Template homework

Student name: Andre F. V. Matias

Course: Modeling and Simulations
Due date: April 25th, 1974

1. The basics

The easiest way to edit a Typst file is using **typst.app** online editor, a browser based editor that already has all the required packages installed. Try importing this project to typst online editor and edit there.

After opening this project in typst online editor, the first thing to edit is the information about you and the course. You can change that above. For example, the title can be changed in #Title(reportName: "Template homework").

1.1. Images. The inclusion of figures needs to be inside the environment *figure*. You can see an example below.



Figure 1: Figure caption edited here. The position of the image can be controlled by changing the h above. Use t for top of the page, b to bottom of the page, h to fix the position of the image, and auto to let typst decide. The alignment of caption can also be adjusted, by changing the captionAlign above, l indicates left, r indicates right, and c indicates center^[1].

1.1.1. Sub figures. Multi figures can also be combined using the subfigure environment.

For more information see <u>Typst>Reference>Model>Figure</u>.

Remark: It is hard to place the iages and tables exactly where we want. Sometimes it is better to let Typst win.

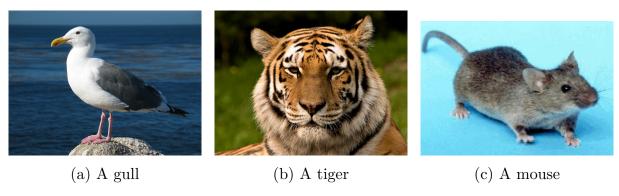


Figure 2: Pictures of animals.

1.2. Math mode. Euquations can be embedded in the text with \$...\$. For example, $a^2 = b^2 + c^2$. And can be highlighted with

$$\alpha^2 = \beta^2 + \gamma^2$$

$$\sum_{n=1}^{2}$$
(1.1)

Code like <eq-1> added labels to equations, figures, tables, etc. For equation, only those with labels will show reference numbering on the right. This method enables the referencing of equations using Eq. (1.1). The same is true for figures (Fig. 1, Fig. 2a), tables (Table 1), sections (Sec. 1.1), etc^[2]...

For more information see **Typst documents** and **Typst example book**.

2. Code snippets

To include code snippets we use a 3rd party library called codly. Import the library at the beginning of the document^[3]:

```
1 #import "codly.typ": * Typst
```

And then you can write code like the example.

```
1 // Simple C program to display "hello world"
2
3 // Header file for input output functions
4 #include <stdio.h>
5
6 // main functions
7 // where the excution of program begins
8 int main()
9 {
10 // prints hello world
11 printf("hello world");
12 return 0;
13 }
```

Listing 1: A code listing.

For more information see https://github.com/typst/packages/tree/main/packages/preview/codelst/2.0.0. To refer it, use @codel to get Listing 1.

3. Lists

The inclusion of list, such as enumerate or bullet points are very easy to make.

3.1. Enumerate.

- 1. Point 1;
- 2. Point 2;
- 3. Point 3.

Without an empty line between, it will be:

- 1. Point 1;
- 2. Point 2;
- 3. Point 3.

3.2. Bullet points.

- Bullet 1;
- Bullet 2;
- Bullet 3.

Without an empty line between, it will be:

- Bullet 1;
- Bullet 2;
- Bullet 3.

4. Tables

Tables are generated with a 3^{rd} party library called tablex. Import it at the top of the document using:

Below is an example of a table.

Table 1: Table caption

For more complex configurations, please refer to https://github.com/PgBiel/typst-tablex.

4. References

- [1] Figure Function Typst Documentation[EB].
- [2] Reference Function Typst Documentation[EB].
- [3] Codly/README.Md at Main · Zheoni/Codly[EB].