Assignment 1

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I Project specification

The project consists in designing an application for the administration of City Hall. It enables citizens to the people to make requests for documents from the City Hall online and from the comfort of their own home.

The application will have two types of users:
- Regular User: any people from the city
- Admin: people who work at the City Hall

The constraints for the regular user consist of being able to make only 3 requests per document for a house during one year.

II Implementation

The application uses the Model-View-Controller architecture and it has the following packages:
1) controller :
- DocumentController
- LoginController
- RequestControllerv
- ResidenceController
- UserAccountController
- UserRegisterController

It contains the main Entities of the application which are also the tables from the database.
2)dto (Data Transfer Object):
- RequestDto

3)entity:
- Document
- Request
- Residence
- User

4)exceptions (custom error messages for user login and register validation):
- CustomErrorMessages
- InvalidInput

5) gui (contains all the classes with the interfaces for each page, for some i edited the interface with Swing Forms)
- AdminAccountGUI
- RequestGUI
- UserAccountGUI
- AdminLogin
- MainGUI
- RegularUserLoginGUI

● UserRegisterGUI

6)mappers (only one class that maps the entity to the dto):
● RequestMapper

7) repository (contains classes which handle the requests to the database and retrieves information from database):
● DocumentRepo
● IRepository
● RequestRepo
● ResidenceRepo
● UserRepo

8)service (contains the classes which validate the date before inserting it to the database or before sending it to the controller classes)
● DocumentService
● RequestService
● ResidenceService
● UserService

9)utils (contains two classes ,one for cloning objects into other objects and to get a pretty date format)
● CloneObject
● MyUtils

10) validators (contains one class with methods for validating user input at the login and register phase)
● UserValidator

III DatabaseSchema