

## TP3 - Questions

- In your point of view, what was complicated in the TP#2? What were your pain points? What could you do when expanding this TP to avoid these further?

In TP2, I had difficulties with the connection of the API and making the links between my different files. Then, I had some problems when using Newton.Json (the serialization).

In this TP, I took back all the basics with a clear mind and redo correctly the TP2 to make it work properly. This is what was done.

My research in documentations and understanding of the principles is improved.

- What are the S.O.L.I.D. principles? What are the “KISS rule” and the “boy scout rule”? What’s clean code, clean architecture?

### S.O.L.I.D :

This brings together five design principles intended to produce more understandable, flexible, and maintainable software architectures. (Single responsibility, Open/closed, Liskov substitution, Interface segregation, Dependency inversion)

### KISS rules:

This means: Keep it stupid simple. It is a design that is about simplicity in design and complexity avoidance.

### Boy-scout rules:

This is the principle of always leaving the code cleaner after our passage.

### Clean code:

It is a code that has been thought out so that it can be read, understood and operated. It must be flexible, maintainable and durable.

### Clean architecture:

It is defined by different independent layers. We start from the layer that concerns the details to the most critical layer.

- How would you expand this code? What can you add to the software you build to make it more useful, reliable, relevant to the user? Find 5 ways to improve your previous TP, even if that's not doable.

1. Take multiple variables from the API and create calculations like temperature averages / create global warming indicators.
2. Create weather alerts based on wind and flooding, like orange or red zone in case of storm.
3. Search bar to search by location.
4. A map of the world with the real time weather and in the days to come.
5. Display of seasons and seasons and to be able to compare the temperature level and period with the previous years.