<Assigment1 >

Analysis and Design Document

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Table of Contents

1. Requirements Analysis 3

1.1 Assignment Specification 3

1.2 Functional Requirements 3

1.3 Non-functional Requirements 3

2. Use-Case Model 3

3. System Architectural Design 3

4. UML Sequence Diagrams 3

5. Class Design 3

6. Data Model 3

7. System Testing 3

8. Bibliography 3

1. Requirements Analysis

# Assignment Specification

Use JAVA/C# API to design and implement an application for the front desk employees of a bank. The application should have two types of users (a regular user represented by the front desk employee and an administrator user) which have to provide a username and a password in order to use the application.

# Functional Requirements

The regular user can perform the following operations:

* Add/update/view client information (name, identity card number, personal numerical code, address, etc.).
* Create/update/delete/view client account (account information: identification number, type, amount of money, date of creation).
* Transfer money between accounts.
* Process utilities bills.

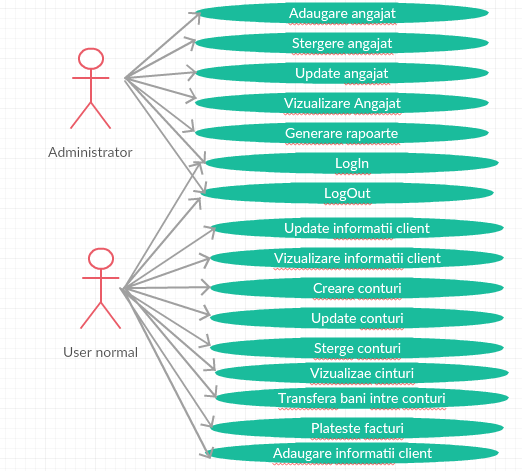
The administrator user can perform the following operations:

* CRUD on employees’ information.
* Generate reports for a particular period containing the activities performed by an employee.

# Non-functional Requirements

-conectare baza de date

2. Use-Case Model



**Use case:**Log In

**Level:**user

**Primary actor:**Administratorul se logheaza

**Main success scenario:** Se completeaza field-urile corespunzatoare pentru logare: nume si parola. Ca urmare a acestei actiuni se va deschide o fereastra prin intermediul careia administratorul va putea sa-si realizeze operatiile specifice.

Extensions: Trebuie introduse corect, atat numele, cat si parola, altfel se va afisa un mesaj de eroare si nu va putea fi accesata acea fereastra.

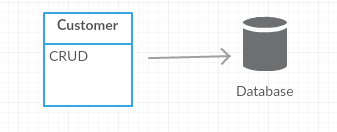
3. System Architectural Design

**3.1 Architectural Pattern Description**

1. *table module*

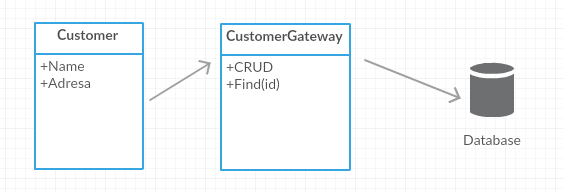
-avem business logic- pentru fiecare tabela din baza de date (Client, Cont, Logare).

- o singură instanță a unei clase conține diverse proceduri care vor acționa asupra datelor.(ClientMap, ContMap, LogareMap).

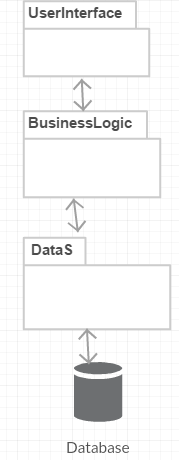


1. *table data gateway*

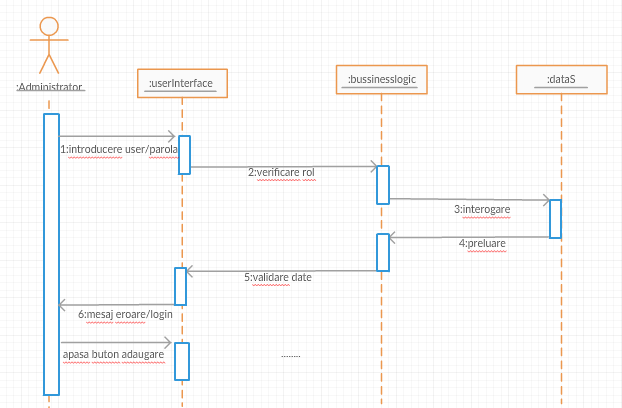
-se fac accesari ale bazei de date: stergere, inserare,update, select, precum si alte metode care solicita interactiunea cu baza de date



Pachete:



4. UML Sequence Diagrams



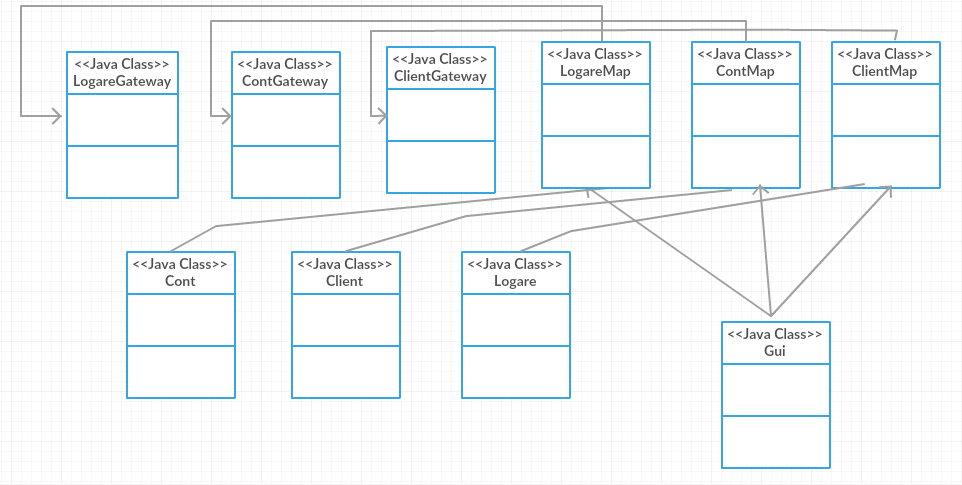
5. Class Design

**5.1 Design Patterns Description**

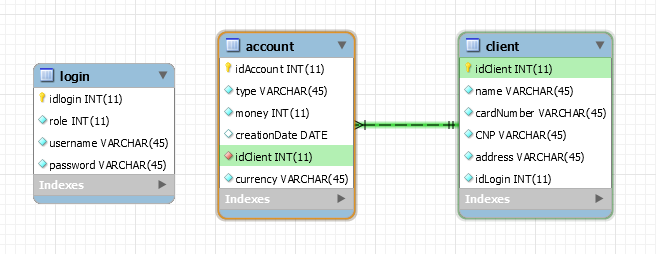
**-**table module

**-**table data gateway

**5.2 UML Class Diagram**



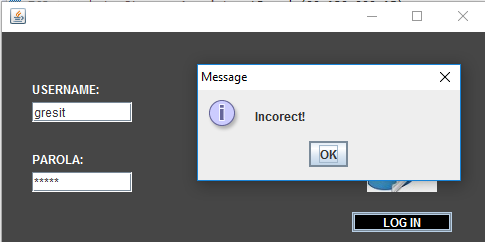
6. Data Model

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7. System Testing

-apar mesaje de confirmare in cazul in care s-a efectuat opertia cu success sau nu;

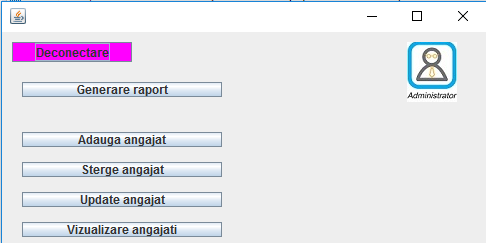
-de exemplu, in cazul in care introducem username-ul si parola gresite:

**

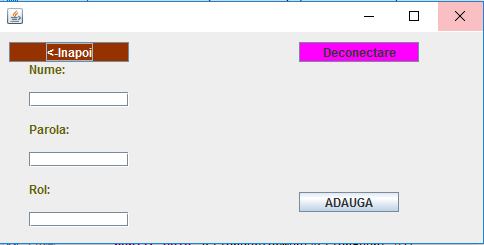
-daca introducem corect se realizeaza logarea in functie de rol(1 sau 2)

* 1=administrator
* 2=user normal

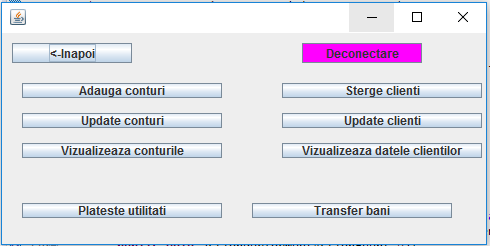
-administrator:

**

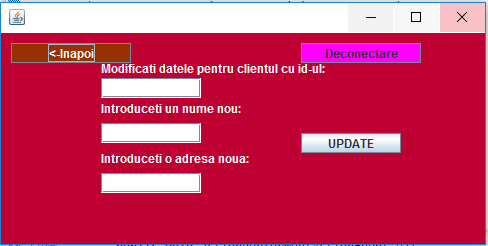
-adaugare angajat:

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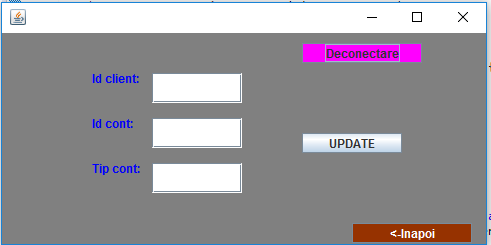
-user normal

**

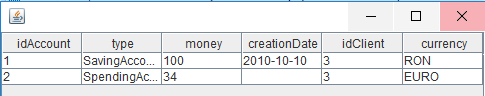
-update client

**

-update cont

**

*-*vizualizare conturi

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