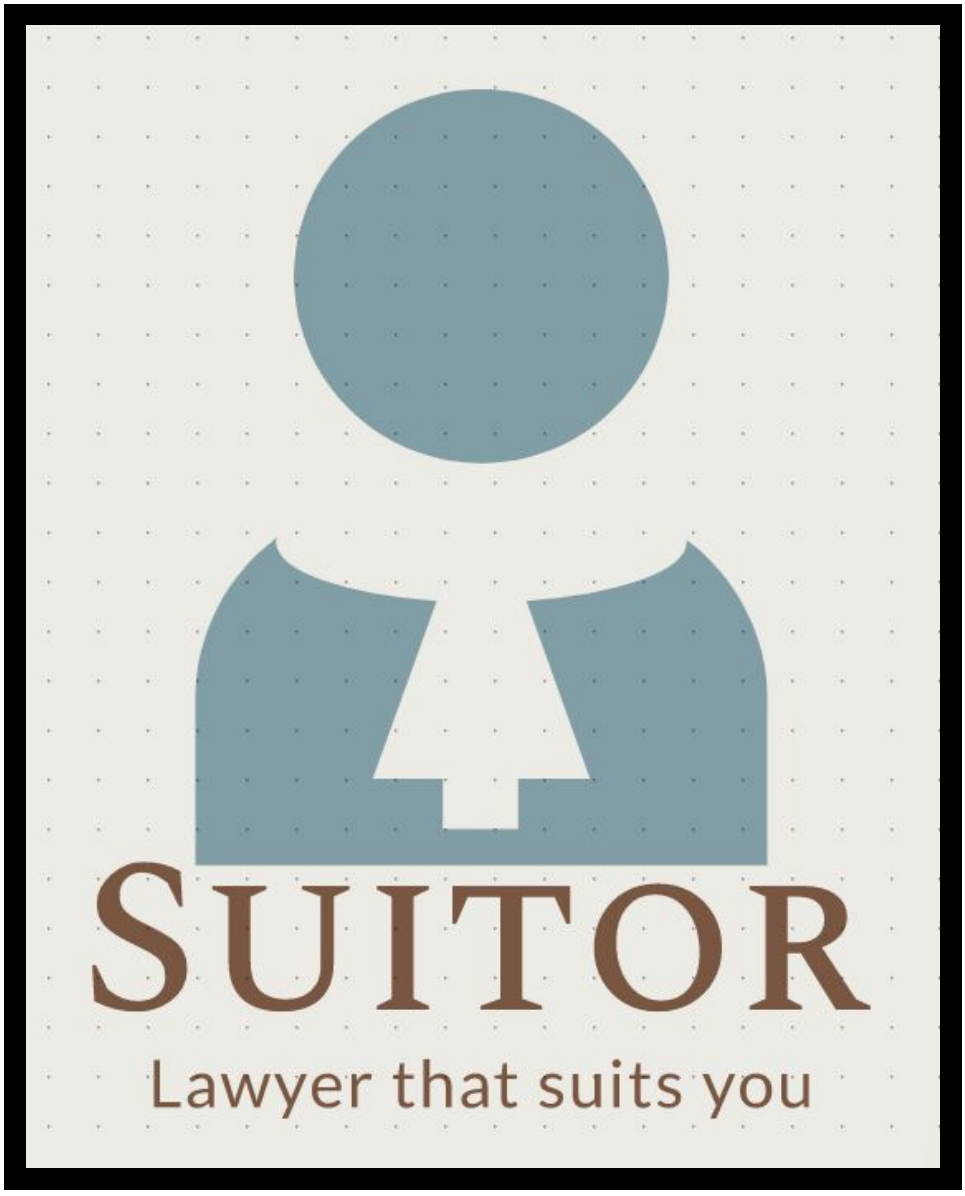

LAW FIRM DATABASE MANAGEMENT

Group 57

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WEEK 1:

Focus on discussing and coming up with a unique and creative idea for the Project

Brief Overview:

The application manages data of various aspects of the firm, like details of lawyers, their ongoing cases, employee earnings, partner earnings, firm earnings, firm expenditure etc. The Managing Partner of the firm lies at the topmost position in the hierarchy of stakeholders and has access to all the information in the database. All the other stakeholders i.e. Firm Partners, Employees (Associates, Paralegals, Secretaries, Office management, IT, HR, Finance and Accounting, Support staff etc.), Clients, Bar Council etc. have various levels of authorization and their views are tailored accordingly.

Problem statement

- Finding the best suited lawyer on the basis of track record, time taken to solve cases, fee etc.
- Helping young associates find their career forte on the basis of track record while working on cases in various legal fields.

Overall Queries

- The **Managing Partner** can view all the data including performance, earnings of the firm and all the employees and decide employees of the year based on that.
- **Law Firm Partners** can view the total amount and their share of money on firm's earnings.
- **Associates, Paralegals** can view past similar/connected cases to particular cases.
- The **Support Staff** can view and add hearing dates/meeting dates for cases of particular associates and partners and reschedule if clashing.
- The **Finance and Accounting employees** can view and update payment status for cases.
- The **HR** can view the colleges, gpa criteria etc. for hiring of Associates.
- The **Customers** can enter the details about their case and can search for a lawyer on the basis of their requirements.

Entities

- Employees (Managing Partner, Law Firm Partner, Associates, Paralegals, Secretaries, and Accounting, Support staff (Receptionists etc.), Attorneys)
  - Lawyers
  - Other Staff
- Legal Cases
- User
  - Customers
    - Corporations(Company Clients)
    - Individual Clients
  - Contacts
  - Opposition
- Financial Transaction (Amount/Percent paid)
- Legal Documents
- Calendar

Relationships

- customer **isA** User
- contact **isA** User
- An Individualclient **isA** customer
- A CompanyClient **isA** customer if there is a corporate
- Employee **isA** User
- An lawyer **isA** employee
- All other staff **isA** Employee
- Employee **receive** financial transaction
- Customer **hasA** legal cases
- Customer **owes** financial transaction to be paid as a fee or charge
- Customer **hires** lawyers
- Lawyer **handles** legal cases
- Legal Cases are **documented by** Legal Documents
- Legal cases demand **invest**ment of finances
- Hearing of legal cases is **held On** hearing Date
- User **keeps tracks** of schedule using calendar
- Court Hearing are **displayedIn** Calendar

WEEK 2:
Continued discussion on stakeholders and queries.

Roles/Queries for Stakeholders:

Investors:

1. Managing Partner (Top most in the hierarchy)

- ➔ View cases and their details with hearing today
- ➔ View pending cases
- ➔ View daily/monthly/yearly earnings in different areas of practice
- ➔ View today's earnings of the firm (in credit and cash)
- ➔ View performance (cases won/pending, earning per case etc.) of employees
- ➔ Update salaries (increase/decrease) of employees according to performance and ratings
- ➔ Update posts of employees (hierarchy) according to performance and ratings
- ➔ Decide and declare employees of the year based on the performance
- ➔ Interact with Bar Council

2. Law Firm Partners (Senior, Junior)

- ➔ View number of cases and brief info on them for the day/week/month
- ➔ View total amount and their share of money on firm's earnings
- ➔ View their cases and case details
- ➔ Update their cases' status, payment, progress
- ➔ Decide and declare representatives based on popularity and rating of employees for reputation enhancement of the firm

Employees:

1. Lawyers

- View their cases and case details for today
- View their pending/completed case details
- View past similar/connected cases to particular case
- View case requests and accept/reject them

2. Paralegals, Secretaries

- View and add hearing dates/meeting dates for cases of particular associates and partners and reschedule if clashing
- Update associates/partners cases' status, payment, progress on demand, days till completion
- Identify similar/connected cases to ongoing cases
- Suggest specialisation/billable hours based on trends for associates
- View number of cases and brief info on them for the day/week/month

5. "Of-counsel" Attorneys (Experienced, supervisory position, temporarily consulted by firms for counsel) --to remove//

- View longest pending cases and case details and add remarks/advice for associates
- View most recent cases and case details and add remarks/advice for associates
- View ongoing cases and case details according to their area of practice and add remarks/advice
- View and update assigned cases for advice
- Update their experience (cases won/settled, reputation)--to remove and merge queries under other sections

Non Legal Staff / Other Staff :

Office management, IT, HR, Finance and Accounting Dept.

- View and update payment status for cases regularly
- View and update total earnings of the firm daily/weekly/monthly/yearly
- Identify most economically productive employees earning-wise monthly and yearly
- Add/delete new/old employees
- View and add hearing dates/meeting dates for cases of particular associates and partners and reschedule if clashing
- Update associates/partners cases' status, payment, progress on demand
- Maintain client data
    1. Enter new clients
    2. Delete clients
    3. Update old clients
    4. Suggest clients best lawyer according to inbuilt algo based on preferences

Clients:

- Ask for a lawyer corresponding to their own needs, and case. Get lawyer suggestions based on their performance.
- Pays the amount charged by the lawyer assigned to the client

DriveFolder: T57DBMS

WEEK 3

- ER-DIAGRAM
- SCHEMA
- DATABASE TABLES

Schema

- lawyer(userID : char(10), emailID : varchar(256), phoneNumber : char(10), address(streetName : varchar(256), pincode: varchar(10), buildingNumber : int, city : varchar(50), state : varchar(50)), name(firstName : varchar(30), middleName : varchar(30), lastName : varchar(30)), dateOfBirth : date, experience : mediumint , gender : varchar(30), casesLost : int, casesSettled : mediumint, casesWon : mediumint, avgTimePerCase : mediumint, {specialization} : varchar(256), charges : mediumint, positionAtFirm : varchar(100), clientRating : mediumint, *calendarID* : char(10)).

- otherStaff(userID: char(10), emailID : varchar(256), phoneNumber:char(10), address(streetName : varchar(256), pincode : varchar(10), buildingNumber : int, city : varchar(50), state : varchar(50)), name(firstName : varchar(30), middleName : varchar(30), lastName : varchar(30)), dateOfBirth : date, experience : mediumint, gender : varchar(30), positionAtFirm : varchar(100), salary : mediumint, *calendarID* : char(10)).

- opposition(oppositionID : char(10), emailID : varchar(256), phoneNumber: char(10), name(firstName : varchar(30), middleName : varchar(30), lastName : varchar(30)), address(streetName : varchar(50), pincode : varchar(10), buildingNumber : int, city : varchar(50), state : varchar(50))

- legalCases(caseID: char(15), dateOfFiling : date, dateOfLastActivity : date, status : varchar(256), duration : mediumint ,{flair} : varchar(256), plaintiff : varchar(256)).

- courtHearing(caseID : char(10), time: time, courtRoom : varchar(256), nextHearingDate : date).
- financialTransaction(transactionID : char(10), amount : mediumint, description : varchar(256), type : tinyint, dateOfPayment : date)
- legalDocument(docID : char(10), createdOn : date, type : varchar(256) , visibility : tinyint, dateLastModified : date, *caseID* : char(15)).
- calendar(calendarID : char(10), deadline: varchar(256), description : varchar(256))
- clientCompanies(userID : char(10), isClient: tinyint, emailID : varchar(256), phoneNumber : char(10), address(streetName : varchar(256), pincode : varchar(10), buildingNumber : int, city : varchar(50), state : varchar(50)), name(firstName : varchar(30), middleName : varchar(30), lastName : varchar(30)), budget : mediumint, companyName : varchar(256), gstIN, fax : varchar(100), *calendarID*).
- individualClients(userID : char(10), isClient: tinyint, emailID : varchar(256), phoneNumber : char(10), address(streetName : varchar(256), pincode : varchar(10), buildingNumber : int, city : varchar(50), state : varchar(50)), name(firstName : varchar(30), middleName : varchar(30), lastName : varchar(30)), budget : mediumint, dateofBirth : date, *calendarID* : char(256)).
- handles(caseID : char(15), userID : char(10))
- hasA(userID : char(10), caseID : char(15))
- displayedIn(calendarID : char(10), caseID : char(15), time: time)
- oweUs(transactionID: char(10), userID: char(10))
- receive(transactionID:char(10) , userID: char(10))
- user(userID:char(10) , password: char(8))
- hire(userID : char(10), lawyerID : char(10))
- against(oppositionID : char(10), caseID : char(15))
- makes(transactionID:char(10), userID:char(10))

- Invest(caseID : char(15), transactionID : char(10))

Lawyer

Variable	Datatype	Integrity Constraints
userID	char(10)	Primary Key, Not null
firstName	varchar(30)	Not null except middleName which is optional, composite attribute (name)
middleName	varchar(30)	
lastName	varchar(30)	
dateOfBirth	date	Not null
gender	varchar(30)	Not null
charges	mediumint	Not null, check >= 2000 and <= 20000
casesWon	mediumint	Not null
casesLost	mediumint	Not null
casesSettled	mediumint	Not null
experience	mediumint	Not null
emailID	varchar(256)	Not null
phoneNumber	char(10)	Not null
positionAtFirm	varchar(100)	Not null, check in Associate, Lawyer, Paralegal, Partner
avgTimePerCase	mediumint	
buildingNumber	int	Not null, composite attribute (address)
pincode	int	
streetName	varchar(256)	
city	varchar(50)	
state	varchar(50)	

{specialization}	varchar(256)	Not null, multivalued attribute
clientRating	mediumint	Not null, check between 0 and 10
calendarID	char(10)	Not null, Foreign Key referenced by Calendar

LegalCases

Variable	Datatype	Integrity Constraints
caseID	char(15)	Primary Key, Not null
status (Active/Settled/Won/Lost)	varchar(256)	Not null, (“active”,“lost”,“won”, “settled”)
plaintiff	varchar(256)	Not null
dateOfFiling	date	Not null
lastDateOfActivity	date	Not null
duration	mediumint	Not null
{flair}	varchar(256)	Not null, Multivalued attribute

LegalDocuments

Variable	Datatype	Integrity Constraints
docID	char(10)	Primary Key
createdOn	date	Not Null
caseID	char(15)	Foreign Key referenced by LegalCases, Not Null
dateLastModified	date	Not null
visibility	tinyint	Not Null, check 0 or 1

type	varchar(256)	Not Null

ClientCompanies

Variable	Datatype	Integrity Constraints
userID	char(10))	Primary Key
isClient	tinyint	Not null
firstName	varchar(30)	Not null except middleName which is optional, composite attribute (name)
middleName	varchar(30)	
lastName	varchar(30)	
phoneNumber	char(10)	Not null
emailID	varchar(256)	Not null
fax	varchar(100)	
buildingNumber	int	Not null, composite attribute (address)
pincode	varchar(10)	
streetName	varchar(256)	
city	varchar(50)	
state	varchar(50)	
budget	mediumint	Not null
companyName	varchar(256)	Not null
gstIN	varchar(11)	
calendarID	char(10)	Foreign Key referenced by Calendar

CourtHearing

Variable	Datatype	Integrity Constraints
caseID	char(15)	Foreign Key part of Primary Key along with time, not null
time	time	Part of Primary Key along with caseID, Not null, check (time > '09:00' AND time < '19:00')
nextHearingDate	date	
courtRoom	varchar(256)	Not null

DisplayedIn

Variable	Datatype	Integrity Constraints
calendarID	char(10)	Not null, Foreign key, part of Primary key along with caseID
caseID	char(15)	Not null, Foreign key, part of Primary key along with calendarID
time	time	Not null

IndividualClients

Variable	Datatype	Integrity Constraints
userID	char(10)	Primary Key
isClient	tinyint	Not null, check is '0' or '1'
firstName	varchar(30)	Not null except middleName which is optional, composite
middleName	varchar(30)	

lastName	varchar(30)	attribute (name)
phoneNumber	char(10)	Not null
emailID	varchar(256)	Not null
dateOfBirth	date	Not null
buildingNumber	int	Not null, composite attribute (address)
pincode	varchar(10)	
streetName	varchar(256)	
city	varchar(50)	
state	varchar(50)	
budget	mediumint	Not null, check != 0
calendarID	char(10)	Foreign Key referenced by Calendar

Handles

Variable	Datatype	Integrity Constraints
caseID	char(15)	Not null, Foreign Key part of Primary Key along with userID
userID	char(10)	Not null, Foreign Key part of Primary Key along with caseID

HasA

Variable	Datatype	Integrity Constraints

userID	char(10)	Not null, Foreign Key part of Primary Key along with caseID
caseID	char(15)	Not null, Foreign Key part of Primary Key along with userID

OtherStaff

Variable	Datatype	Integrity Constraints
userID	char(10)	Primary, Not null
firstName	varchar(30)	Not null except middleName which is optional, composite attribute (name)
middleName	varchar(30)	
lastName	varchar(30)	
dateOfBirth	date	Not null
gender	varchar(30)	Not null
emailID	varchar(256)	Not null
phoneNumber	char(10)	Not null
experience	mediumint	Not null
salary	mediumint	Not null, check >= 2000 and <= 20000
positionAtFirm	varchar(100)	Not null
buildingNumber	int	Not null, composite attribute (address)
pincode	varchar(10)	
streetName	varchar(256)	
city	varchar(50)	
state	varchar(50)	
calendarID	char(10)	Foreign Key referenced by Calendar

Makes

Variable	Datatype	Integrity Constraints
transactionID	char(10)	Not null, Foreign Key part of Primary Key along with userID
userID	char(10)	Not null, Foreign Key part of Primary Key along with transactionID

Invest

Variable	Datatype	Integrity Constraints
caseID	char(15)	Not null, Foreign Key part of Primary Key along with transactionID
transactionID	char(10)	Not null, Foreign Key part of Primary Key along with caseID

FinancialTransaction

Variable	Datatype	Integrity Constraints
transactionID	char(10)	Primary Key
description	varchar(256)	
amount	mediumint	Not null, check not equal to 0
type	tinyint	Not null, check is '1' or '0' for take and give

		respectively
dateOfPayment	date	Not null

User

Variable	Datatype	Integrity Constraints
userID	char(10)	Primary key along with caseID, Not null
password	char(8)	Not null

Against

Variable	Datatype	Integrity Constraints
oppositionID	char(10)	Foreign key, Primary key along with oppositionID, Not null
caseID	char(15)	Foreign key, Primary key along with caseID, Not null

Calendar

Variable	Datatype	Integrity Constraints
calendarID	char(10)	Primary Key
deadline	char(10)	Not null
description	varchar(256)	Not null

Hires

Variable	Datatype	Integrity Constraints
userID	char(10)	Not null, Foreign Key part of Primary Key along with lawyerID
lawyerID	char(10)	Not null, Foreign Key part of Primary Key along with userID

Opposition

Variable	Datatype	Integrity Constraints
oppositionID	char(10)	Primary Key
emailID	varchar(256)	Not null
phoneNumber	char(10)	Not null
firstName	varchar(30)	Not null except middleName which is optional, composite attribute (name)
middleName	varchar(30)	
lastName	varchar(30)	
buildingNumber	int	Composite attribute (address)
pincode	varchar(10)	
streetName	varchar(256)	
city	varchar(50)	
state	varchar(50)	

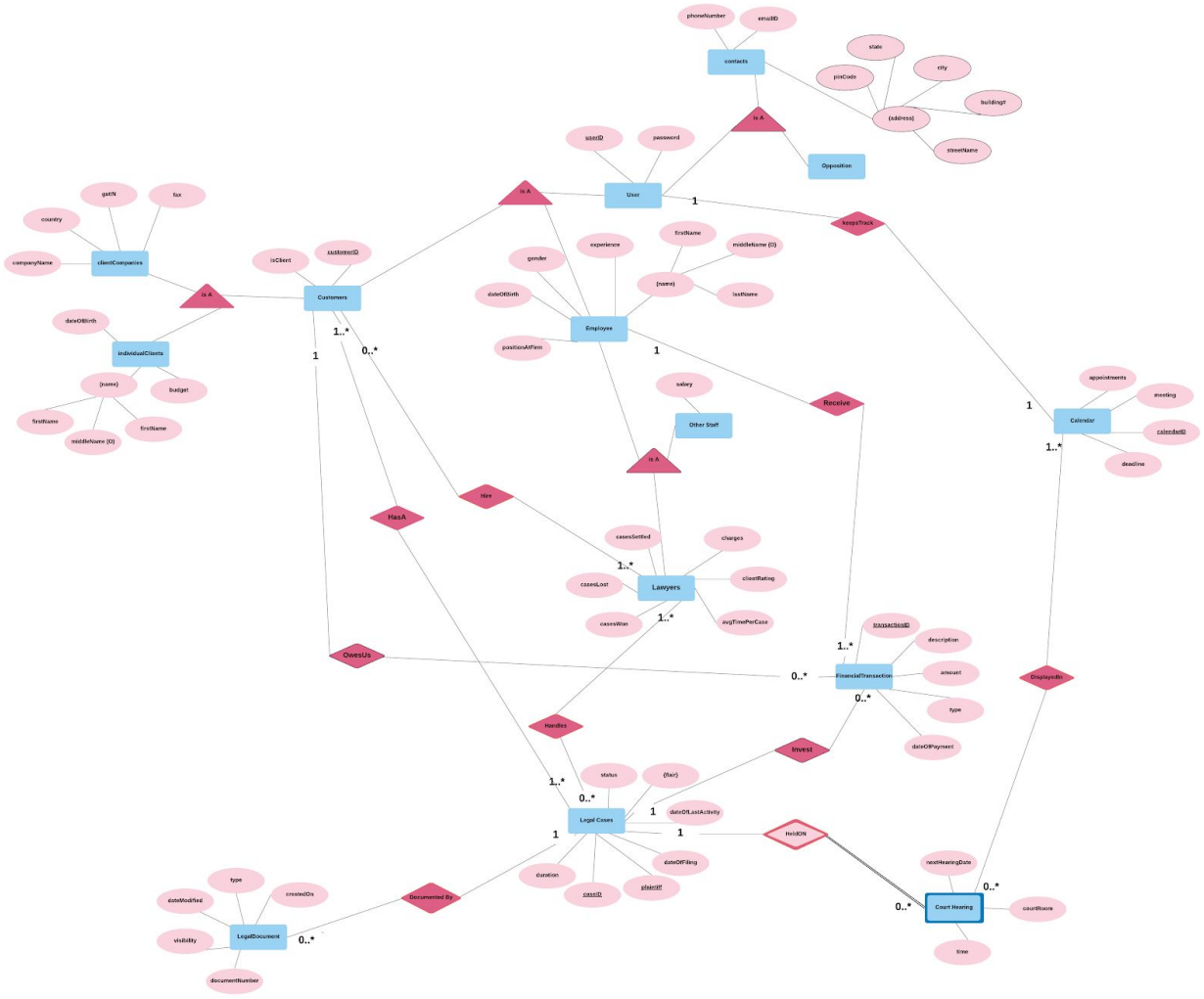
Type of cases we will be covering:

Divorce|Tenant Law|Crime|Civil|Real Estate|Bankruptcy|Finance|Family Law|Traffic Law|Wills and Probate|Child Custody|Medical Malpractice|Construction Law|Copyrights and

SUITOR
Lawyer that suits you

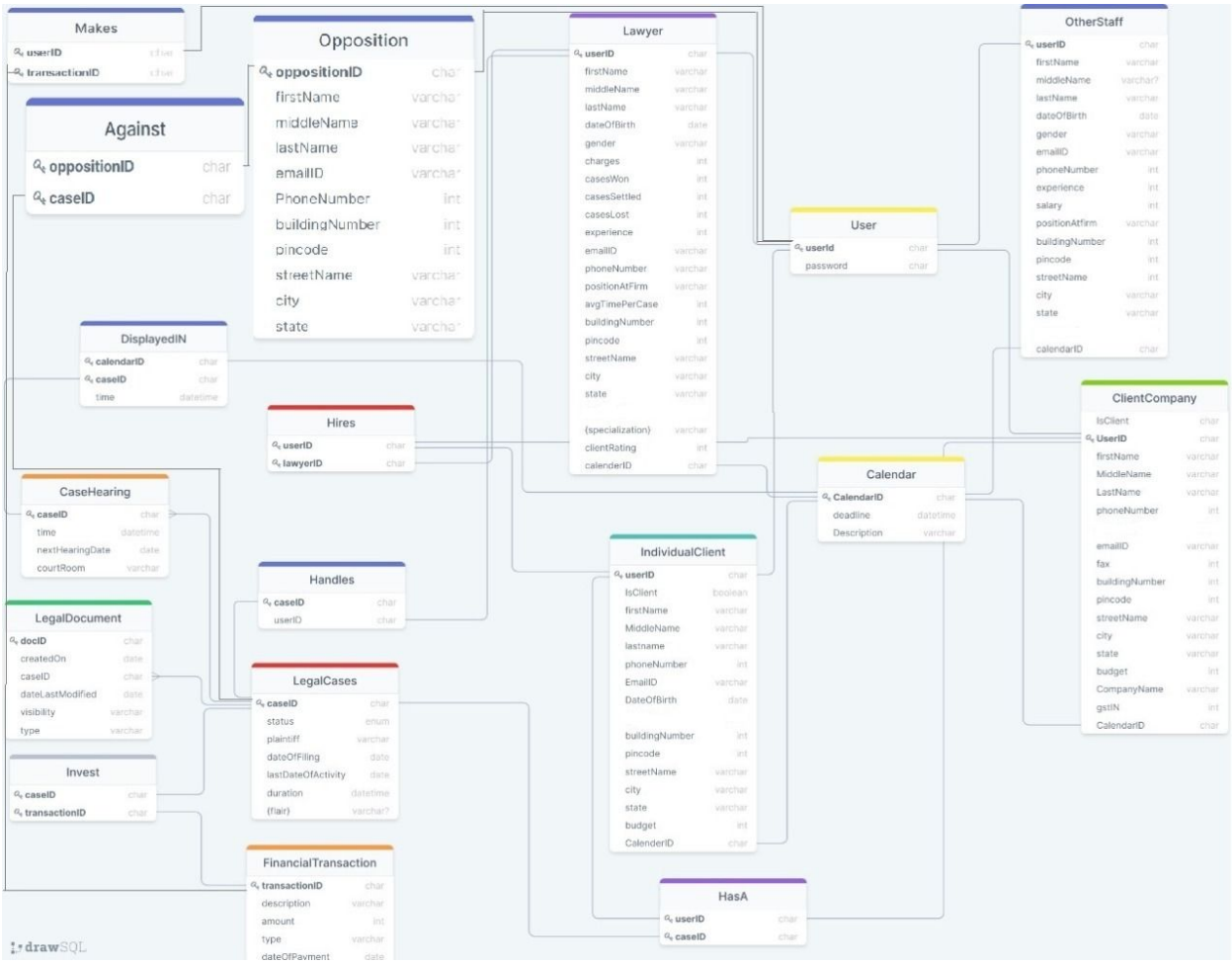
Patents|Education|Felony|Health Insurance|Income Tax|LGBTQ Law|Oil and Gas|Shipping|Visitation Rights|Wrongful Death|Whistleblower Litigation|Sports Law|Restraining Orders|Military Law|Labour and Employment|Investments|Homicide|Politics|Communications and Media|Drug Crimes|Agricultural Law|Aviation Law

ER DIAGRAM



SUITOR
Lawyer that suits you

SCHEMA DIAGRAM



CONTRIBUTION OF MEMBERS

Aditi Sejal: ER diagram, design of schema
Neha Goel: ER diagram, design of schema
Shivam Verma: Populating the tables, DDL queries
Karish Grover: Populating the tables, DDL queries
Kushagra Gupta: ER diagram, design of schema

WorkInProgress document has been created by everyone, it is hard to demarcate contributions. Equal contribution was made by every participant in every aspect of the project, just the ones focused on designated parts of the project have been specified above.