Assignment 1

Project documentation

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# I Project specification

The project consists in designing an application for the administration of Cluj Napoca City Hall which will helps the people to get the desired documents from the City Hall in a faster time by avoiding infinitely long queues and making the requests for certain documents online .

The application will have two types of users:

* Normal User: any people from the city
* Admin: people who work at the City Hall

Of course, the Normal User compared will have some restriction and limitations like not being able to make more than 3 request per year for a certain house.

# II Implementation

The application uses **Model-View-Controller** architectural **pattern** and it has the following packages:

1)Entity:

* Document
* House
* Request
* User

It contains the main Entities of the application which are also the tables from the database

2)Exception :

* DuplicateKeyException
* EmptyFieldException
* IllegalNameException
* TooManyRequests

It contains a few new created Exception which are used for preventing some misbehavior of the application

3)Gui:

* AdminMainView
* AminRequestView
* LoginView
* Etc.

It contains all the View classes, designed with swing.

4)guiController:

* AdminController
* LoginController
* UserMainViewController

It contains the classes which implements the behaviors of each button and swing Component.

5)messages

It contains only one class RootMessages which store some suggestive message for errors or successfully done operations.

6)repository

* DocumentRepo
* HouseRepo
* RequestRepo
* UserRepo

It contains the classes which are the closest to the database and which extract and add information from/into database.

6)service:

* DocumentService
* HouseRepo
* RequestRepo
* UserRepo

It contains the classes which validate the date before inserting it to the database or before sending it to the controller classes.

7)start

* ApplicationStart

It contains only one class which has the Main method which start the application

8)Utils

* ConvertReqStateToString :it converts an Enumerate type into a string
* DateFormatter
* RequestState : Enumerate type designed for specifying in which state the request is

9)Validators

* DocumentValidator
* HouseValidator
* Etc

It contains Classes designed for validating the date before introducing it to the Database.

# III DatabaseSchema

