

## Technical Test 2021 – Business intelligence Student

### PART 1 – 50%

Using the data model below (Figure 1), and the OLAP cube (Figure 2) create the ETLs using Pentaho Data Integration needed to generate the fact table and dimensions tables of the active projects from 2019 to 2020.

Please download the following SQL file, with the code to create the data that should be used in this exercise ([Download SQL file](#)). Execute it in a local MySQL 8.0 local database.

Descriptions for each table as follows:

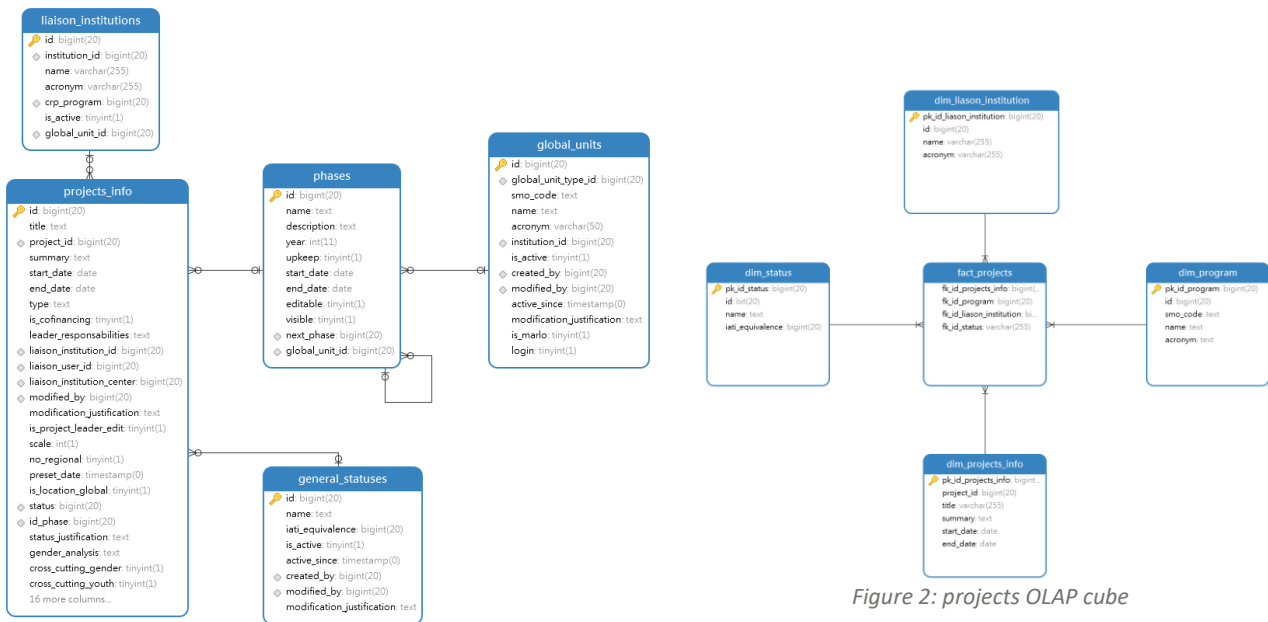
**project\_info:** Main table with the basic information about the projects. Fields to use in the cube:  
**project\_id**

**general\_statuses:** list of different statuses of the projects.

**global\_units:** Information on the different Research programs leading the projects.

**Phases:** list of project phases and process years.

**liaison\_institutions:** Information about the institution leader of the project



## **PART 2– 50%**

Using the excel sheet provided with the Innovation's information, design a dashboard in Power BI.  
([Download source file here](#))

### **DELIVERABLES:**

All information should be loaded on a personal github repository.

Please include a readme file in the root of the folder with the instructions for us to install and run the test in our end.

Deliverable1: Pentaho data integration files (.kjb and .ktr) of projects ETLs.

Deliverable2: Power bi file with the Innovation dashboard.