

## Alfa 3

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school project

### used external library's:

- mysql-connector-python => <https://pypi.org/project/mysql-connector-python/>
- prettytable => <https://pypi.org/project/prettytable/>

### Run:

- run main.py in src folder as
  - cd src
  - python main.py
- login with name
  - use admin to login as administrator
  - use some different name to login as a user
    - if this name does not exist you will create new user

### Config:

- config has two main part
  - database mandatory part
  - import optional part (without import config data can not be imported)
- config has to be in config.json file in config folder
- example of config:

```
{  
  "db_config":{  
    "address":"ip_address",  
    "database":"db_name"  
  },  
  "import":{  
    "file":"absolute_file_path",
```

```

    "delimiter": ";"
}
}

```

- database configuration has address and database parameters
  - address is ip address of database (it could be a localhost)
- database parameter is name of the database which we will working with
- import configuration has file and delimiter parameters
  - file parameter is absolute path to imported csv file
  - delimiter is optional parameter, and it is one character that divides values in csv (; by default)
    - config.json will work with or without delimiter variable

### Import:

- example imported files is in data import folder
- all imported files have to be of type csv
- delimiter is in default ; but in config.json can be changed
- if there is some error in import config to see the changes you have to restart the program
- import into brand, csv file is composed of two values
  - brand name this value has to be unique
  - residence of the brand like New York or Prague
  - for example:
    - Samsung;Thailand
    - Apple;Washington
    - Apple is brand name
    - Washington is residence of the Apple
  - import into product, csv file is composed of four values
  - product name
  - weight in kg have to be number can be decimal
  - price have to be a number can be decimal
  - brand id as
    - number integer has to exist in brand table
    - string brand name has to exist in brand table
    - for example:
      - shoes;0.02;49.99;1
        - (the 1 represent id of the specific brand)
      - phone;0.05;249.49;Samsung
        - phone is name of the product
        - 0.05 is weight in kilograms of the phone
        - 49.99 is price for the phone
        - Samsung is a brand name which the phone belongs to

Errors:

User interface:

*\_\_user\_input*

- error: input has to be integer
- 'error: Integer out of range'

ApplicationUser:

*\_\_create\_order*

- error: add some product into bin to create order
- error: in product id => 'id', check your bin
  - some id of the product in bin does not exists in database

*\_\_delete\_order*

- error: order id is lower or equal 0
- error: in order id wrong datatype
- error: paid orders cannot be deleted
  - once order is paid cannot be deleted

*\_\_add\_product*

- error: product id is lower or equal 0
- error: in product id wrong datatype
- error: amount is lower or equal 0
- error: in product wrong datatype

*\_\_remove\_product*

- error: product id is lower or equal 0
- error: in product id wrong datatype
- error: product does not exist in bin

*\_\_add\_cash*

- error: cash is lower or equal 0
- error: in cash is used wrong datatype
- error: no user has been updated

*\_\_paid\_order*

- error: order id is lower or equal 0
- error: in order id wrong datatype
- error: order with id 'chosedOrderId' does not exists
- 'error: dont have enough cash'

ApplicationAdmin

*\_\_send\_paid\_order*

- error: order id is lower or equal 0
- error: in order id wrong datatype

#### \_\_import\_brand

- 'error: some problem with converting to csv'
  - Some problem when reading the content
- error: on line 'index' you have empty value
- error: name 'brand\_name' already exists
- error: bad amount of arguments in line 'index' number of arguments actual 'argument\_count' expected 2

#### \_\_import\_products

- error: some problem with converting to csv
- error: on line 'index' you have empty value
- error: brand with name 'name' on line 'index' does not exists
- error: brand with id 'brand\_id' does not exists
- error: bad amount of arguments in line 'index' number of arguments actual 'argument\_count' expected 4

#### LoadConfig

##### \_\_init\_\_

- config/config.json file does not exists please recreate it using readme.txt
- text in config/config.json is not json please recreate it using readme.txt
- Error in address parameter look at the readme documentations
  - it is not ipv4 address or local host
- Error in database name parameter is empty
  - It is empty

##### \_check\_json

- config params is incorrect or missing please recreate it using readme.txt
- 'variable' params is incorrect or missing please recreate it using readme.txt

##### import\_path

- error: import param is incorrect or missing please recreate it using readme.txt
- error: import path param is incorrect or missing please recreate it using readme.txt
- error: file does not have .csv ending
- error: file does not exists

#### LoadConfigSingleton

##### \_\_init\_\_

- load config is exists
  - trying to use constructor when instance is already exists

#### UserSingleton

##### \_\_init\_\_

- user exists
  - trying to use constructor when instance is already exists

## Connection

### *\_\_init\_\_*

- db connection is exists
  - trying to use constructor when instance is already exists

### *\_\_connection*

- Error in database connection check database name and ip address in config.json in config file

## View

### *order\_final\_price*

- 'error: order id is incorrect'
  - Order does not exists

### *order\_and\_products*

- error: no order found

## UserRowGateway

### *Insert*

- error: nickname 'nick\_name' is already exists

### *update*

- error: nickname 'nick\_name' is already exists
- error: no user has been updated

### *delete*

- error: can not delete your account
- error: no user has been deleted

## ProductOrderRowGateway

### *Insert*

- error: order id 'order\_id' or product id 'product\_id' is incorrect and does not exists

### *update*

- error: order id 'new\_order\_id' is incorrect and does not exists
- error: product id 'new\_product\_id' is incorrect and does not exists
- error: incorrect datatype
  - incorrect datatype of amount
- error: no product\_order has been updated

### *delete*

- error: no product\_order has been deleted

## ProductRowGateway

### *Insert*

- error: brand with id {brand\_id} does not exists

#### *update*

- error: incorrect datatype 'new\_product\_name'
- error: brand with id 'new\_brand\_id' does not exists
- error: no product has been deleted

#### *delete*

- error: no product has been deleted

#### *\_\_it\_is\_number*

- error: 'variable' is lower or equal zero
- error: 'variable' is not a number

### OrderRowGateway

#### *Insert*

- error: user with id 'user\_id' does not exists

#### *update*

- incorrect datatype or out of range 'new\_paid'
- error: incorrect datatype or out of range 'new\_send'
- error: no order has been updated

#### *delete*

- error: no order has been deleted

### BrandRowGateway

#### *Insert*

- error: name 'brand\_name' already exists

#### *update*

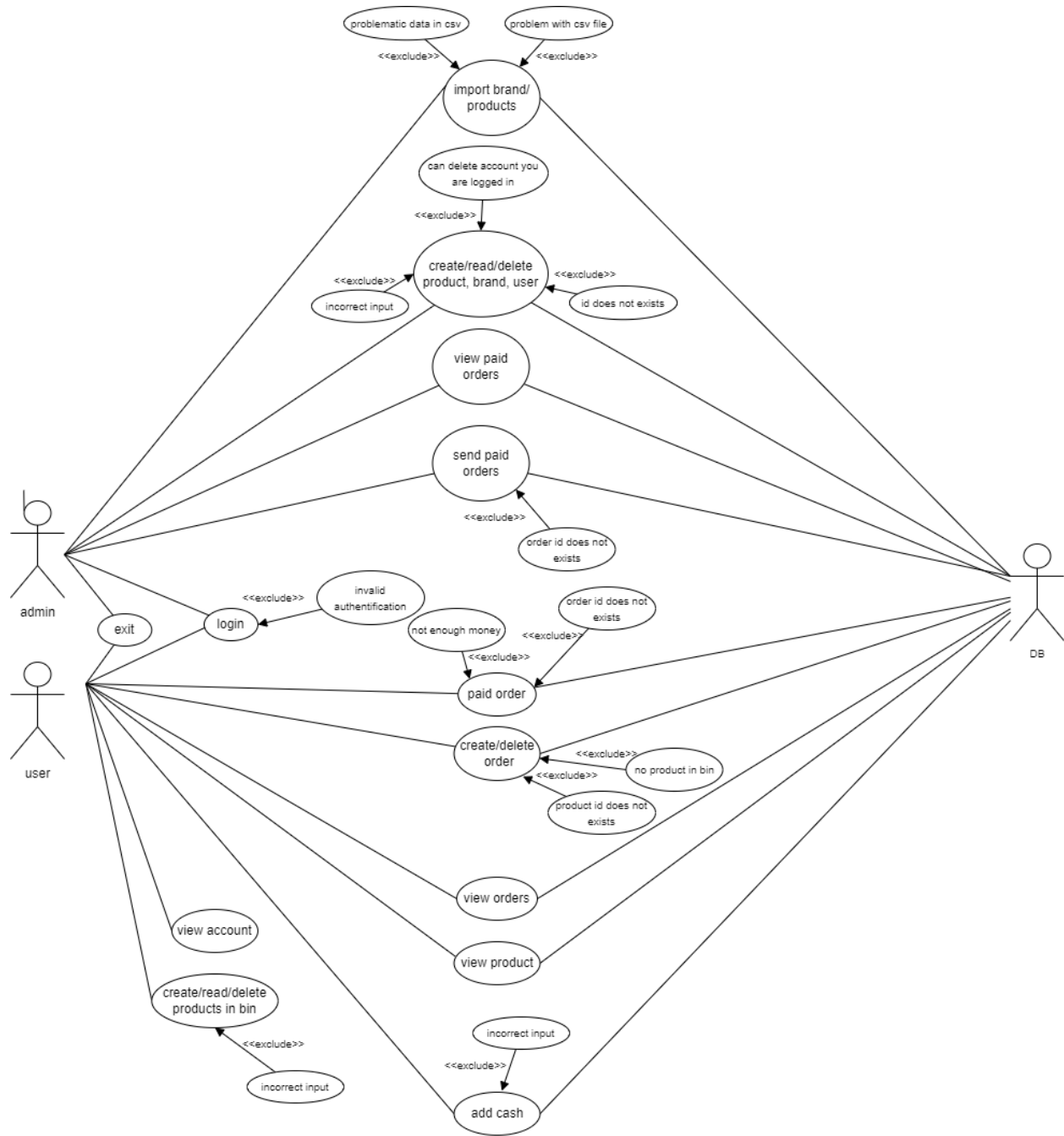
- error: name 'brand\_name' already exists
- error: no brand has been updated

#### *delete*

- error: no brand has been deleted

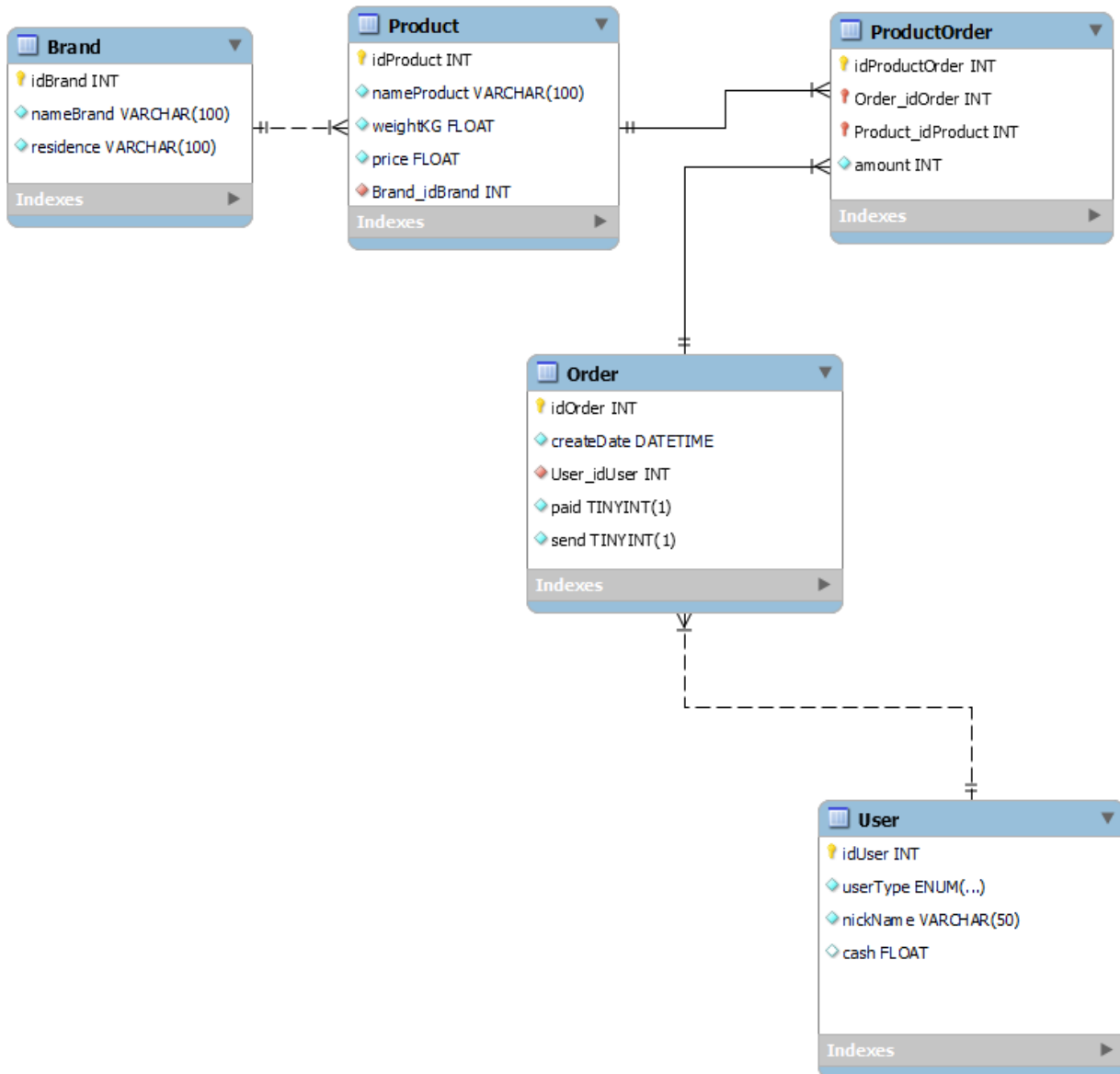
[illegible]

Use casediagram:





ER model:



### End resume:

Alfa in the order third is the assignment I spent on more time then on alfa 1 and alfa 2 together. The code took me just half of the work and the other half was comprehensive required documentation. I had to find out how to make uml diagrams again after year and a half and it took me lot of time and still, I am not sure if I did it correct way. Tests cases were on one hand, took much more time creating them then creating the unit tests but on the other hand creating them was much easier and natural. To sum up it was interesting project but much more complicated than it is seemed at the beginning.