5/1/2021 Basic Guide

Basic Guide for implementation

Fake Server

This application has a fake server that can be started to allow the application to work with an actual server.

To use the server go the folder **Documentation** and execute the following:

npm i to install the requirements and

npm start to start the actual server.

Any change to the file db.json will be syncronized.

Go to the page

http://localhost:3000/acciai to see if the application works.

The file **db.json** is the database. All changes will be visible in that file.

Fo more reference, go here, the homepage of **json-server**.

CRUD Operations

To see concrete examples, see the examples in the **Examples** folder.

Read

When AccaioManager, ColataManager and ProdottoManager are constructed, they all fetch the data from the server.

It should not be necessary, but it's possible to call the function

5/1/2021 Basic Guide

```
public class example{
    public static void main(String[] args){
        AcciaioManager aM = new AcciaioManager();
        //The acciaioManager has already called the function fetchFromDB();
        aM.fetchFromDB();
        //This resets the aM and fetches again the elements from the server.
    }
}
```

Create

To create an element, for coherence purposes, a Prototype must be created.

This assures that every initiated element is surely inside the database.

This means that an element CANNOT be initiated directly. The exception PrototypeSystemAvoidance will be thrown.

For every element the principle is exactly the same.

```
public class example{
    public static void main(String[] args){
        AcciaioManager aM = new AcciaioManager();
        ColataManager cM = new ColataManager(aM);
        ProdottoManager pM = new ProdottoManager(cM);
        //Creation of Acciaio
         AcciaioPrototype aP = new AcciaioPrototype("INOX", "Example");
         Acciaio aA = aM.createInDB(aP):
        //Creation of Colata
         ColataPrototype cP = new ColataPrototype(22, aA);
         Colata cA = cM.createInDB(cP);
        //Creation of Prodotto
         ProdottoPrototype pP = new ProdottoPrototype(14, 25, 35, cA, "Descrizione prodot"
         Prodotto p = pM.createInDB(pP);
    }
}
```

Update

Yet to be implemented.

5/1/2021 Basic Guide

The Elements Acciaio, Colata and Prodotto won't be editable! A new element must be created, and given to the manager. The manager will replace the old element with the new one, also in the DB.

Delete

Yet to be implemented.

Extra Features

State of Colata

An object Colata can only have a determined set of states.

This set is editable in the file **Constanst**.

If the state given is not present in the array, an exception DataNotValid is thrown.

Removal of Acciao and Colata

If an Accaio has been used in at least one Colata, it will not be deletable. Upon removal, the boolean **Not Selectable** will be set to true. A Colata with a Not Selectable acciaio won't be created, and a DataNotValid exception will be thrown.

A Colata with at least one Prodotto cannot be deleted.