A Tutorial on Creating Presentations Using Beamer

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Some info on LATEX

- LATEX is a typesetting language which makes creating professional documents of any type but is generally used in the mathematical sciences.

- You start with a .tex file. You compile this to a .dvi file. Then you convert this to a .ps file. Finally, you convert this to a .pdf file.

- Installing LATEX on a PC

    1. Install some LATEX distribution. *MiKTeX* is a good one.
    2. I highly recommend getting a nice editor. *LEd* is a popular one. You need to configure it with your LATEX distribution before you can use this editor. More info can be found on the LEd website.

- A good tutorial for LATEX can be found *here*.

Some info on LATEX

- There are two main "modes" in which beamer works.
  1. Text mode (which we have been in the entire presentation)
  2. Math mode ($\sum_{i=1}^{n} \frac{1}{i} = \log n$)
- Virtually any symbol you can think of, LATEX can provide.
  - Most symbols that you might want to use can be found *here*.
  - For a (very large) pdf of more symbols than you could possibly want to deal with, look *here*.
- Some symbols require a package that does not come with LATEX. In most such cases, MiKTeX will install any missing packages.

LaTeX
Beamer

Themes
Blocks and Columns
Figures
Overlays

Why Beamer?

- You can quickly create professional presentations.
- Writing mathematical formulas is easy after a small amount of practice.
- Presentations are in pdf format and can be run on any operating system.

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Why not Beamer?

- Animation is not as easy as in Powerpoint.
- You have to compile it every time you want to view what you are doing, a downside to LaTeX in general.

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Themes

- There are several themes from which you can choose.
- A gallery of some of the themes can be found *here*.

Blocks

Block 1

- You can use blocks (which this is contain in) to help organize your presentations.

Block 2

Each theme will display blocks differently.

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Columns

Block 3

You can create columns to organize your data like so.

Block 4

You can set the columns to be as wide as you want.

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Columns

Smaller Block
This column takes up 30% of the page.

Wider Block
This column takes up 70% of the page.

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Columns

Over the columns

This is over the columns.

Block 3

You can create columns to organize your data like so.

Block 4
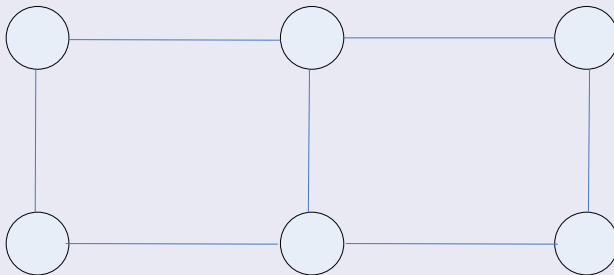
You can set the columns to be as wide as you want.

Under the columns

This is under the columns.

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LaTeX
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Figures

- You can add figures to your presentations.
- In order to get "animation", you need to have several slides overlayed with the figure changing each time (to the best of my knowledge).
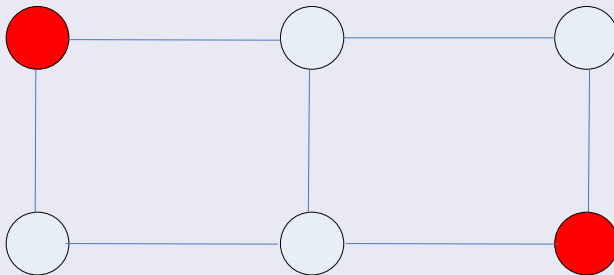

Domatic Partition

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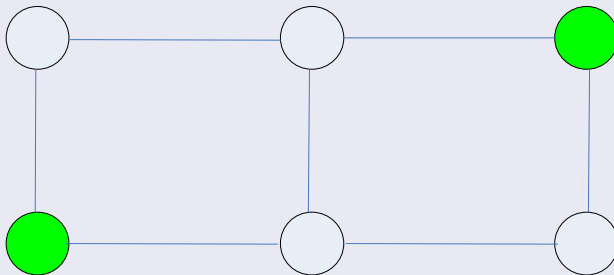

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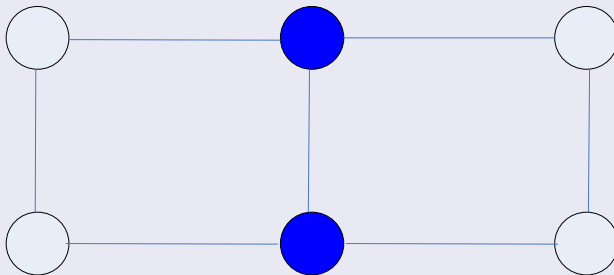

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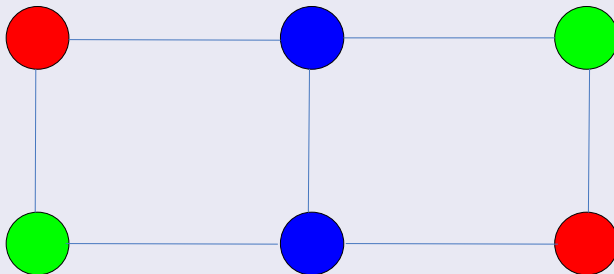

Domatic Partition

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Overlays

- You can create an overlay effect using the "pause" command.

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- You can create an overlay effect using the "pause" command.
- This creates a different page in your pdf.

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- You can create an overlay effect using the "pause" command.
- This creates a different page in your pdf.
- While it can be handy, it can make your pdf be quite large if you do it on every slide.

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Questions?