

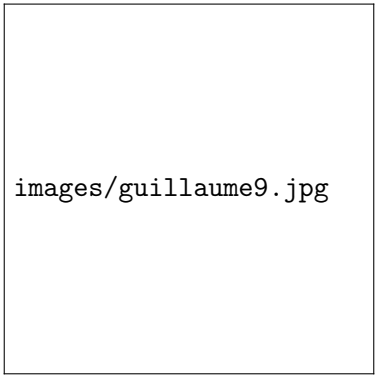

Figure: Guillaume in front of Tvindefossen

A frame

- A frame is not the same as a slide. We can make information appear and disappear on each slides, making up different states of a slide. This is called a frame
- The following pages will explain this in detail

Itemize: Showing each point after another

- Itemize works in the same way as in normal LaTeX

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- Itemize works in the same way as in normal LaTeX
- The command above makes every bullet point appear after each other on n different slides
- Everything working like lists has that functionality

Itemize: Explicit visibility

- This information is visible from slide 1 to the end of this frame

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- This information is visible from slide 2 to the end of this frame
- This one will disappear soon

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- This information is visible from slide 1 to the end of this frame
- This information is visible from slide 2 to the end of this frame
- This one will disappear soon
- This one will appear in slide 3

Itemize: Explicit visibility

- This information is visible from slide 1 to the end of this frame
- This information is visible from slide 2 to the end of this frame

- This one will appear in slide 3
- Did something disappear?

Itemize: Pause

- Exactly the same can be done using `pause`
- There will be an explicit visibility break before each `pause` command

Itemize: Pause

- Exactly the same can be done using `pause`
- There will be an explicit visibility break before each `pause` command
- The next slide will show the rest of the frame or until the next `pause` is coming

Pause within a text

Pause can be used within a big text block.

Pause within a text

Pause can be used within a big text block. And everything else.

Pause within a text

Pause can be used within a big text block. And everything else. The tilde-symbol is relevant since LaTeX would otherwise ignore the space after pause.

Textblocks

There are three different colours of textblocks in LaTeX. The colours can be changed, but nobody knows how.

Remark

The names of the environments are `block`, `alertblock` and `examples`

Important theorem

French is a weird language

Examples

Un bel avion est un avion qui vole bien.

Example Python

You can use code on your slides by using the `minted`, but you need to mark your slides with the parameter `fragile` python for i in range(10): print("use Haskell")

Example SQL

sql SELECT * FROM books WHERE title = "Der satanarchäolügenialkohöllische Wunschpunsch";

The Visible command

The `<a-b>` command from `itemize` can be used for other slide elements as well. With `Visible`, you can define a part of the frame only appearing on some sub-slides (from x to y)

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$G := (V, E)$ with V a set of vertices and $E := \{(a, b)$ and (b, a) with $a, b \in V$ and $a \neq b\}$

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$G := (V, E)$ with V a set of vertices and $E := \{(a, b)$ and (b, a) with $a, b \in V$ and $a \neq b\}$

$$G = (\{1,2,3,4,5,6\}, \{(1,2),(2,1),(1,3),(3,1),(1,4),(4,1),(2,4),(4,2),\\ (2,5),(5,2),(2,6),(6,2),(3,4),(4,3),(3,6),(6,3),(5,6),(6,5)\})$$

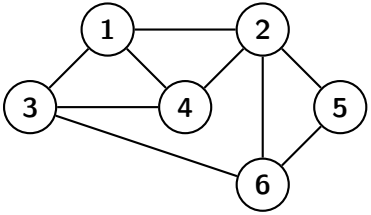
The Visible command

The <a-b> command from `itemize` can be used for other slide elements as well. With `Visible`, you can define a part of the frame only appearing on some sub-slides (from x to y)

Lets make that math stuff disappear

The `only` command works in the same way as `visible` but hands back space on the slide for other things to show

$$
\begin{array}{ll}
1: & \begin{bmatrix} -1.28078 \\ 0.280776 \\ -1 \\ -1.28078 \\ 2.28078 \end{bmatrix} \\
2: & \\
3: & \\
4: & \\
5: &
\end{array}
\quad \rightarrow \quad
\begin{bmatrix} -1 \\ 1 \\ -1 \\ -1 \\ 1 \end{bmatrix}
$$



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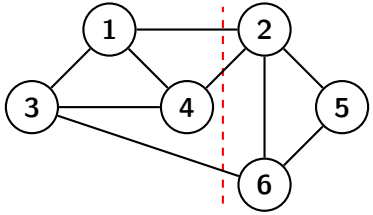
$$
\begin{array}{ll}
1: & \begin{bmatrix} -1.28078 \\ 0.280776 \\ -1 \\ -1.28078 \\ 2.28078 \end{bmatrix} \rightarrow \begin{bmatrix} -1 \\ 1 \\ -1 \\ -1 \\ 1 \end{bmatrix} \rightarrow \begin{array}{l} V_1 = \{1, 3, 4\} \\ V_2 = \{2, 5, 6\} \end{array} \\
2: & \\
3: & \\
4: & \\
5: &
\end{array}
$$



The representation of a frame in two columns is *of course* possible.

$$P \stackrel{?}{=} NP$$

- Presentation fanatics can make them appear
- after each other
- But who would do that?

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To do this, you can use the `column` command where you define the width of both columns. This frame has a 50:50 proportion.

Thank you for listening!

Good luck with your fantastic Beamer presentation