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|  | **KATOWICE INSTITUTE OF TECHNOLOGIES**  **INFORMATION TECHOLOGY** |  |

**IT SYSTEM DESIGN**

**PREVIEW DESIGN REPORT**

**SUBJECT**

The Web Application for Patients and Lab Technicians

To Manage and Access Pathological Reports

**PREPARER**

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1. PROJECT SCOPE
   1. What is The Project?

This project contains an web information management system to store, manage and present pathological and diagnostics results of patients. We have 3 types of user;

*Patient*: Who is want to see pathological and diagnostic results of him

*Lab* Techinician: Who is entering the pathological results to system.

*Doctor*: Who is review the pathological results and creating diagnostic reports.

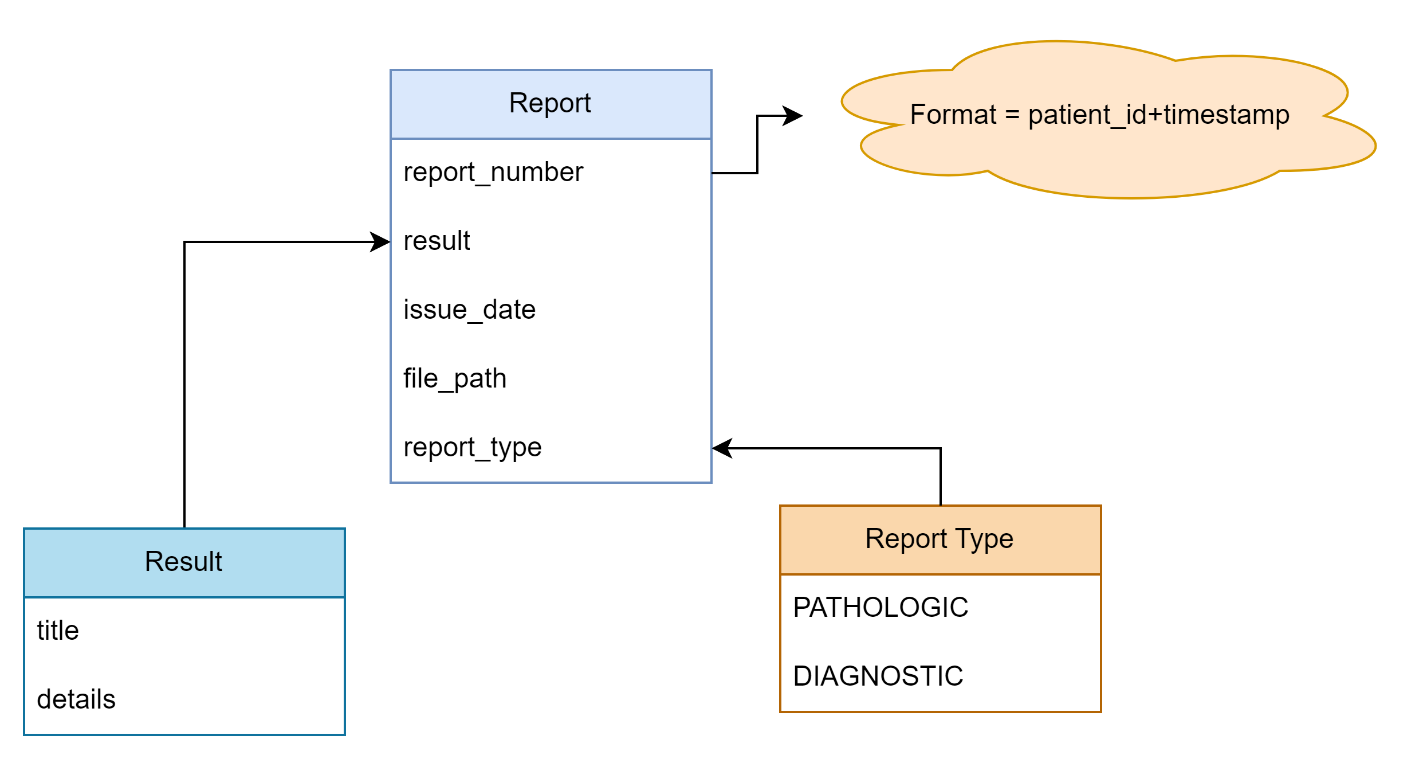
* 1. **What is The Purpose of Project?**
* Managing pathological and diagnostic reports of patients.
* To get easier and be faster the accessing the patient results.
* Taking to digital place the patient diseases.
  1. **What are The Components of Project?**
* Database
* Web API
* Web Interface
* A schema of showing the relation between components
  1. **What are The Functionalities of Project?**
* Create Patient/Lab Technician/Doctor User
* Update Patient/Lab Technician/Doctor Informations
* User Identification by Login/Logout
* User Authorization
* Create, Update, Delete, View pathologic and diagnostic results of patients.
* Download Patient Results as .pdf file
* Logging user actions to MongoDB like create, delete, show, login, logout etc. (Optional)
* View user actions by log data.
* Managing diseases for patients.
* Contact with Doctor on system. (Optional)

\*\*\* Some of these functionalities can be perform only by who has authority. For more information check the “USER AUTHORIZATION”.

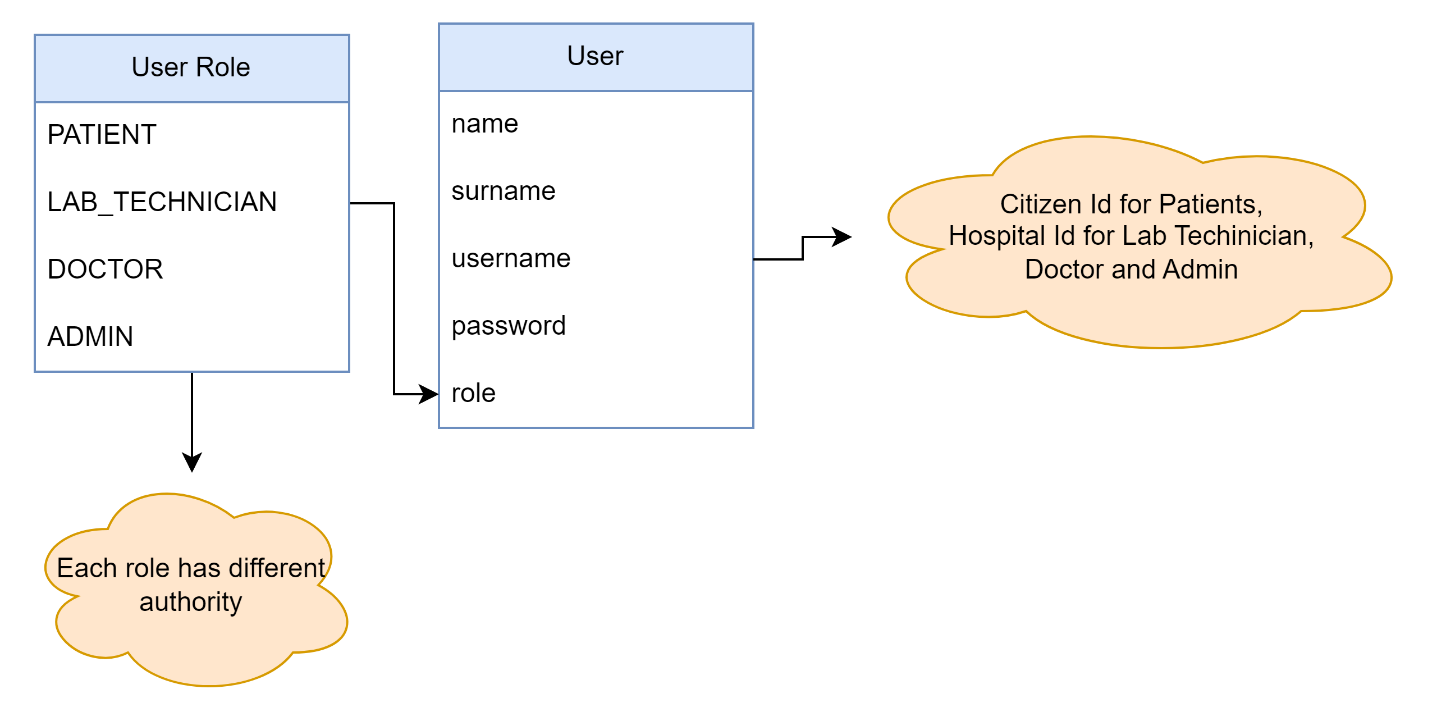
1. **COMPONENTS**
   1. Database
      1. Entities
         1. Disease



* + - 1. Report



* + - 1. User



* + - 1. Report File

This report file creating by using disease and report entities. It has following properties;

* Report\_number
* Result (title, details)
* Issue\_Date
* Report\_type
* Patient\_id
* Doctor\_name
* Lab\_Techinician\_name



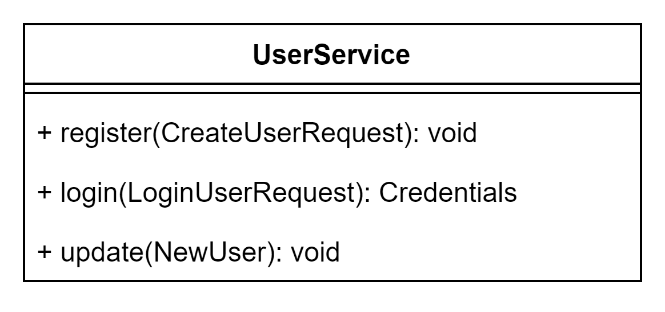
* + 1. Logs (Optional)
    2. Developing Tools
       1. MySQL

Patient, doctor and lab techinican informations stores here.

* + - 1. MongoDB

Log data stores here.

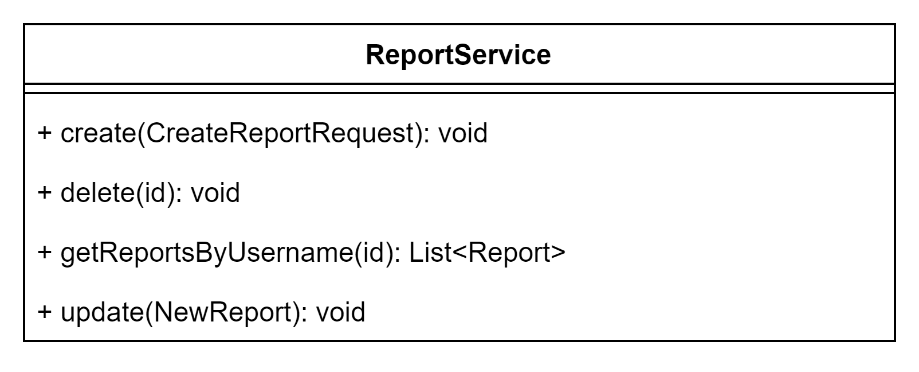
* 1. Web API
     1. User Service



* + 1. Disease Service



* + 1. Report Service



* + 1. Report File Manager



* + 1. Logger (Optional)
    2. Authentication
    3. Developing Tools
       1. Java 19
       2. Spring Boot
       3. OpenAPI
       4. Maven
       5. IntelliJ IDEA
  1. **Web Interface**
     1. Pages
     2. Developing Tools

1. **USER AUTHORIZATION**
2. **INTERFACE SKETCHS**