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DOCUMENTATION

**ORDERS MANAGEMENT**

Programming Techniques

Laboratory - Assignment III

Student: Paul Petruț-Betuel

Group: 30421

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# Assignment Objective

*The objective of this assignment is to design and implement an Orders Management application that efficiently processes client orders for a warehouse. The application will utilize relational databases to store information related to products, clients, and orders.*

# Problem Analysis, Modeling, Scenarios, Use Cases

*Here we have a simple interface where the user is asked to introduce all the necessary data.* We have given the user a lot of freedom to choose what they want, we don’t such as:

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Description automatically generated with medium confidenceIf the user miss to complete a box it will not start only after the user has write everything that is needed.

A screenshot of a computer

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After the users have introduced all the necessary data he can press start and the program should update in real time the database and let the user take a quick look at the table with the values.

# Design

*In the design phase of this project, we will focus on developing a clear object-oriented design for the application.*

*We used this Conceptual Architecture for the program while we used Reflection for the Data Access*

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*A picture containing text, screenshot, font, graphic design

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# Implementation

*The implementation for each class can be seen in Javadoc while the main idea will be written here too.*

*The presentation layer has all the controller classes, view classes and form. It deals with the GUI implementation.*

*The business layer has all the BLL classes which run the DAO classes’ s methods.*

*The data access layer has all the DAO classes including the Abstract DAO which user reflections to make the other DAO classes.*

*The model layer has all the model classes: Client, Product, Purchase(order).*

Overall, the class provides the necessary functionality for managing a basic store by itself.

# Conclusions

In conclusion, the objective of the assignment is to design and implement an Orders Management application that efficiently processes client orders for a warehouse using relational databases. The application follows a layered architecture pattern, with separate classes for the presentation, business logic, data access, and model layers. The implemented classes provide the necessary functionality for managing a basic store independently.

# Bibliography

The references that were consulted by the student during the implementation of the homework:

1. Lab teacher’s explanations
2. <https://dsrl.eu/courses/pt/>
3. <https://www.geeksforgeeks.org/>
4. https://stackoverflow.com/