



Java Assignment

Test : Developer is expected to build/create below mentioned APIS for the catalog application, below mentioned are the descriptions of what a catalog application is and what are the apis that need to be built.

Create APis:

- 1)To create a category
- 2)To create category attributes
- 3)To create a product by linking it to category and its attributes
- 4)Get product by id
- 5)get category attributes by category id

Technical expectations from developer:

- 1)use java as a language
- 2)use spring boot as application framework
- 3)user in memory DB/Mysql preferably
- 4)using spring jpa repositories preferably
- 5)create REST services
- 6)all the above mentioned API's are mandatory
- 7)developers are expected to build the database tables and write services which act upon those tables.
- 8)develop the project and push it to a GIT repository and share the link to the concerned recruiter.

Catalog Application:

- 1)Catalog will have products which belong a certain category
- 2)Every category will have its own attributes(ex category apparels/shirts will have attributes like color, size, material)
- 3)every product will be associated with a category,which means the product acquires the category attributes, and the product can give its own values for the attributes.





Example of a product in a catalog application:

TIP : A product when being created to a apparels/shirts category will get attributes of that category ,and the user/product owner needs to give some values for those respective attributes.

NOTE : the below mentioned example is a just representation of a product, Developer change the schema if she/he deemed necessary

```
[
{
productName : red stripes pontic shirt
ProductID: 1hy26msd8h9
categoryId: 12
categoryName:apparels/shirts
productAttributes/category product attributes
[
{
attributeId: 123
attributeName : color
attributevalue : Red
},

{
attributeId: 456
attributeName : size
attributevalue : Large
},
{
attributeId: 765
attributeName : material
attributevalue : linen
}
```





```
]
},

{
  productName : tea kettle
  ProductID: 1hy78gsd8h9
  categoryId: 21
  categoryName: kitchen accessories
  productAttributes/category product attributes
  [
    {
      attributeId: 123
      attributeName : brand
      attributevalue : morphy richards
    },

    {
      attributeId: 67
      attributeName : weight
      attributevalue : 12
    },
    {
      attributeId: 456
      attributeName : volume
      attributevalue : 30
    }
  ]
}
]
```

