

VE472 — Methods and tools for big data

L^AT_EX slides and poster

Manuel — UM-JI (Summer 2022)

Goals of the lab

- Improve your L^AT_EX skills
- Practice poster design
- Prepare a professional booklet

1 Background

After a meeting between Donnel, Kazato, Joe, and Mikel, it was decided that the posters and booklet should be designed using L^AT_EX in order to provide maximum flexibility while complying with SilverFOCS' high quality standard in term of marketing and communication.

2 Poster

Designing high quality posters is no simple task. A good poster is expected to

- Introduce the project while highlighting its strengths;
- Engage the viewer by being clear and appealing;
- Be well written but easy to read and follow;

Much attention should be paid to details to ensure an optimal experience for the viewers. Lets consider the draft of a Pac-Man poster.

Tasks.

- Find at least eight design problems;
- Without considering the above design problems, suggest at least three strategies that could be applied to potentially improve the design;
- Find at least six issues with the language elements;

Mikel has prepared two sample posters:

- Pac-Man poster was designed with the purpose of making interns think of common design shortcomings while providing sample code in a real poster context;
- A startup file was written to ease the understanding of the source code and allow for basic manipulations;

To fully benefit from this workshop, download and refer to `tcolorbox` documentation.

Tasks. Open `poster.tex`, and answer the following questions.

1. Background.
 - Change the background color to blue, without any gradient;
 - Add a background image (at this stage, no need for a high quality image);
2. Look at the source code comments and explain how to use the `textblock` environment;

3. Increase the width of the “Introduction box” and shift it right;
4. The anchor defines “where the box is attached on the canvas at coordinates (x,y) ”. It can be specified using the second parameter $[x,y]$.
 - What are the meanings of $[0,1]$, $[1,1]$, and $[0.75,0.25]$?
 - Attach the design philosophy box with the anchor at its center.
5. Change the background color of the “Highlights box” to blue 25% and black 75% while making the foreground color white;
6. What is `blankbox` and how to use it?

Hint: search for “blanker” in `tcolorbox` documentation.
7. What is a `tcbraster` and how can it be helpful for your poster?
8. To use a different font,
 - What needs to be done on Overleaf?
 - How to define a new font family in the \LaTeX source code?
 - How to use the newly defined font in the text?
9. Adjust the opacity of the developers’ note to 0.25 for the frame and 0.5 for the content;

Tasks. Open `pacman.tex`, and answer the following questions.

1. The “Title” and “Introduction boxes” are aligned with respect to the bottom, align them with respect to their centers;
2. All boxes feature a `remember` as parameter. Under what circumstances will you need it for your own poster?
3. Adjust the `pacbox` definition to use sharp corners;
4. How useful is the `borderline` option to build a simple box?
5. Instead of using boxes based on the ghost image we want to use `octobox`. Adjust the code to display four octagonal boxes side by side;

Hint: change the number of columns and rows in `tcbraster` parameters;

6. Bullet points.
 - Search online how to increase the size of bullet points and ensure they do not look too small on the poster?
 - The color of the text in a `tcolorbox` does not affect the color of items, how did Mikel did it for the “Highlights box”?

Hint: search for “setbeamercolor” in `pacman.tex`;

3 Booklet

Kazato is expecting a highly professional booklet which fully engages the readers and incites them to play. It is mandatory to ask for his formal approval, if at any stage you think of adjusting the official SilverFOCS template (e.g. adding low opacity background on each slide, changing the color theme).

Tasks. Open `booklet.tex`, and answer the following questions.

1. What is the difference between `\fadedpic` and `\fffadedpic`?
2. Why should images be of the exact same height when laid out horizontally and exact same width when positioned vertically?
3. What are meaningful resolutions for booklet images when displayed full frame or on part of the frame?
4. How to adjust the column width to ensure a balanced spacing?
5. How to create a comic book bubble attached to a character?
6. In an animation how to ensure elements do not randomly move between two slides?
7. How to change the colors for a single slide?
Hint: check the concept diagram frame;
8. How to include a video in the slides?
9. Spy library.
 - How to use `TikZ` spy library?
 - Using a style of your choice, create a new spy on the title box.