

CS-353: Database Systems

Project Proposal

National Judiciary Informatics System

Group 24



Group Members

Alp Ertürk

Firat Ege Akin

Burak Korkmaz

Elif Gülşah Kaşdoğan

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1.0 Description of Application

National Judiciary Informatics System is a web based application which brings suspect, victim, judge, lawyer and conciliator together. National Judiciary Informatics System can be accessed by different user types which are citizen (as victim or suspect), lawyer, judge and conciliator where different user types have different roles and different limitations for functionality. This system make many real life juristical acts convenient where citizens can file a lawsuit through her lawyer. Also lawyers, citizens and judges can track down the information related to an ongoing lawsuit. Many legal actions can be done easily and lower the price by taking away the necessity to going court, decreasing transportation expenses and easiness of storing soft copies of legal materials than hard copies.

2.0 Advantages of Using a Database

There are a lot of documents related to legal procedures in Turkey and most of the time these documents tend to be disorganized. Using a database for storing legal documents and informations related to them can solve disorganization problem. Information transfer among different departments of ministry of justice can be slow due to physical limitations. Our web based application makes information transfer fast. Providing a secure environment for legal documents is highly important. A secure system can prohibit physical problems such as document loss, document robbery, or impairment of documents.

3.0 Requirements

3.1 Functional Requirements

Functional requirements clarify the functions of National Judiciary Informatics System where functions can be described as interactions between user and system and also actions of inputs and outputs which are related to system that we will develop.

3.1.1 File/withdraw/close lawsuit

Each user is able to file lawsuits to any citizen through her lawyer. The judge is able to close a lawsuit. Only judge can close a lawsuit. The users that filed lawsuit before are able to withdraw their lawsuits. If they want to withdraw their lawsuit, they should make a request for withdrawal. If judge accepts this withdrawal request, lawsuit will be withdrawn. When a lawsuit is filed, every user that is related to lawsuit(complainant, defendant, lawyers, judge) gets notification about the lawsuit. This notification will be provided by sending e-mail.

3.1.2 Submit/claim document

Lawyers prepare complainant's documents and submit a lawsuit to the system. Once she submit the file, judge and defendants are able to claim the lawsuit. Every lawsuit document has a unique ID.

3.1.3 Examine files

Citizens and lawyers can keep track of the files through the system. Content of the files and information related to files can be seen by everyone if the case is a public. Only related judge, defendant, complainant and lawyers of them can see the details of files if the case is private.

3.1.4 Reconciliation process

Certain crimes can be handled by conciliators between two parties. Different conciliators take place in different cities and towns, two parties can come to terms in order to choose a conciliator for their lawsuits. If these two parties cannot agree on same conciliator, judge of that lawsuit will designate a conciliator to that case.

3.1.5 Deposit case fee

In National Judiciary Informatics System, every citizen will be able to file a lawsuit through their lawyers. In order to file a lawsuit and during the lawsuit submitting files is a need. Depending on number of files will be submitted, a fee will be determined and users will be able to pay this charge through system.

3.1.6 Sign in

Different user types will have different authentication ways to login to system in the first screen of our system. Lawyers, judges and conciliators who have a unique law society ID will be able to log in to the system with this unique ID to do their act of laws. Lawyers, judges and conciliators are also citizen so they will have an option to sign in to system with their TCK numbers just like other citizens who do not have a law society ID.

3.1.7 Make lawsuits private

Every lawsuit is public by default but if judge is able to make the lawsuit private. If judge makes a lawsuit private, only judge, defendant, complainant, and the lawyers of defendant and complainant are able to access the lawsuit documents from system.

3.2 Nonfunctional Requirements

Nonfunctional requirements clarify how National Judiciary Informatics System is supposed to be. Nonfunctional requirements are useful to analyze features of the system that we will develop. In our system non functional requirements are usability, extendibility, performance and data security of users. These nonfunctional requirements are important to indicate quality of our system.

3.2.1 Different user types and Authentication

There are citizens, judge, lawyer and conciliator user types in the system. Citizen represents a generalization for other users; judge, lawyer and conciliator types are obtained by specialization. There is a citizen login page, every citizen can enter the system by TCK no and password. Lawyers, judges and conciliators can sign in to the system by their law society ID and password. Authentication is made by a notification process to complete the action in system.

3.2.2 Secure data and electronic signatures

Each user must have a password to enter the system. Sign in process requires the unique TCK no and the password of the user. Moreover, an electronic signature is sent user a notification to her email address or mobile phones for providing data security. Authentication in an action which obligates the user to use an electronic signature to complete a process. Password in sign in stage and electronic signatures ensure data security in our system.

3.2.3 Permanently stored and read only data

System will store the documents related to lawsuit even if the citizen withdraw or judge conclude and close the case. This documents will be accessible by everyone if it is a public lawsuit. Documents are read only, a document cannot be updated after submission. People should not be able to make changes on the submitted documents, this feature is included to ensure the trustworthiness of the system.

3.2.4 User friendly interface

Interface of system is user-friendly, in other words using the system is very easy and simple to prevent complications. Therefore the puntos within system are 13 pt character. This makes documents visible enough for users at different ages. Also screen resolution is 1600x1200 pixel and this also makes documents easy to read.

3.2.5 Quick response time

In order to make a high performance system which will not require much system requirement, we are planning to not use high resolution graphics and as far as efficient ways for searching and sorting data in our system. Required 512 MB RAM and 30 GB HDD will be enough to use our system in an effective way.

3.2.6 Extendable design

In order to make our National Judiciary Informatics System extendable after and during development process we are going to use abstraction, encapsulation and inheritance principles. It will be costly in manner of time but in long process it will make our system extendable.

4.0 Limitations

- Lawyers can only access the documents of the assigned cases.
- Citizens will not be able to file a lawsuit without a lawyer.
- Everyone can access the case documents if the case is a public case.
- Only authorized people can access to case files if the case is private.
- Citizens can access the case documents through system only if the case is registered by her name.
- Different user types will not be able to operate other user types operation. For example citizens can not close a file or designate a conciliator
- Lawyers, judges and conciliators will have to sign in with their TCK no rather than law society ID to perform their citizen operations like file a lawsuit.
- Every lawsuit has a type and every court has a type (ordinary court, supreme court, administrative court). Lawsuit will be sent to related court which matches with its type.

5.0 Web Page's Address:

6.0 Conceptual Design

6.1 E/R Diagram

