My awesome presentation

A 15 minute LaTeX Beamer extravaganza

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This is some normal text with some items:

- List item one,
- List item two,
- and list item three.

And some more text.

This is a slide note

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You can also highlight information in a so-called block

This is a block

Some information worth remembering.

Beamer does not like code listings very much, so you will need to use the **fragile** modifier. This is an example of some Arduino code:

```
1  void setup() {
2      // Pin D13 out
3  }
4
5  void loop() {
6      // turn LED on
7      // wait 1 s
8      // turn LED off
9      // wait 1 s
10 }
```

Sometimes it is a good idea to divide the frame into two columns. You can use other environments in frames:

This is the content in the first (left) column.
Yet more information.
Chicken, chicken, chicken.

This is the content in the second (right) column.
Yet more information.
Chicken, chicken, chicken.

Part I

Parts
This is a stand-alone page separating parts. Use it sparingly, only for long presentations or lectures (>30-45 min).

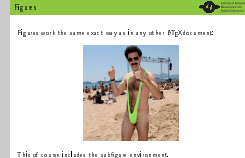Figures work the same exact way as in any other LaTeXdocument:

This of course includes the subfigure environment.

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You can and should use references. References are cited like in any other LaTeXdocument, so we have [Takács et al., 2016] or
[Asato et al., 2015, Stark et al., 2015] etc. References are inserted at the end of the presentation, are automatically broken up to frames and are not numbered.

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Pauses serve to gradually reveal parts of your frame. This will create more pages in the PDF (without advancing the frame counter) thereby achieving the desired result.

- Then you can go on the next portion of the information...
- ...and the next one

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- ...and the next one

Overlays essentially add more control to pause-like behavior when you want to reveal specific parts of your frame. By using overlay commands such as `<1-2,4,5->`, you can tell exactly when the part shall appear. The numbers in the brackets specify when the item should appear, the hyphen before tells LATEX that it should be there from the beginning, the hyphen after means that it should stay up to the end.
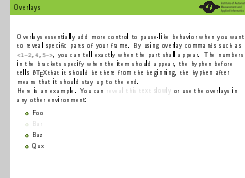
Here is an example. You can reveal this text slowly or use the overlays in any other environment:
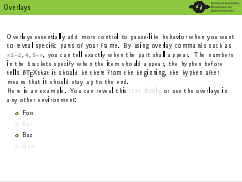
- Foo
- Bar
- Baz
- Qux

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You can create content and then break it up to several sub-slides by the `allowframebreaks` modifier. If you want to manually trigger a break, you then use `framebreak`. If you wish, you can just continue on your text and let LaTeX decide when to break your frame to more slides (e.g. pages in the PDF).

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LATEXwill hold page numbering on the given slide, keep the title and append a roman numeral, as to indicate that the content continues. (It is a nasty little trick to decrease complete frame numbering, but still have the slides you need.)

- Use the `important` command to create text that is important. Alternatively you can use the `alert` command that is valid in Beamer to achieve the same results. The original color for alerts in beamer is red, which would look very ugly here.
- Use the `veryimportant` command to create text that is very important .

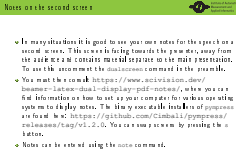- In many situations it is good to see your own notes for the speech on a second screen. This screen is facing towards the presenter, away from the audience and contains material separate to the main presentation. To use this uncomment the `dualscreen` command in the preamble.
- You must then consult `https://www.scivision.dev/beamer-latex-dual-display-pdf-notes/`, where you can find information on how to set up your computer for various operating systems to display notes. The binary executable installers of `pympress` are found here: `https://github.com/Cimbali/pympress/releases/tag/v1.2.0`. You can swap screens by pressing the `s` button.
- Notes can be entered using the `note` command.

Event or Presentation title

2019-05-10

└─Notes on the second screen

This is a note that will be displayed on the second screen

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Combine the above tricks to create visually engaging presentations!

```
1  void setup() {
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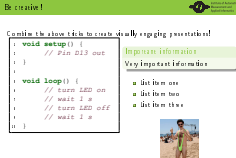**Important information**

Very important information

- List item one
- List item two
- List item three

- Dĺžka prezentácie je 15 min ani o minútu dlhšie.
- Počet strán cca. 1-2 na minútu, odporúčané je teda 10-20.
- Premietaná prezentácia slúži pre audienciu nie pre Vás. Spolu s tým čo hovoríte tvorí celok.
- NeprepĺÅ̌ajte slide informáciami. (Ako napríklad tu.) Je absolútne dovolené mať jednu vetu resp. jednu fotku na slide a potom slovne vysvetliť všetko ostatné.
- Úvodná strana obsahuje názov práce a Vaše meno
- Žiadne úvody o všeobecnej teórii
- Musíte vysvetliť motiváciu. Motiváciu na napísanie BP/DP a motiváciu pre komisiu prečo dávať pozor
- Prezentujte hlavne svoj prínos, vlastnú prácu a vlastné výsledky
- Z prezentácie musí byť jasné čo ste robili vy, čo už ste mali dané, atď.
- Fotografie reálnych výstupov sú vysoko vítané…

2019-05-10

└─Prezentácia záverečnej práce (BP/DP)

- Začínajte s tím prečo ste robili to čo robíte, potom aké boli východiská, ďalej ako ste samotný problém riešili a na záver zhodnoťte dosiahnuté ciele, prípadne dajte ešte krátku víziu čo by sa dalo robiť do budúcnosti (ak tam je potenciál - samozrejme).

- Posledná snímka (slide) Poďakovanie za pozornosť...

- Po poďakovaní čakajte na vyzvanie a potom bude prezentácia pokračovať vopred pripravenými odpoveďami na otázky oponenta. Štýlom Otázka oponenta a pod ňou Vaša odpoveď... Môžete vložiť pár slideov až po poďakovaní kde uvediete otázky oponenta a Vaše odpovede na nich

- Ak máte videá z prezentácie dajte ich na záver svojej prezentácie, môže byť aj ako externý zdroj.

Okrem všeobecne platných princípov pre prezentácie BP/DP na minimovú prácu platí aj

- Uvediete podstatný obsah svojej práce a jej výsledky
- v rozsahu najviac 25 min, skôr 20 min.
- Po závere a ešte pred poďakovaním vložíte tézy svojej práce.
- Tézy sú testovateľné vedecké hypotézy nie "zadania"!

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Okrem všeobecne platných princípov pre prezentácie BP/DP dizertačnú prácu platí aj

- Uvediete podstatný obsah svojej práce a hlavne jej výsledky
- splnenie cieľov zadania
- prínos práce
- používajte odvolávky na vlastnú prácu
- v rozsahu najviac 25 min, skôr 20 min.

Thank you for your attention!

Please feel free to contact me any time at `jmrkvicka@stuba.sk`

How did you calculate the mass of the sun?
The sun's mass has been found using Newton's law of gravitation.

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Why is the sky blue?
Blue light is scattered in all directions by the tiny molecules of air in Earth's atmosphere. Blue is scattered more than other colors because it travels as shorter, smaller waves. This is why we see a blue sky most of the time.

How many five year olds can you realistically take in a fight?
About 31.

📄 Asato, K., Nagado, T., and Tamaki, S. (2015).
Development of low cost educational material for learning fundamentals of mechatronics.
In *2015 International Conference on Intelligent Informatics and Biomedical Sciences (ICIIBMS)*, pages 454–456.

📄 Stark, B., Li, Z., Smith, B., and Chen, Y. (2015).
Take-home mechatronics control labs: a low-cost personal solution and educational assessment.
ASME 2013 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference Volume 4: 18th Design for Manufacturing and the Life Cycle Conference; 2013 ASME/IEEE International Conference on Mechatronic and Embedded Systems and Applications, pages 1–9.

📄 Takács, G., Zometa, P., Findeisen, R., and Rohaľ-Ilkiv, B. (2016).
Embedded model predictive vibration control on low-end 8-bit microcontrollers via automatic code generation.
In *ICSV 23: Proceedings of the 23rd International Congress on Sound and Vibrattion. Athens, Greece, 10-14 July, 2016*, pages 266/1–266/8, Athens, Greece.