

DBMS: LAW MANAGEMENT SYSTEM

INTRODUCTION:-

A law management system, also known as a legal practice management system (LPMS) or law practice management software, is an all-encompassing software solution created to simplify and improve the operations of law firms, legal departments, or individual attorneys. In order to successfully manage their cases, clients, papers, appointments, billing, and other administrative responsibilities, legal businesses rely heavily on this system.

The legal profession is inherently complex and necessitates meticulous planning, adherence to rules, and good client and legal professional communication. These issues are specifically addressed by law management systems, which offer a single platform to manage the numerous activities that attorneys and other legal professionals must deal with on a daily basis.



SCOPE OF CASE STUDY

- The legal system in India works through a combination of traditional law practices and modern technologies. A law management system includes many elements such as **Lawyer, Client, Court, Case** and **Document**.
- Lawyers are legal professionals who provide legal advice, represent clients in court, and assist with legal issues, contracts, and legal documentation. a lawyer handles many cases. it comprises the **Lawyer id, Name, Mobile number, Specialization, Bar license number** and **Hire date** also.
- Clients can be individuals or entities (such as businesses) who initiate or defend a lawsuit. clients include a **Unique id, Name, Address, Mobile number**.
- Courts are the formal legal systems in which cases are heard and resolved. lawyers present arguments, evidence, and seek legal remedies or justice on behalf of clients in court. court includes the **Court id, Name** and **Address**.
- There are undoubtedly many types of cases that include criminal, civil, family law, traffic violations cases and so on. each and every case has its own **Case id, Name, Description, Status, Date opened** and **closed**.
- Court related document include pleadings, evidences, court orders, summons, transcripts, briefs judgements and legal notices to make every document different from another document has **Document id, Name, Type, Declared Date**.

ENTITIES AND THEIR ATTRIBUTES

1. **LAWYER:** This entity represents lawyers or legal professionals who work within the system. (**LAWYER_ID**, FIRST_NAME, LAST_NAME, PHONE, SPECIALIZATION, BAR_LICENSE_NUMBER, HIRE_DATE)

2. **CLIENT:** Represents the clients or individuals involved in legal cases.

(**CLIENT_ID**, FIRST_NAME, LAST_NAME, ADDRESS, MOBILE_NO)

3. **CASE:** Represents legal cases that lawyers handle.

(**CASE_ID**, CASE_NAME, CASE_DESCRIPTION, CASE_STATUS, DATE_OPENED, DATE_CLOSED)

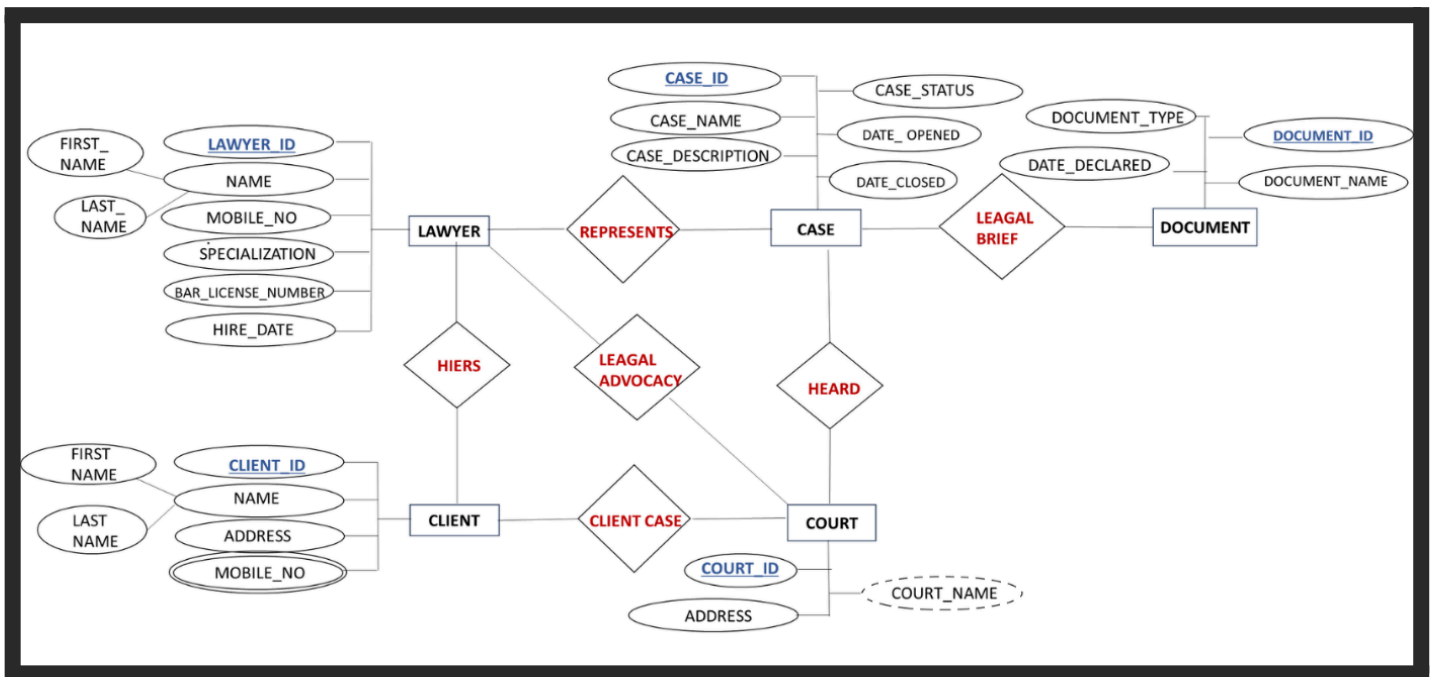
4. **COURT:** The courts where legal cases are heard.

(**COURT_ID**, COURT_NAME, ADDRESS)

5. **DOCUMENT:** Represents documents or records associated with legal cases.

(**DOCUMENT_ID**, DOCUMENT_NAME, DOCUMENT_TYPE , DATE_DECLARED)

ER -DIAGRAM



RELATIONSHIPS

- **LAWYER-CASES RELATIONSHIPS (One-to-Many):** Each lawyer can handle multiple cases.
- **CLIENT-COURT RELATIONSHIPS (One-to-Many):** Each client can be associated with multiple cases, as clients can be involved in various legal matters.
- **CASE-DOCUMENTS RELATIONSHIPS(One-to-Many):** Each case can have multiple legal documents associated with it.
- **LAWYER-COURT RELATIONSHIPS(Many-to- Many):** A lawyer can be associated with multiple courts, and a court can have multiple lawyers associated with it.
- **LAWYER-CLIENT RELATIONSHIPS (One-to-Many):** Each lawyer can represent multiple clients, but each client is typically represented by one lawyer at a time.
- **CASE-COURT RELATIONSHIP (Many-to-One):** Each case is associated with one specific court where legal proceedings related to that case take place.

TABLES

1.LAWYER (Lawyer_id , First_name , Last_name , mobile_no, Specialization, Bar_license_number, Hire_date)

LAWYER	FIRST_NAME	LAST_NAME	MOBILE_NO	SPECIALIZATION	BAR_LICENS	HIRE_DATE
A1234	ajay	patil	9876588341	family law	BAR123456	15-MAY-20
A3338	sunil	desai	9854377232	corporate law	BAR987654	20-SEP-18
A6789	prakash	raj	9969722734	real estate law	BAR555555	10-MAR-19
A4580	chetan	dalvi	9456377238	environmental law	BAR321987	25-JAN-21
A2346	anil	shah	9945982345	employment law	BAR888999	14-JUL-17
A8845	sumit	shetty	9594327168	immigration law	BAR111222	14-JUL-19
A5564	tejas	pawar	9819163824	intellectual property	BAR555123	03-DEC-18
A9956	rahul	shinde	9893458995	constitutional law	BAR889345	05-AUG-15

2. CLIENT (Client_id , First_name , Last_name , Address, Mobile_no)

CLIENT	FIRST_NAME	LAST_NAME	ADDRESS	MOBILE_NO	MOBILE_NO_2
C01	nitin	das	bandra kurla complex	9930088375	7887654344
C02	priti	patel	andheri(e) m.i.d.c.	9594328167	6543476648
C03	rupesh	patil	lower parel,dadar	8898543281	8734601469
C04	sunil	gaikwad	linking road,bandra	9934588614	4569872749
C05	rohit	kamble	cheetah camp,tronbay	9867432159	9857243568
C06	sonal	desai	nehru nagar,kurla	8814599589	9861235478
C07	dinesh	patil	shivaji park,dadar	9757308126	9875497123
C08	ruchi	more	barc colony,anushktnagar	9757308134	8644276321

3. COURT (Court_id, Court_name, Address)

COURT_	COURT_NAME	ADDRESS
1301	mumbai high court	fort,mumbai,400032
1302	mazgaon court	court building,mumbai,400010
1303	bandra court	bandra east,mumbai,400051
1304	kurla court	kurla west,mumbai,400070
1305	vikroli court	vikroli,mumbai,400083
1306	borivali court	borivali west,mumbai,400092
1307	mulund court	mulund west,mumbai,400080
1308	andheri court	andheri east,mumbai,400069

4.CASE1 (Case_id, Case_name, Case_description, Case_status, Date_opened, Date_closed, Lawyer_id, Client_id, Court_id)

CASE_ID	CASE_NAME	CASE_DESCR	CASE_STATUS	DATE_OPENED	DATE_CLOSED	LAWYER_ID	CLIENT_ID	COURT_ID
S-1432	deep vs state	assault case	open	15-JAN-22	-	A1234	C01	1301
S-2856	patel vs municipality	land dispute	in progress	10-JUL-21	-	A3338	C02	1302
S-6345	gupta vs state	tax evasion	closed	02-MAY-20	18-DEC-21	A6789	C03	1303
S-6759	verma vs corporation	employment discrimination	open	20-MAR-23	-	A4580	C04	1304
S-5466	kumar vs government	public interest	in progress	08-AUG-23	-	A2346	C05	1305
S-5476	sharma vs municipality	property zoning dispute	in progress	05-NOV-22	-	A8845	C06	1306
S-5636	khan vs state	personal injury law	closed	15-MAR-21	30-SEP-21	A5564	C07	1307
S-4657	mehta vs corporation	criminal fraud	closed	12-SEP-22	28-FEB-23	A9956	C08	1308

5.DOCUMENT (Document_id, Document_name, Document_type, Date_declared, Case_id)

DOCUMENT_ID	DOCUMENT_NAME	DOCUMENT_TYPE	DATE_DECLARED	CASE_ID
D-1	affidavit	witness statement	09-JAN-22	S-1432
D-2	complaint	court orders	03-JUL-21	S-2856
D-3	search order	legal notice	27-APR-20	S-6345
D-4	offer letter	settlement agreement	19-MAR-23	S-6759
D-5	complaint	legal notice	06-AUG-23	S-5466
D-6	appeal	legal contract	01-NOV-22	S-5476
D-7	medical records	settlement agreement	07-MAR-21	S-5636
D-8	criminal complaint	witness statement	03-SEP-22	S-4657

QUERIES

1) Find the names of all Document:

```
SELECT DOCUMENT_NAME FROM DOCUMENT;
```

```
SQL> select document_name from document;
```

```
DOCUMENT_NAME
```

```
-----  
affadavit  
complaint  
search order  
offer letter  
complaint  
appeal  
medical records  
criminal complaint
```

```
8 rows selected.
```

2) Change the address of CLIENT_ID 'C07' to 'PRABHADEVI,DADAR'.

```
UPDATE CLIENT
```

```
SET ADDRESS = 'PRABHADEVI DADAR' ;
```

```
WHERE CLIENT_ID = C07;
```

3)SELECT * FROM LAWYER where mobile_no like'98%

```
SQL> UPDATE CLIENT
```

```
2 SET ADDRESS = 'PRABHADEVI DADAR'
```

```
3 WHERE CLIENT_ID = 'C07';
```

```
1 row updated.
```



```
SQL> select * from lawyer where mobile_no like '98%';
```

LAWYER	FIRST_NAME	LAST_NAME	MOBILE_NO	SPECIALIZATION	BAR_LICENS	HIRE_DATE
A1234	ajay	patil	9876588341	family law	BAR123456	15-MAY-20
A3338	sunil	desai	9854377232	corporate law	BAR987654	20-SEP-18
A5564	tejas	pawar	9819163824	intellectual property	BAR555123	03-DEC-18
A9956	rahul	shinde	9893458995	constitutional law	BAR889345	05-AUG-15

4) Change the name of COURT to COURT_OF_JUSTICE.

```
ALTER TABLE COURT
```

```
RENAME TO COURT_OF_JUSTICE;
```

```
SQL> ALTER TABLE COURT  
2 RENAME TO COURT_OF_JUSTICE;
```

```
Table altered.
```

```
SQL> select * from COURT_OF_JUSTICE;
```

COURT_	COURT_NAME	ADDRESS
1301	mumbai high court	fort,mumbai,400032
1302	mazgaon court	court building,mumbai,400010
1303	bandra court	bandra east,mumbai,400051
1304	kurla court	kurla west,mumbai,400070
1305	vikroli court	vikroli,mumbai,400083
1306	borivali court	borivali west,mumbai,400092
1307	mulund court	mulund west,mumbai,400080
1308	andheri court	andheri east,mumbai,400069

5) Find the cases of 'In Progress' that started before 2023.

```
SELECT *FROM CASE1WHERE UPPER(CASE_STATUS) =
'IN PROGRESS' AND DATE_OPENED <
TO_DATE('2023-01-01', 'YYYY-MM-DD')
```

CASE_ID	CASE_NAME	CASE_DESCR	CASE_STATUS	DATE_OPENED	DATE_CLOSED	LAWYER_ID	CLIENT_ID	COURT_ID
S-2856	patel vs municipality	land dispute	in progress	10-JUL-21	-	A3338	C02	1302
S-5476	sharma vs municipality	property zoning dispute	in progress	05-NOV-22	-	A8845	C06	1306

6) List all case started dates in format 'DD-Month-YY from CASE table.

```
SELECT TO_CHAR(DATE_OPENED, 'yyyy-mm-dd') AS
"DATE_OPENED" FROM CASE1;
```

```
SQL> SELECT TO_CHAR(DATE_OPENED, 'yyyy-mm-dd') AS "DATE_OPENED" FROM CASE1;

DATE_OPENED
-----
2022-01-15
2021-07-10
2020-05-02
2023-03-20
2023-08-08
2022-11-05
2021-03-15
2022-09-12

8 rows selected.
```

7)Display case id and description with lawyer id and his Name

```
Select case1.case_id,  
       case1.case_descr,  
       lawyer.lawyer_id,  
       lawyer.first_name AS lawyer_first_name,  
       lawyer.last_name AS lawyer_last_name  
FROM   case1  
INNER JOIN   lawyer  
ON   lawyer.lawyer_id = case1.lawyer_id;
```

CASE_ID	CASE_DESCR	LAWYER_ID	LAWYER_FIRST_NAME	LAWYER_LAST_NAME
S-1432	assault case	A1234	ajay	patil
S-2856	land dispute	A3338	sunil	desai
S-6345	tax evasion	A6789	prakash	raj
S-6759	employment discrimination	A4580	chetan	dalvi
S-5466	public interest	A2346	anil	shah
S-5476	property zoning dispute	A8845	sumit	shetty
S-5636	personal injury law	A5564	tejas	pawar
S-4657	criminal fraud	A9956	rahul	shinde

8)Count total number of court with court name in ascending order from court

```
SELECT court_name, COUNT(*) AS total_count  
FROM court  
GROUP BY court_name  
ORDER BY court_name ASC;
```

```
SQL> SELECT court_name, COUNT(*) AS total_court
  2   FROM court
  3   GROUP BY court_name
  4   ORDER BY court_name ASC;
```

COURT_NAME	TOTAL_COURT
andheri court	1
bandra court	1
boriwali court	1
kurla court	1
mazgaon court	1
mulund court	1
mumbai high court	1
vikroli court	1

8 rows selected.

9) Display document type starts with l and how much they are present

```
SELECT document_type , count(*) as document_no
FROM document
WHERE document_type LIKE 'l%'
GROUP BY document_type;
```

```
SQL> SELECT document_type, COUNT(*) as document_no
  2   FROM document
  3   WHERE document_type LIKE 'l%'
  4   GROUP BY document_type;
```

DOCUMENT_TYPE	DOCUMENT_NO
legal notice	2
legal contract	1

10) Display first name of client where his mobile number ends with 1

select first_name from client where mobile_no = (select mobile_no from client where mobile_no like '%1');

```
SQL> select first_name from client where mobile_no = ( select mobile_no from client where mobile_no like '%1');
```

```
FIRST_NAME
```

```
-----
```

```
rupesh
```

```
SQL>
```

PROCEDURE

1) declare

v_id lawyer.lawyer_id%type;

v_firstname lawyer.first_name%type;

v_number lawyer.mobile_no%type;

begin

v_id:='&v_id';

select first_name , mobile_no into v_firstname , v_number
from lawyer where lawyer_id=v_id;

dbms_output.put_line('lawyer name is:' || v_firstname);

dbms_output.put_line('mobile number is:' || v_number);

end;

/

```
SQL> declare
  2  v_id lawyer.lawyer_id%type;
  3  v_firstname lawyer.first_name%type;
  4  v_number lawyer.mobile_no%type;
  5  begin
  6  v_id:='&v_id';
  7  select first_name , mobile_no into v_firstname , v_number from lawyer where lawyer_id=v_id;
  8  dbms_output.put_line('lawyer name is:' || v_firstname);
  9  dbms_output.put_line('mobile number is:' || v_number);
 10  end;
 11  /
Enter value for v_id: A8845
old  6: v_id:='&v_id';
new  6: v_id:='A8845';
lawyer name is:sumit
mobile number is:9594327168

PL/SQL procedure successfully completed.
```

FUNCTION

```
SQL> CREATE OR REPLACE FUNCTION GetClientData(client_id_identity IN VARCHAR2)
  2  RETURN client%ROWTYPE
  3  IS
  4      client_info client%ROWTYPE;
  5  BEGIN
  6      SELECT *
  7      INTO client_info
  8      FROM client
  9      WHERE client_id = client_id_identity;
 10
 11      RETURN client_info;
 12  EXCEPTION
 13      WHEN NO_DATA_FOUND THEN
 14          NULL;
 15  END;
 16  /
```

Function created.

```
SQL> DECLARE
  2      client_data client%ROWTYPE;
  3  BEGIN
  4      client_data := GetClientData('C08');
  5
  6      -- Use the client_data variable to access client information
  7      DBMS_OUTPUT.PUT_LINE('Client Name: ' || client_data.first_name || ' ' || client_data.last_n
ame);
  8      DBMS_OUTPUT.PUT_LINE('Address: ' || client_data.address);
  9      DBMS_OUTPUT.PUT_LINE('Mobile No: ' || client_data.mobile_no);
 10      DBMS_OUTPUT.PUT_LINE('Mobile No 2: ' || client_data.mobile_no_2);
 11  END;
 12  /
```

OUTPUT:

```
Client Name: ruchu      more
Address: barc colony,anushktinagar
Mobile No: 9757308134
Mobile No 2: 8644276321

PL/SQL procedure successfully completed.
```

TRIGGER

```
SQL> CREATE OR REPLACE TRIGGER display_client_data
  2  AFTER INSERT OR UPDATE ON client
  3  FOR EACH ROW
  4  DECLARE
  5  BEGIN
  6      DBMS_OUTPUT.PUT_LINE('Client ID: ' || :new.client_id);
  7      DBMS_OUTPUT.PUT_LINE('First Name: ' || :new.first_name);
  8      DBMS_OUTPUT.PUT_LINE('Last Name: ' || :new.last_name);
  9      DBMS_OUTPUT.PUT_LINE('Address: ' || :new.address);
 10      DBMS_OUTPUT.PUT_LINE('Mobile Number 1: ' || :new.mobile_no);
 11      DBMS_OUTPUT.PUT_LINE('Mobile Number 2: ' || :new.mobile_no_2);
 12  END;
 13  /
```

Trigger created.

OUTPUT:

```
SQL> -- Insert a new client record
SQL> INSERT INTO client VALUES('C09','John','Doe','123 Main St',1234567890,NULL);

1 row created.
```