# Advanced SpreadSheet – Big Data Assignment - Gaëtan Mourmant

**This is a group work (2 or 3 people)**

**Part 1 : Create an interactive dashboard (40%)**

**Part 1 is due October 13rd , 2017 at 9 pm (France time) and should be uploaded on Iéseg Online.**

1. Structure the workbook according to this :
   1. Data : Find or create a dataset as mentioned during the class
   2. Parameters : for example, you will store the cells linked to form controls (in general one worksheet). Don’t forget to name those cells.
   3. List : where the lists are stored (in general one worksheet)
   4. Dashboard : what the end user will see (in general one worksheet)
   5. Documentation, including the presentation of the company and who is the final user. Design the documentation for someone who is going to modify the file after you left the company.
2. I need to see the following elements
   1. An interactive dashboard using
      1. VLOOKUP,
      2. INDEX/MATCH
      3. SUMPRODUCT
      4. SUMIFS
      5. SUM (with CTRL+MAJ+Enter).
   2. The dashboard should also use the following control from the developer menu : combobox.
   3. Data validation
   4. At least 4 different pivot tables with 2 slicers and 1 timeline
   5. A VBA Userform to navigate through the system and change the parameters. It could be the hyper navigation or a different one you create.
3. Polish the design
4. Don’t be afraid to be creative.
5. Save the excel file under your\_name.xlsM.

**Part 2 – VBA : (60%)**

**There are 4 intermediary deadlines for this project.**

**1/ Submissions of the first draft of the functions to the 4 overarching teams for evaluation and feedback => Today.**

**2/ Comments and recommendations from the overarching team => Today**

**3/ Based on the comments of the overarching teams, submission of the final project to the overarching teams and upload to Ieseg Online => October 10th at 9 pm.**

**4/ Integration of the functions by the overarching teams into a single entity + comment on the quality of the integration of the feedback for each function. Upload the project to Ieseg Online => October 20th at 9 pm.**

By creating the XL Big Data Tool, the evaluation will be personalized according to your function. The following elements will be assessed.

The overarching groups will benefit from a different evaluation system.

The code should contain at the very least the following elements:

* Documentation (50%):
  + In a worksheet, please document the general structure of the project
  + In the code, comment extensively.
  + You can use some code from the Internet, but   
    1/ Add the source of the code (hyperlink)  
    2/ Do not use more than 50% of internet code in the project  
    3/ Comment this code extensively to demonstrate that you understand what you are using.
* VBA code (40%)
  + DIM
    - Variables (String, Long, variant)
    - Use of objects (Range, worksheet or workbook)
  + Store your data table in an Array in VBA and perform some data transformation. Bring that array back to excel in a new worksheet
  + For this, use at least
    - For … to … Next
    - If … Then… Elseif … End if
  + Userform
    - Use different controls
* Design. Use white background for the userform (10%)