Assignment 1 Report

Statistical Library

Members:

Đinh Duy Kha 1411675

## Introduction

### Challenges

Statistical and probabilities is a rather new topic for us because we have not taken the course. This created many difficulties in implementing this project.

### Goals

## Tool used

### Code::Block

Code::Block is the basic IDE of taught in the course. We decided to use it because it is simple and easy to use.

### Git and Github

Git is a version control system that is simple and fast. A version control system helps us synchronize our code across different computers. This helps us speed up the development process tremendously.

Github[[1]](#footnote-1) is a free-to-use Git repository hosting service. It is used by more than 31 million developers across many fields, with more than 100 million repositories hosted[[2]](#footnote-2).

The Github for our project is at: <https://github.com/dalo2903/statistical-lib>

## Implementation

### Classes

To increase the modularity of the code, we decided to split the program into 3 classes that do different tasks of the program. Those classes are the following:

#### statistical\_lib

This class contains the main logic of the programs

#### data\_loader

This class implement methods to load data from files into memory.

#### menu\_printer

This class mainly contains functions to print out the user interface of the program. Those function are implemented mainly using *<iostream>* library for printing , <*iomanip*> and <*windows.h*> libraries for formatting. This class contains the following functions:

1. void print\_title(): Print the header of the program’s interface.
2. void print\_main\_menu\_no\_data(): Print main interface when there is no data loaded.
3. void print\_main\_menu():
4. void print\_load\_data\_menu()

### Data types

#### union type

### Data structures

#### std::vector

### Functions

#### Building

## Conclusion

## References

[For best results when selecting text to copy or edit, don’t include space to the right of the characters in your selection.]

1. [Here is a numbered list which you can find in the Styles gallery.]

### [Heading 3]

[Replace this text with your text.]

1. <https://github.com> [↑](#footnote-ref-1)
2. <https://github.com/about> [↑](#footnote-ref-2)