

**<Cluj City Hall>**  
**Analysis and Design Document**  
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**Group: 30239**

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## Revision History

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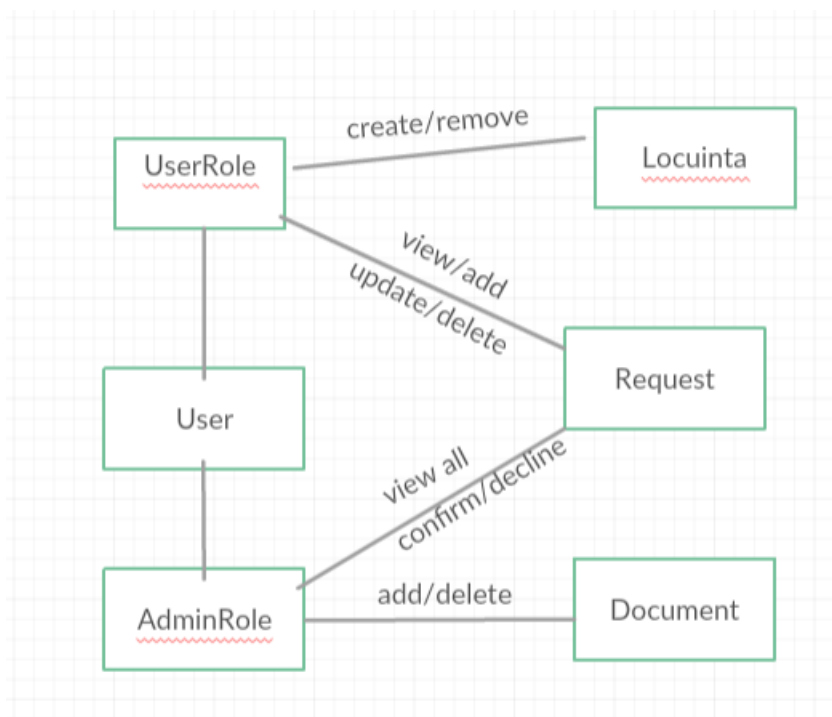
## I. Project Specification

*Proiectul reprezinta o aplicatie in limbajul Java pentru un sistem online de emitere a unor documente de la primaria Cluj-Napoca.. Fiecare cetatean poate cere maxim 3 documente de acelasi tip pentru fiecare locuinta inregistrata. Exista doua tipuri de utilizatori: User(Register/Login, Add/Remove locuinta, view requests, create request, update/delete request) si administrator(view all users, create/remove documents, view all requests, confirm/delete requests)*

## II. Elaboration – Iteration 1.1

### 1. Domain Model

*Model: User, Locuinta, Request, Document*



## 2. Architectural Design

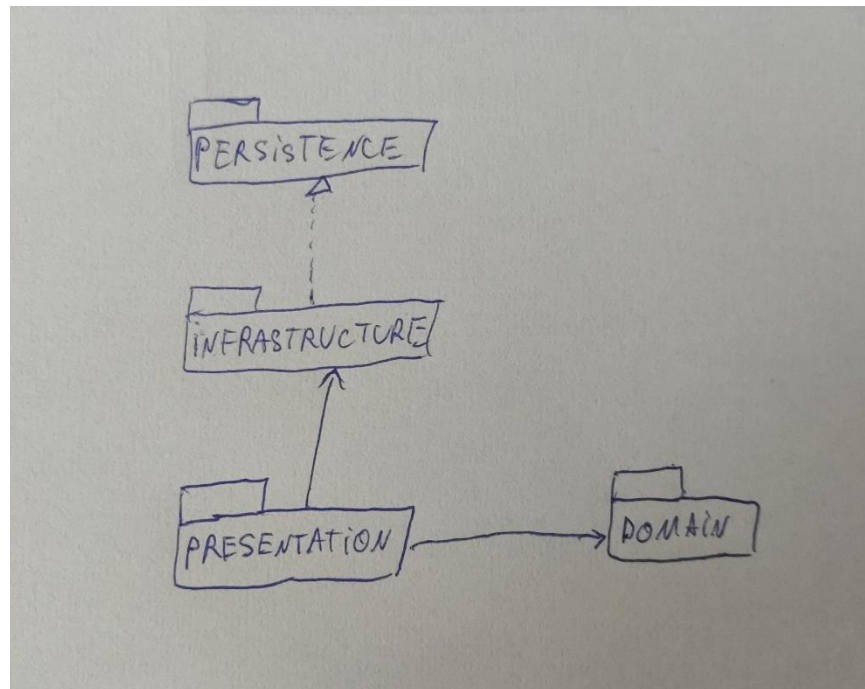
### 2.1 Conceptual Architecture

*Aplicatia foloseste pattern-ul architectural Layers, aceasta imparte aplicatia in prezentare, procesare si data management. De asemenea aceasta arhitectura imbunatateste timpul de raspuns al aplicatiei.*

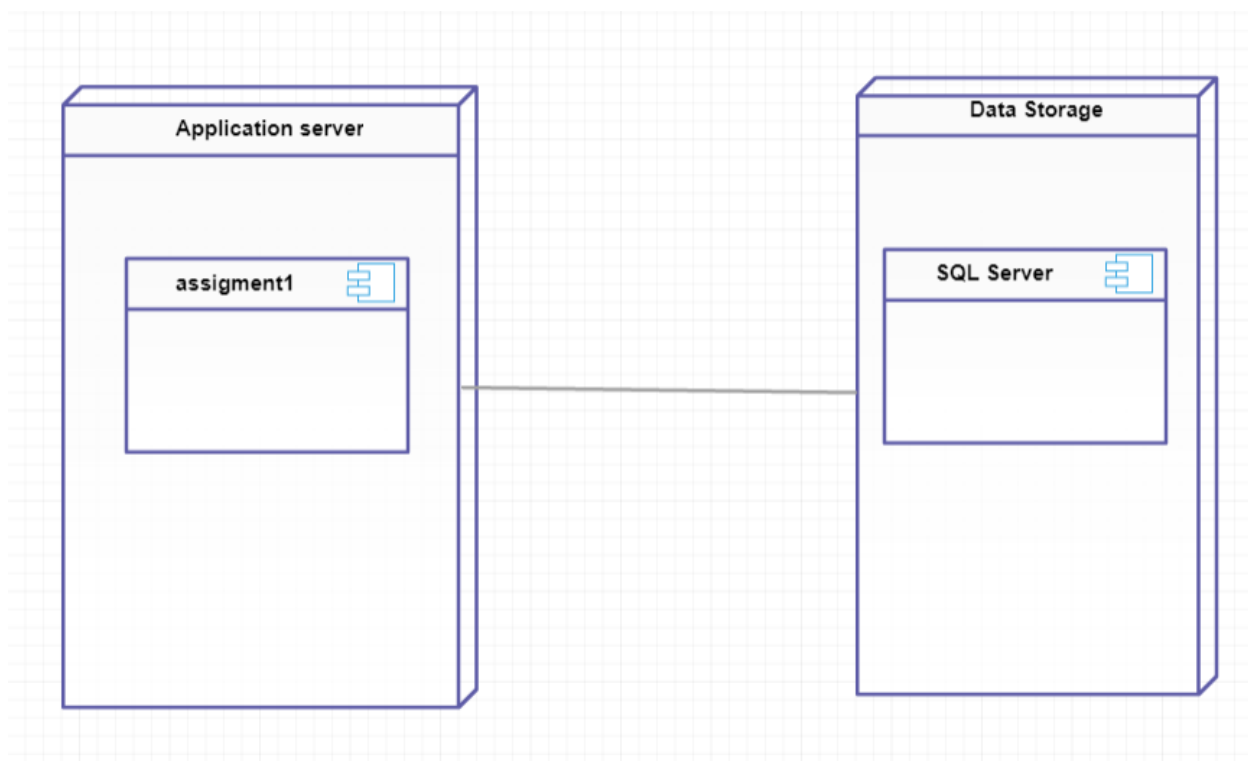
### 2.2 Package Design

*[Create a package diagram]*

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### 2.3 Component and Deployment Diagrams

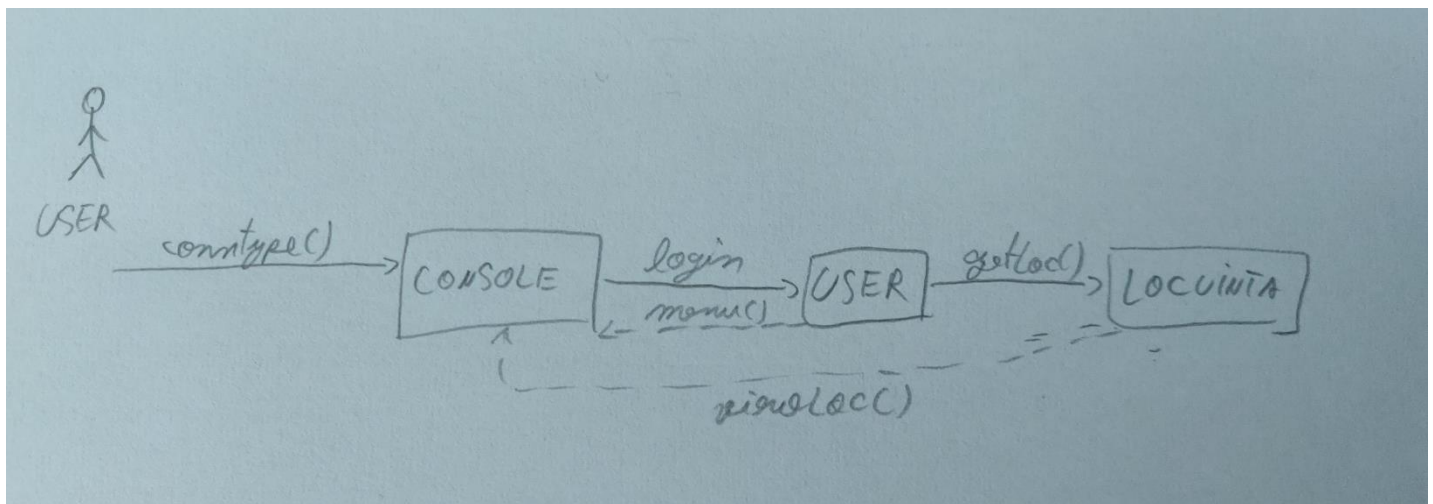
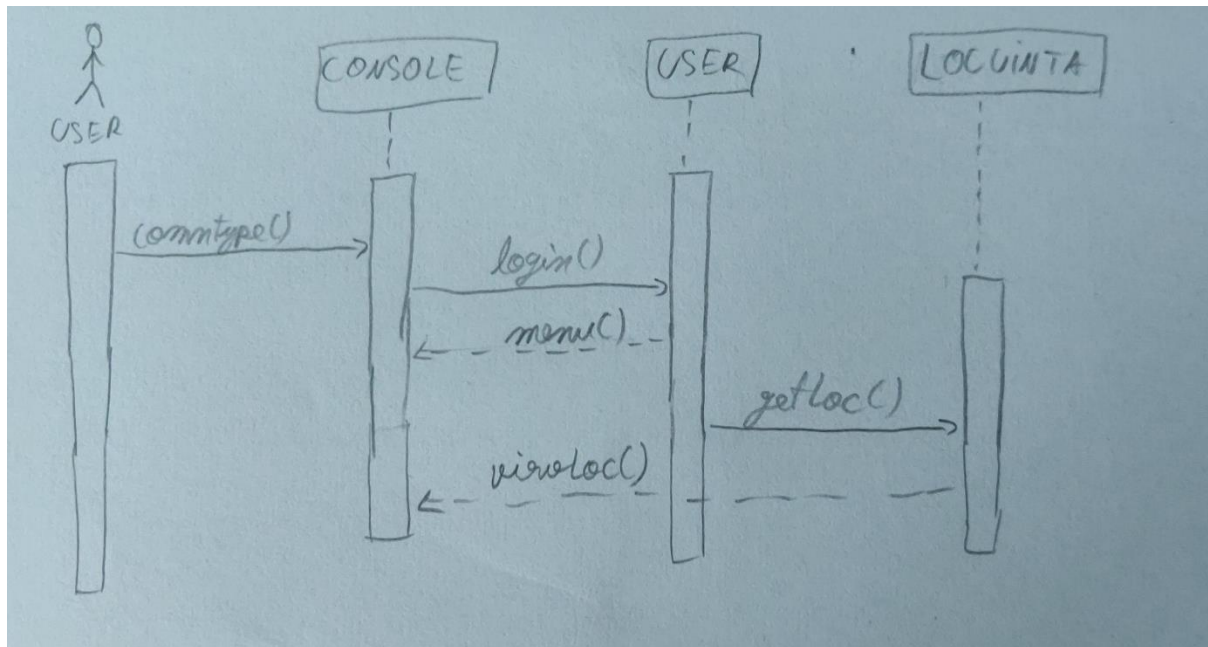


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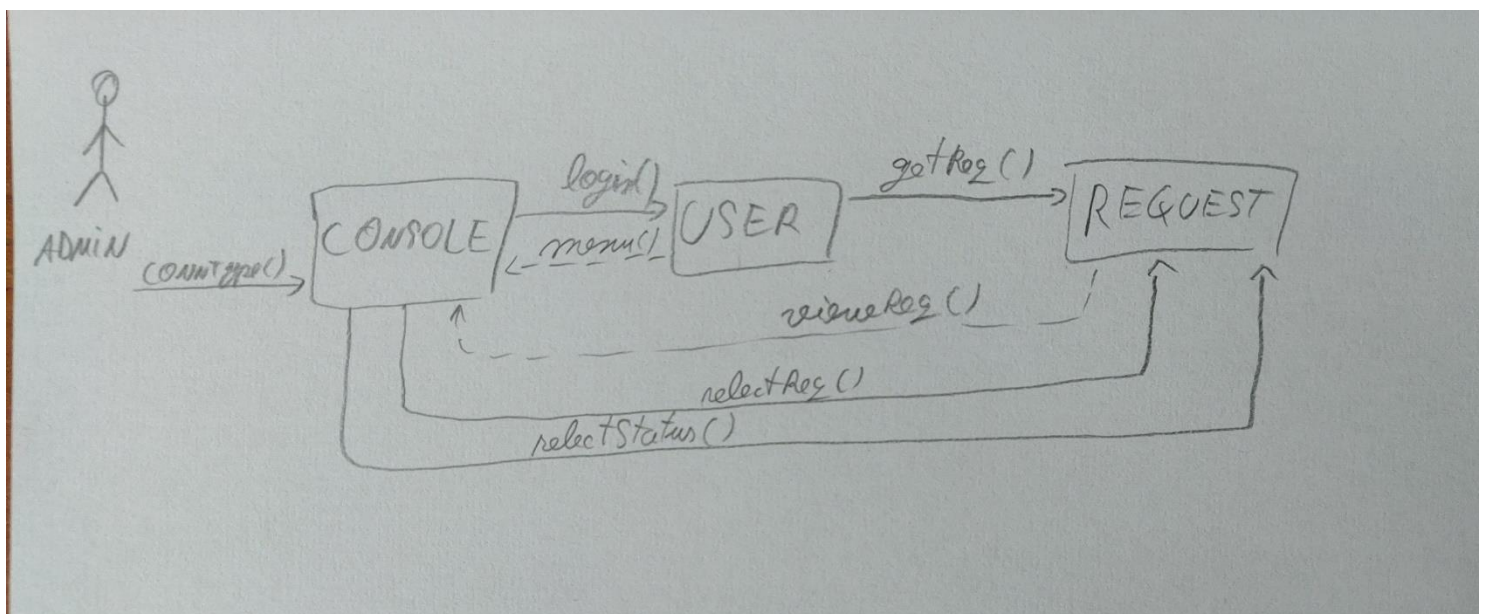
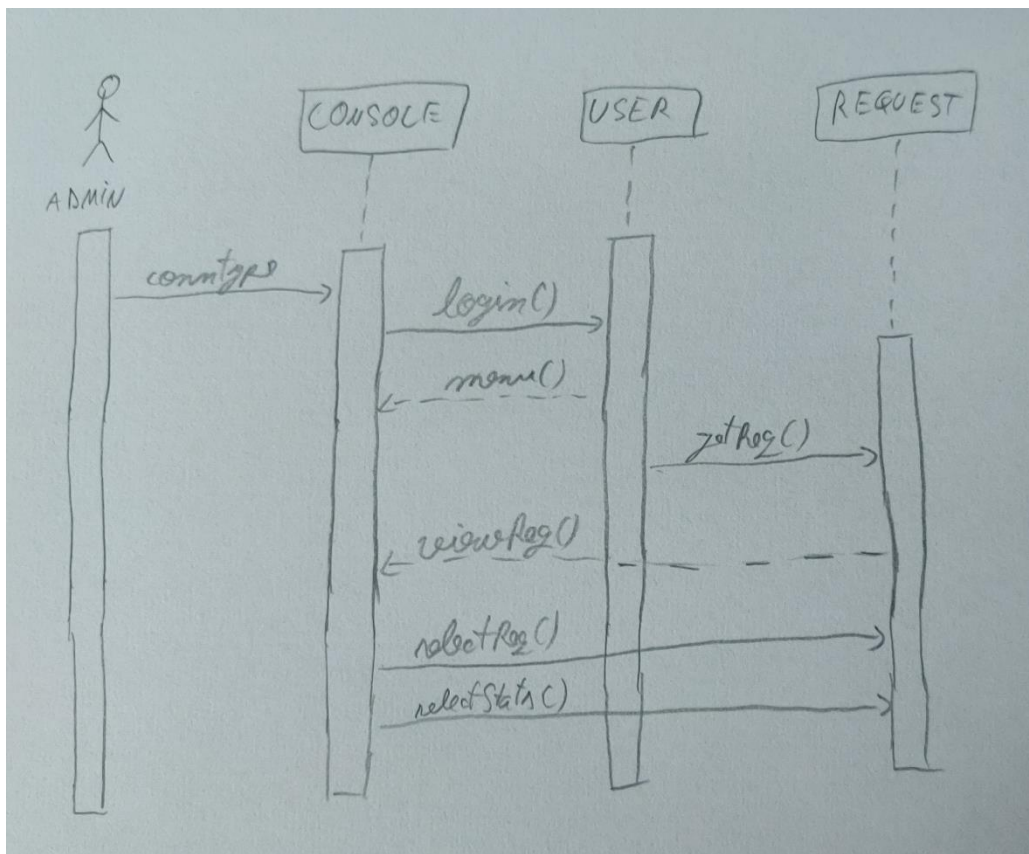
### III. Elaboration – Iteration 1.2

#### 1. Design Model

##### 1.1 Dynamic Behavior

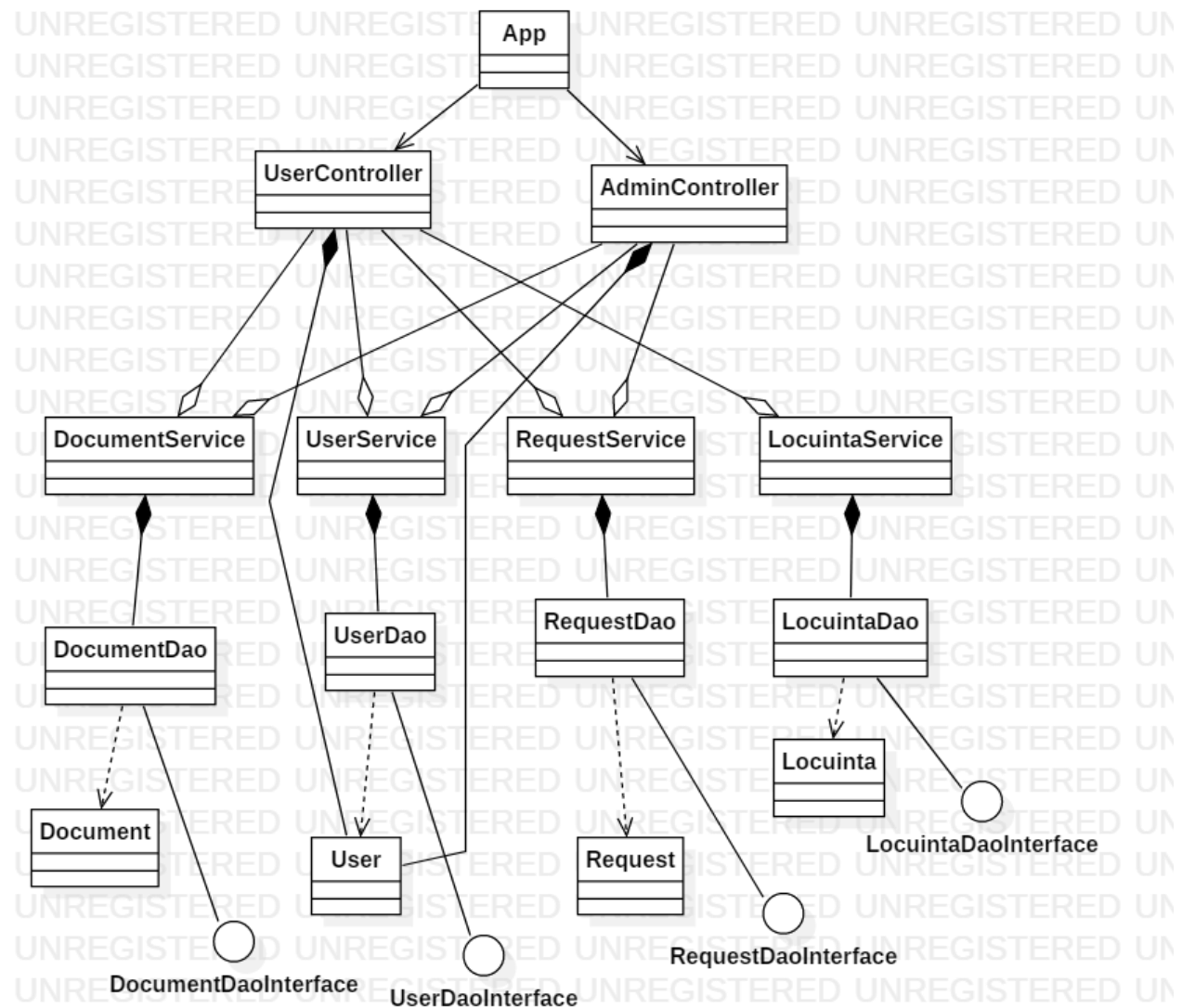


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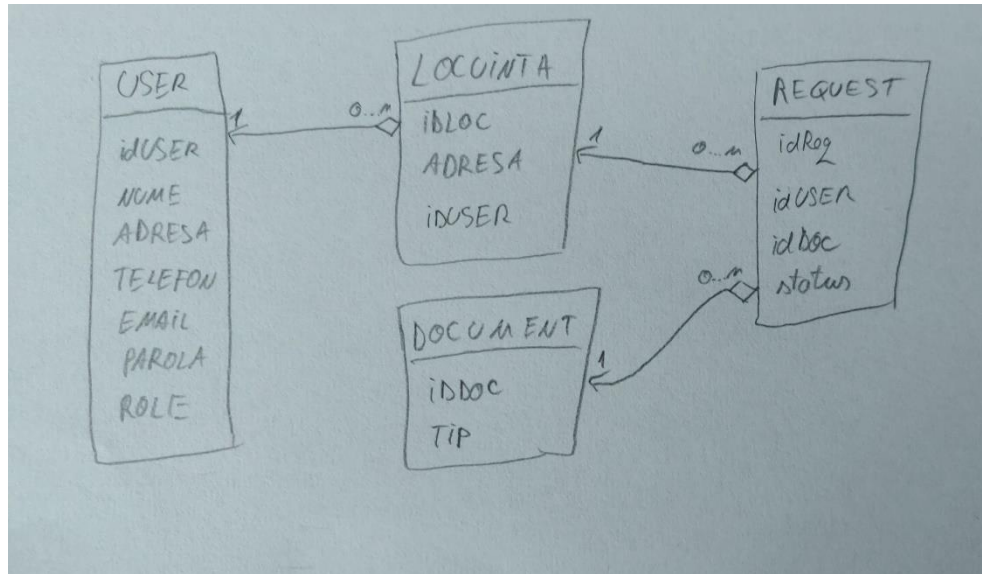
## 1.2 Class Design





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## 2. Data Model



## 3. Unit Testing

*[Present the used testing methods and the associated test case scenarios.]*

## IV. Elaboration – Iteration 2

### 1. Architectural Design Refinement

*Am adaugat un Abstract Factory design pattern pentru a putea schimba tipul conexiunii la baza de date(JDBC sau Hibernate).*

### 2. Design Model Refinement

*[Refine the UML class diagram by applying class design principles and GRASP; motivate your choices. Deliver the updated class diagrams.]*

## V. Construction and Transition

### 1. System Testing

*[Describe how you applied integration testing and present the associated test case scenarios.]*

### 2. Future improvements

*Utilizatorii vor putea sa primeasca pe email documentele. Adaugarea unui sistem de plata pentru chitante si facturi.*

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## VI. Bibliography

<https://dzone.com/articles/layered-architecture-is-good>

[https://www.tutorialspoint.com/hibernate/hibernate\\_examples.htm](https://www.tutorialspoint.com/hibernate/hibernate_examples.htm)

[https://www.tutorialspoint.com/design\\_pattern/abstract\\_factory\\_pattern.htm](https://www.tutorialspoint.com/design_pattern/abstract_factory_pattern.htm)