

# Analytical Challenge

## Problem Description

A client wants to create an app to help companies see how their products are perceived worldwide. In this app, each company will be able to own several products, with each product being present in one or more countries.

Also, companies will have two kinds of users: administrators and regular users. Administrators can configure the company's categories to be ranked, such as "*Tastefulness*" or "*Perceived Quality*". All companies need to set up at least one category.

Every user can rank a product in a country at any moment in time, in any category. All rankings must be preserved so companies can access their historical data. A ranking is always a number between 1 and 10.

For any moment in time  $d$ , the ranking for a product's category is the latest one submitted prior to  $d$ .

Administrators will have the ability to see the latest scores for a product in any country. That way, they could see the evolution in time of how a product is perceived in different countries.

## Expected Solution

You should submit the following:

- A first approximation of a Domain Model for this project context. It can be either programmed in the language of your choice or in a diagram.
- A brief explanation on how you would query your model to get the rankings for a moment in time  $X$  for a product  $P$  in a given country  $C$ .

Feel free to add in your submission any comments or questions. Please have in mind that **you can only upload one file** for this challenge, so remember to bundle everything together.