# 1. Initial Working Plan

## 1.1. Diagram of Gantt

You can find it attached at the following link: <https://drive.google.com/file/d/1StXyfpV_H5_BvNLa_W5yKcX2WzL_rEJz/view?usp=sharing>

## 1.2. Division of tasks (assignment grid)

After reading the project statement, we identified the following tasks to be completed during the project development:

| **Tasks/Participants** | **Victor** | **Ange** | **Eloi** | **Fatima** | **Zhongkai** | **Ximena** |
| --- | --- | --- | --- | --- | --- | --- |
| Preprocessing |  |  | **X** |  |  | **X** |
| Basic initial univariate descriptive statistics of preprocessed variables | **X** |  |  |  |  | **X** |
| Dataset description according to the main conclusions of the univariate and bivariate statistics |  | **X** |  |  | **X** |  |
| PCA analysis for numerical variables |  | **X** | **X** | **X** |  | **X** |
| ACM analysis of multiple qualitative variables |  |  | **X** |  | **X** |  |
| Multiple Factorial Analysis | **X** | **X** |  | **X** |  | **X** |
| Association rules mining analysis | **X** |  | **X** |  |  |  |
| First part D3 report writing | **X** | **X** | **X** | **X** | **X** | **X** |
| Prepare for the D3 presentation | **X** | **X** | **X** | **X** | **X** | **X** |
| Task created to resolve unforeseen incidents | **X** | **X** | **X** | **X** | **X** | **X** |
| Hierarchical Clustering on original data | **X** |  | **X** | **X** | **X** |  |
| Profiling of clusters | **X** | **X** |  | **X** |  | **X** |
| Decisions tree |  | **X** | **X** |  | **X** |  |
| Discriminant analysis | **X** |  | **X** |  | **X** |  |
| Discussion and conclusions | **X** | **X** | **X** | **X** | **X** | **X** |
| Second part D3 report writing | **X** | **X** | **X** | **X** | **X** | **X** |
| Task created to resolve unforeseen incidents | **X** | **X** | **X** | **X** | **X** | **X** |
| Discussion, conclusions, comparison of results among several methods | **X** | **X** | **X** | **X** | **X** | **X** |
| Update the initial Working plan | **X** | **X** | **X** | **X** | **X** | **X** |
| Write the final report | **X** | **X** | **X** | **X** | **X** | **X** |
| Prepare for the final presentation | **X** | **X** | **X** | **X** | **X** | **X** |

## 1.3. Original risk contingency plan

| **Risk** | **How to prevent** | **How to manage** |
| --- | --- | --- |
| Member does not work | Regular reports | Communicating via Discord |
| Files lost | Online backups | Shared folder in Google Drive |
| Poor communication | anything should be clearly clarified | Ask frequently if someone missed |
| Team member quitting | Have more than one team member in a task. Assign a substitute for each task | Reassign work |
| Some member of the team gets stuck with some task | Constant communication and asking each other if someone has any problem with the task assigned to him/her | Communicating via Discord.  Helping each other |
| Conflict between members | Respect and acknowledge other’s ideas | Resolve the conflict in a meeting |
| Errors in some of the tasks | Assign more than one team member in a task. | Everyone in the team should check the tasks done by other members in order to find ways of improving it and/or find mistakes. |
| Lack of communication within the team | Having regular meetings | Using discord with for regular meetups |
| Team members with different backgrounds and different culture | Constant communication and trying to understand each other | Regular meetups, discord |
| Another pandemic | Using online tools | Using discord and Google Drive to keep communication |
| Low data quality | Correct data treatment | Use the correct tools to improve the data quality |
| Some member of the team does not feel comfortable with the tasks he/she has been assigned | Make a plan and assign tasks taking into account everyone's opinion. | Communication |
| Initial plan errors | Make an initial plan taking into account that it can be changed or updated. | Constantly monitor that the plan is being followed and adjust it accordingly. |
| Lack of experience by some team members | Making pairs in which one of the team members has more experience | During the task distribution, make sure the pairs are distributed correctly |
| Missing tasks in the initial task distribution | Check of the initial list of tasks by all team members | Use the delivery file to check that all the task are included |