

SHOP DATABASE APPLICATION DOCUMENTATION

Project name: Shop Database Application

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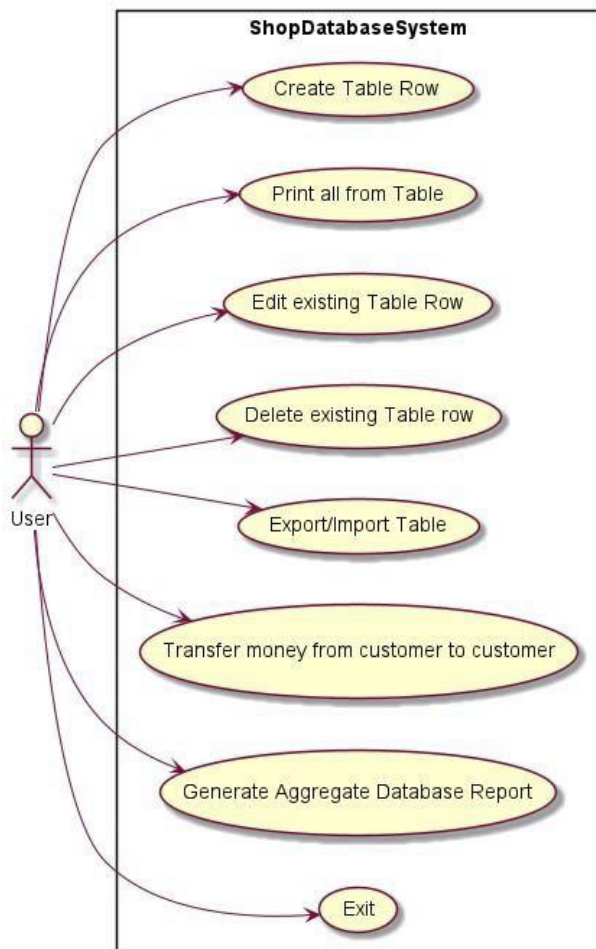
School: SPŠE Ječná

Project is being used as school project

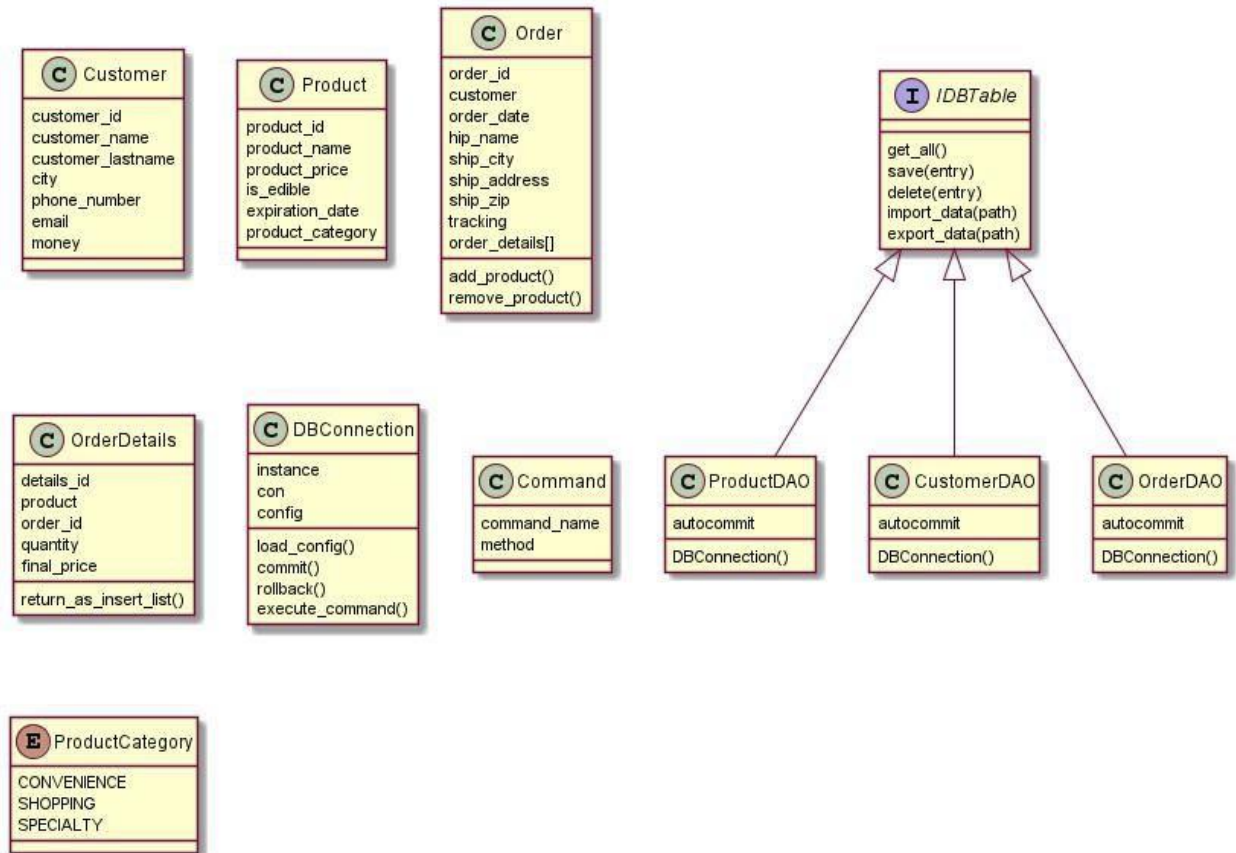
Application Requirements

- Python 3.9 with external libraries
 - pandas
 - pyodbc
 - numpy
- Microsoft SQL Management Studio 2019
- MS SQL Server

Application UML Use Case Diagram

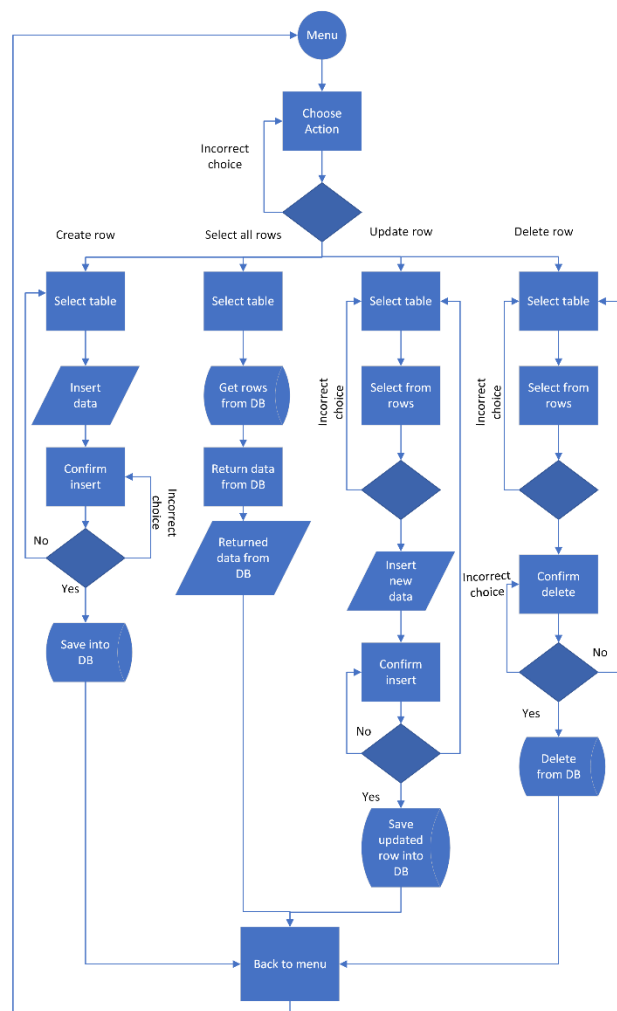


Application UML Class Diagram

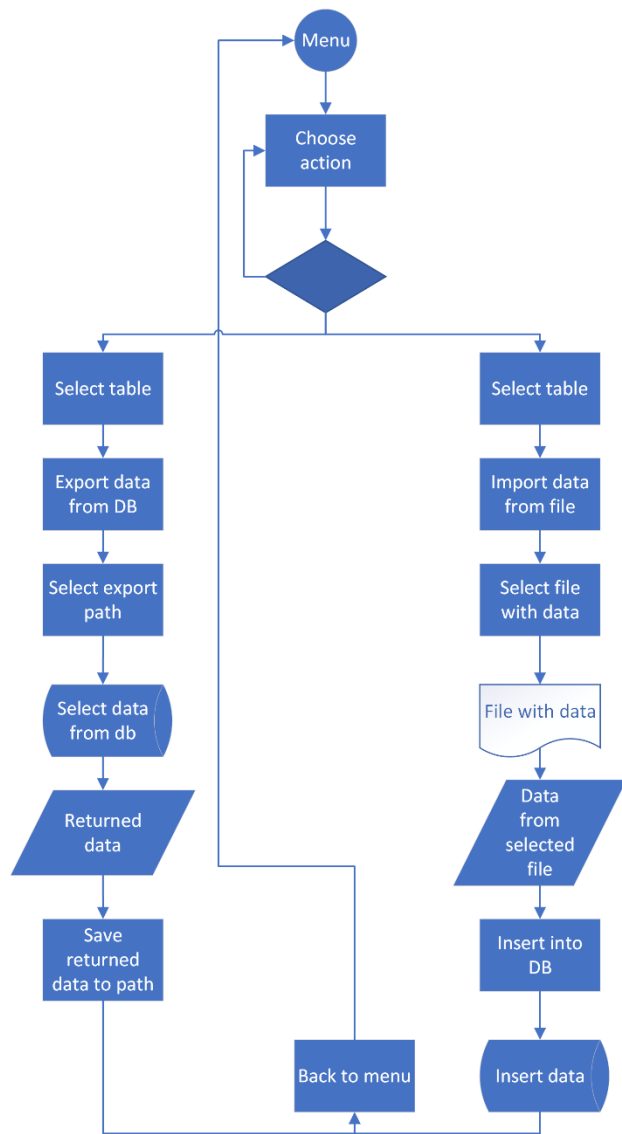


Application UML Activity Diagrams

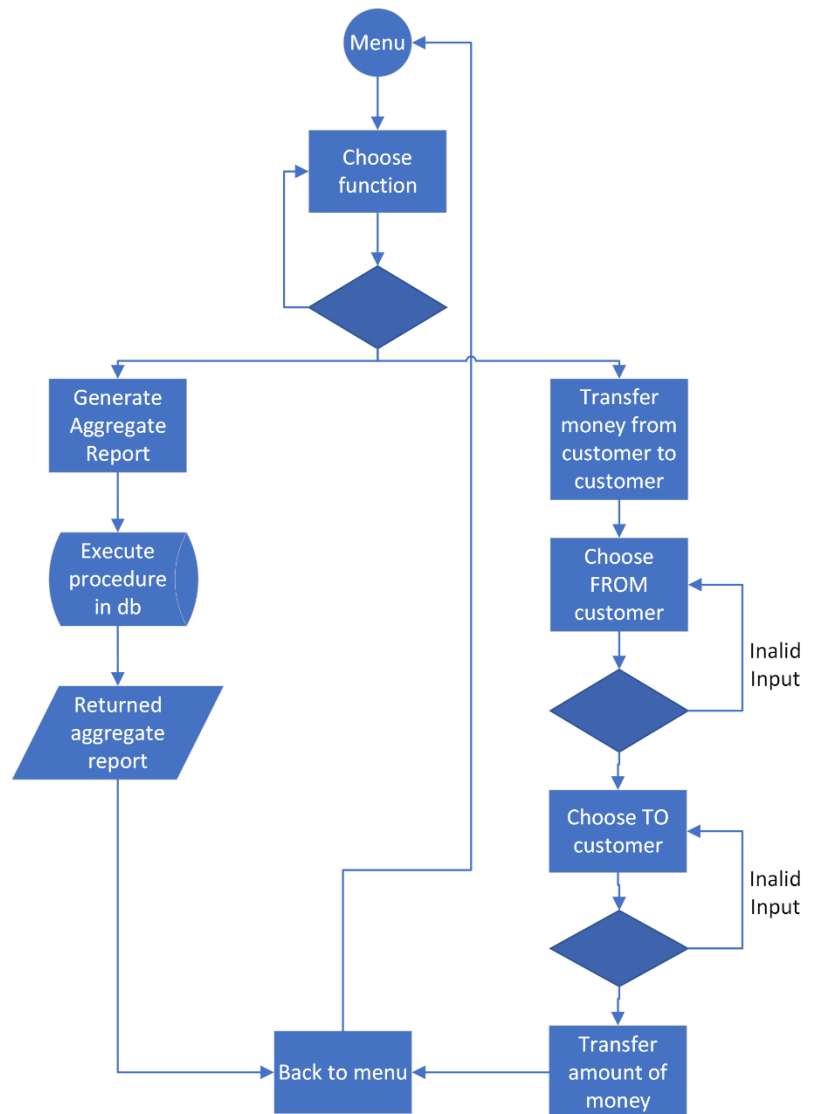
CRUD Activity Diagram



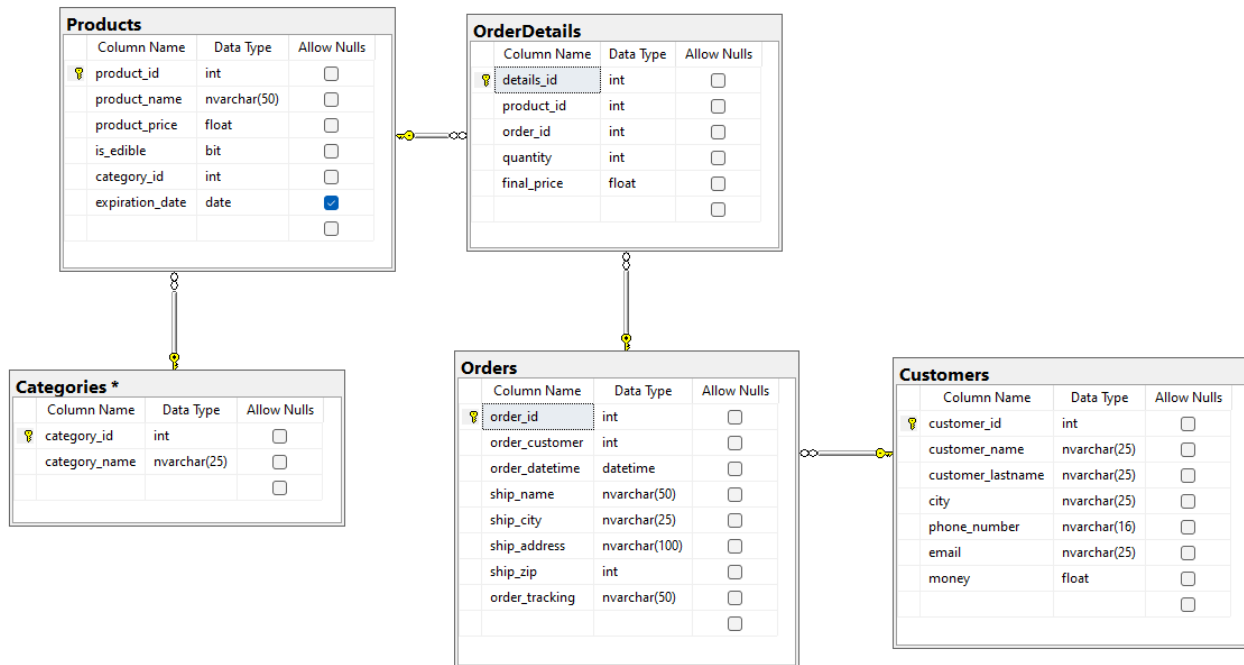
Import/Export Activity Diagram



Other Functions Activity Diagram



Application Database ER Diagram



Application Export/Import Data Scheme

Export data from each is saved in separate .csv file and has this format:

- **products.csv**

Header: product_name,product_price,is_edible,category_id,expiration_date

Row example: Bread,25.0,True,1,2022-05-05

- **customers.csv**

Header: customer_name,customer_lastname,city,phone_number,email,money

Row example: Max,Kuzma,Prague,772731155,maxkuzma@gmail.com,3000.0

- **orders.csv**

Header: order_customer,order_datetime,ship_name,ship_city,ship_address,ship_zip,order_tracking

Row example: 1,2022-01-06 01:25:24.940,Maksym Kuzma,Prague,Address 12,14000,CZ13254223

- **order_details.csv**

Header: product_id,order_id,quantity,final_price

Row example: 2,1,3,3600.0

Files in mentioned format can also be used as import files.

Application configuration

All configuration and application installation is described in README.txt file in main folder directory.

Application Errors and their possible solutions

If any error occurs, it's saved into /log/errorlog file

Known errors:

FileNotFoundError with value "Config not found"

Solution:

Step 1: create folder cfg in program directory if not exists

Step 2: create config.json file in this folder

Step 3: write configuration like this into this file

```
{  
  "SERVER": "193.85.203.188",  
  "DATABASE": "kuzma",  
  "UID": "kuzma",  
  "PWD": "Asdwsx78"  
}
```

More information in README.txt

Step 4: The problem must be solved.

InterfaceError

Solution: This error appears when config file is not correctly configured. Check config.

If any other error occurs contact with me and I'll help you fix it.

Third-party libraries

In order to launch this application on Linux or MacOS you have to have installed Python 3.9 or higher on your machine.

Also, you will need to download third-party libraries using **pip install** in CLI. Use these commands to install them:

- pip install pyodbc
- pip install pandas
- pip install numpy

Project resumé

Project has CRUD for Many to Many table.

Project has multi table transaction for transferring money between customers.

Project can generate aggregative report.

Project can import/export data from/to .CSV file.

Project has external config file that can be configured.

Project saves all errors/exceptions to a log file.