# PHP Technical task

Provide a private git repository with the project to aleksandr.polyanskiy@rubygarage.org

Task estimate - 8 hours = 3 working days

## Description:

It’s needed to create an online store with products and categories. Categories must be organized in a tree structure with including levels up to 4.

## Terms:

* Significant category attributes: Title.
* Significant product attributes: name and price.
* One product can belong to several categories.

## Task:

1. Create the necessary entity models with relations, migrations, and adding test data using the framework tools.
2. Create a MySQL database structure, also corresponding to the entity model, to store the category tree, product list, and product category information.
3. Create CRUD operations for the main entities.
4. Create an **API** for the main entities.
5. Populate the tables with test data.
6. Cover unit code with **unit tests.**
7. Write samples to get the following data: *(write in text file)*.
   1. For a given list of products, get the names of all categories in which products are presented;
   2. For a given category, get a list of offers for all products from this category and its child categories;
   3. For a given list of categories, get the number of product offers in each category;
   4. For a given list of categories, get the total number of unique product offers;
   5. For a given category, get its full path in the tree (breadcrumb).
8. Check and justify the optimality of used queries.