**Conclusion of Our Project**

**Romain**

During this project I have learned to work on data-visualization, modeling of classifier and using a flask application.

Concerning **data-visualization**, I have been led to reuse the basic libraries seen during the TD: **numpy, panda, matplotlib, seaborn**. I learn how to **work on a dataframe** (group by, drop column, count) and plot multiple graphs.

About **Modeling classifier**, I have discovered several types of classifiers: **bagging, boosting, stacking and voting**. I have also become aware of the importance of a **grid search** to find optimize classifiers. Thanks to this project I have develop a method of work to find a final model with a good accuracy (I explain it in the conclusion of our power point).

Regarding the creation and use of a **flask application**. I had a lot of difficulty to understand how it worked. I have met many problems with the import and the compatibility of the libraries I needed. Thanks to this part of the project, I have developed my knowledge about the **command prompt** (creation and deletion of environment, installation of libraries, moving throw the drive, launching file). I also learn about the use of **flash request with URL parameters**. I am proud to have implemented a few **html** in our project and also a set up of 8 functions of verifications in order to avoid crash of the application and allows to have a **clean interface**. As a bonus, I have discovered the **import of python file in another python file**.

**Leonard**

This project gave me the opportunity to learn a lot of new skills, especially in data analysis and collaborative work on GitHub. Indeed, it was the first time for me that I used a **Git environment**, and it was not easy to understand how it worked. But at the end we managed to create a clean **Github repository** and after that it was extremely pleasant to work online in a **collaborative environment**.

Concerning **data analyze and visualization**, I had the possibility to reuse the libraries seen in practical work and perfect my skills on those libraries, especially **seaborn** which I discovered only this year and **pandas** with all the possibilities it gives to analyze data frames.

I also learned to work on modeling classifier and to use the **sklearn library**. I have learned to use the classifiers that were introduced to us during practical work session like the **K neighbors Classifier** and the **SV Classifier** (Support Vector Classifier).

Using the **Grid Search Model** is also something I learned during this project and I realize it was extremely helpful to optimize an already existing classifier. Thanks to all these classifiers we managed to create models with a very good accuracy which I am pretty proud of.

Finally, I leaned to do **predictions** on chosen data thanks to a model we created previously. Thank to this learned knowledge, our code can predict the type of Obesity a person is facing thanks to a few information this person gives us.

This Project was very **rewarding on the technical way**, but also **on the collaborative way**, because it is always interesting to work with another person on an IT project.