

Legal Management System

Group 1



DDL Statements

MC212: Database Management Systems

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Contents

1 DDL Statements	1
------------------	---



1 | DDL Statements

User

```
CREATE TABLE "User" (  
    User_ID VARCHAR(10) PRIMARY KEY,  
    Password VARCHAR(8) NOT NULL,  
    CONSTRAINT user_id_format  
        CHECK (  
            (User_ID LIKE 'IL_____' ) OR  
            (User_ID LIKE 'AL_____' ) OR  
            (User_ID LIKE 'MP_____' ) OR  
            (User_ID LIKE 'SJ_____' ) OR  
            (User_ID LIKE 'JU_____' ) OR  
            (User_ID LIKE 'CL_____' ) OR  
            (User_ID LIKE 'PT_____' ) OR  
            (User_ID LIKE 'FR_____' ) OR  
            (User_ID LIKE 'AC_____' ) OR  
            (User_ID LIKE 'AM_____' )  
        ),  
    CONSTRAINT password_format  
        CHECK (  
            LENGTH>Password) = 8  
            AND Password SIMILAR TO '%[a-z]%',  
            AND Password SIMILAR TO '%[A-Z]%',  
            AND Password SIMILAR TO '%[0-9]%',  
            AND Password SIMILAR TO '%[#|!|@|$|%|^|&|*]%',  
        )  
);
```

Case

```
CREATE TABLE "Case" (  
    Case_ID VARCHAR(8) PRIMARY KEY,  
    Case_Status VARCHAR NOT NULL DEFAULT 'Not_Started' CHECK  
        (Case_Status IN ('Not_Started', 'Ongoing', 'Closed')),  
    Case_Result VARCHAR,  
    Judge_ID VARCHAR(10) NOT NULL CHECK (Judge_ID LIKE 'JU_____' ),  
    Case_Details VARCHAR,  
    Defending_Lawyer_ID VARCHAR(10) CHECK (Defending_Lawyer_ID LIKE  
        'IL_____' OR Defending_Lawyer_ID LIKE 'AL_____' OR  
        Defending_Lawyer_ID LIKE 'MP_____' OR Defending_Lawyer_ID  
        LIKE 'SJ_____' ),  
    Defendant_ID VARCHAR(10) NOT NULL CHECK (Defendant_ID LIKE  
        'CL_____' ),  
    Accuser_ID VARCHAR(10) NOT NULL CHECK (Accuser_ID LIKE  
        'CL_____' ),  
    Prosecuting_Lawyer_ID VARCHAR(10) CHECK (Prosecuting_Lawyer_ID LIKE  
        'IL_____' OR Prosecuting_Lawyer_ID LIKE 'AL_____' OR  
        Prosecuting_Lawyer_ID LIKE 'ML_____' OR Prosecuting_Lawyer_ID  
        LIKE 'SJ_____' ),  
    CONSTRAINT check_case_status_for_result CHECK (  
        (Case_Status = 'Closed' AND Case_Result IS NOT NULL) OR  
        (Case_Status <> 'Closed')  
    ),  
    CONSTRAINT fk_lawyer_defending FOREIGN KEY (Defending_Lawyer_ID)  
        REFERENCES "Lawyer" (ID),
```



```
CONSTRAINT fk_lawyer_prosecuting FOREIGN KEY  
  (Prosecuting_Lawyer_ID) REFERENCES "Lawyer" (ID),  
CONSTRAINT fk_client_defendant FOREIGN KEY (Defendant_ID)  
  REFERENCES "Client" (ID),  
CONSTRAINT fk_client_accuser FOREIGN KEY (Accuser_ID) REFERENCES  
  "Client" (ID)  
);
```

Case_Type

```
CREATE TABLE "Case_Type" (  
  Case_ID VARCHAR(8) REFERENCES "Case" (Case_ID) PRIMARY KEY,  
  Case_Type VARCHAR NOT NULL CHECK (Case_Type IN ('Criminal',  
    'Civil', 'Family'))  
);
```

Lawyer

```
CREATE TABLE "Lawyer" (  
  ID VARCHAR(10) PRIMARY KEY,  
  Email_ID VARCHAR NOT NULL,  
  Name VARCHAR NOT NULL,  
  Education VARCHAR NOT NULL,  
  Salary NUMERIC NOT NULL,  
  License_Year INTEGER NOT NULL,  
  Experience INTEGER NOT NULL,  
  CONSTRAINT id_format  
    CHECK (  
      (ID LIKE 'IL_____' OR ID LIKE 'AL_____' OR ID LIKE  
        'ML_____' OR ID LIKE 'SJ_____' )  
      AND SUBSTRING(ID FROM 3) SIMILAR TO '[0-9]{8}'  
    ),  
  CONSTRAINT fk_user_lawyer FOREIGN KEY (ID) REFERENCES "User"  
    (User_ID)  
);
```

Lawyer_Area_Of_Expertise

```
CREATE TABLE "Lawyer_Area_Of_Expertise" (  
  ID VARCHAR(10) REFERENCES "Lawyer" (ID),  
  Area_Of_Expertise VARCHAR,  
  CONSTRAINT id_format  
    CHECK (  
      (ID LIKE 'IL_____' OR ID LIKE 'AL_____' OR ID LIKE  
        'MP_____' OR ID LIKE 'SJ_____' )  
      AND SUBSTRING(ID FROM 3) SIMILAR TO '[0-9]{8}'  
    ),  
  CONSTRAINT pk_lawyer_area_expertise PRIMARY KEY (ID,  
    Area_Of_Expertise),  
  CONSTRAINT check_area_of_expertise  
    CHECK (Area_Of_Expertise IN ('Criminal', 'Civil', 'Family'))  
);
```



Paralegals_and_Trainees

```
CREATE TABLE "Paralegals_and_Trainees" (  
    ID VARCHAR(10) PRIMARY KEY,  
    Name VARCHAR NOT NULL,  
    Education VARCHAR NOT NULL,  
    Salary NUMERIC NOT NULL,  
    Experience INTEGER NOT NULL,  
    CONSTRAINT id_format  
        CHECK (ID LIKE 'PT_____' AND SUBSTRING(ID FROM 3) SIMILAR TO  
            '[0-9]{8}'),  
    CONSTRAINT fk_user_paralegals_trainees FOREIGN KEY (ID) REFERENCES  
        "User" (User_ID)  
);
```

PNT_Independent_Lawyer

```
CREATE TABLE "PNT_Independent_Lawyer" (  
    PNT_ID VARCHAR(10) REFERENCES "Paralegals_and_Trainees" (ID),  
    Independent_Lawyer_ID VARCHAR(10) REFERENCES "Lawyer" (ID),  
    CONSTRAINT pnt_id_format  
        CHECK (PNT_ID LIKE 'PT_____' ),  
    CONSTRAINT independent_lawyer_id_format  
        CHECK (Independent_Lawyer_ID LIKE 'IL_____' ),  
    CONSTRAINT pk_pnt_independent_lawyer PRIMARY KEY (PNT_ID,  
        Independent_Lawyer_ID)  
);
```

PNT_Firm

```
CREATE TABLE "PNT_Firm" (  
    PNT_ID VARCHAR(10) REFERENCES "Paralegals_and_Trainees" (ID),  
    Firm_ID VARCHAR(10) REFERENCES "Firm" (ID),  
    CONSTRAINT pnt_id_format  
        CHECK (PNT_ID LIKE 'PT_____' AND SUBSTRING(PNT_ID FROM 3)  
            SIMILAR TO '[0-9]{8}'),  
    CONSTRAINT firm_id_format  
        CHECK (Firm_ID LIKE 'FR_____' AND SUBSTRING(Firm_ID FROM 3)  
            SIMILAR TO '[0-9]{8}'),  
    CONSTRAINT pk_pnt_firm PRIMARY KEY (PNT_ID, Firm_ID)  
);
```

Client

```
CREATE TABLE "Client" (  
    ID VARCHAR(10) REFERENCES "User" (User_ID),  
    Name VARCHAR NOT NULL,  
    Client_Details VARCHAR,  
    CONSTRAINT id_format  
        CHECK (ID LIKE 'CL_____' ),  
    CONSTRAINT pk_client PRIMARY KEY (ID)  
);
```



Client_Type

```
CREATE TABLE "Client_Type" (  
  ID VARCHAR(10) REFERENCES "Client" (ID) PRIMARY KEY,  
  Client_Type VARCHAR NOT NULL CHECK (Client_Type IN ('Individual',  
    'Company', 'Govt')),  
  CONSTRAINT id_format  
    CHECK (ID LIKE 'CL_-----' AND SUBSTRING(ID FROM 3) SIMILAR TO  
      '[0-9]{8}'))  
);
```

Judge

```
CREATE TABLE "Judge" (  
  Judge_ID VARCHAR(10) PRIMARY KEY,  
  Name VARCHAR NOT NULL,  
  Experience INTEGER NOT NULL,  
  Salary NUMERIC NOT NULL,  
  License_Year INTEGER NOT NULL,  
  Education VARCHAR NOT NULL,  
  CONSTRAINT id_format  
    CHECK (Judge_ID LIKE 'JU_-----' AND SUBSTRING(Judge_ID FROM  
      3) SIMILAR TO '[0-9]{8}'),  
  CONSTRAINT fk_user_judge FOREIGN KEY (Judge_ID) REFERENCES "User"  
    (User_ID)  
);
```

Task

```
CREATE TABLE "Task" (  
  Task_From_ID VARCHAR(10) REFERENCES "Lawyer" (ID),  
  Task_To_ID VARCHAR(10) REFERENCES "User" (User_ID),  
  Task_No INTEGER PRIMARY KEY,  
  Task_Status VARCHAR CHECK (Task_Status IN ('Task_Assigned',  
    'Task_In_Progress', 'Task_Completed')),  
  Task_Description VARCHAR,  
  CONSTRAINT task_from_id_format  
    CHECK (Task_From_ID LIKE ANY ('{IL_-----, AL_-----,  
      MP_-----, SJ_-----}')) AND SUBSTRING(Task_From_ID FROM 3)  
      SIMILAR TO '[0-9]{8}'),  
  CONSTRAINT task_to_id_format  
    CHECK (Task_To_ID LIKE ANY ('{AL_-----, PT_-----}')) AND  
      SUBSTRING(Task_To_ID FROM 3) SIMILAR TO '[0-9]{8}')  
);
```

Task_Case

```
CREATE TABLE "Task_Case" (  
  Task_From_ID VARCHAR(10) REFERENCES "Lawyer" (ID),  
  Task_To_ID VARCHAR(10) REFERENCES "User" (ID),  
  Task_No INTEGER,  
  Case_ID VARCHAR(8) REFERENCES "Case" (Case_ID),  
  CONSTRAINT task_from_id_format  
    CHECK (Task_From_ID LIKE ANY ('{IL_-----, AL_-----,  
      MP_-----, SJ_-----}'))),
```



```
CONSTRAINT task_to_id_format
    CHECK (Task_To_ID LIKE ANY ('{AL_____, PT_____}')),
CONSTRAINT pk_task_case PRIMARY KEY (Task_From_ID, Task_To_ID,
    Task_No, Case_ID)
);
```

Firm

```
CREATE TABLE "Firm" (
    Firm_ID VARCHAR(10) PRIMARY KEY,
    Firm_Name VARCHAR NOT NULL,
    Establishment_Year INTEGER NOT NULL,
    Expenditure NUMERIC NOT NULL,
    CONSTRAINT id_format
        CHECK (Firm_ID LIKE 'FR_____' AND SUBSTRING(Firm_ID FROM 3)
            SIMILAR TO '[0-9]{8}'),
    CONSTRAINT fk_user_firm FOREIGN KEY (Firm_ID) REFERENCES "User"
        (User_ID)
);
```

Bar_Council

```
CREATE TABLE "Bar_Council" (
    ID VARCHAR(10) PRIMARY KEY,
    Name VARCHAR NOT NULL,
    CONSTRAINT id_format
        CHECK (ID LIKE ANY ('{AC_____, AM_____}')) AND
            SUBSTRING(ID FROM 3) SIMILAR TO '[0-9]{8}'),
    CONSTRAINT fk_user_bar_council FOREIGN KEY (ID) REFERENCES "User"
        (User_ID)
);
```

Client_Case_and_PNT_Assistance_Requests

```
CREATE TABLE "Client_Case_and_PNT_Assistance_Requests" (
    Request_From_ID VARCHAR(10) REFERENCES "User" (User_ID),
    Request_To_ID VARCHAR(10) REFERENCES "Lawyer" (ID),
    Case_ID VARCHAR(8) REFERENCES "Case" (Case_ID),
    Request_Type VARCHAR NOT NULL CHECK (Request_Type IN
        ('Case_Request', 'Assistance_Request')),
    Request_Status VARCHAR NOT NULL CHECK (Request_Status IN
        ('Request_Sent', 'Request_Accepted', 'Request_Rejected')),
    CONSTRAINT request_from_id_format
        CHECK (Request_From_ID LIKE 'CL_____' OR Request_From_ID
            LIKE 'PT_____'),
    CONSTRAINT request_to_id_format
        CHECK (Request_To_ID LIKE 'IL_____' OR Request_To_ID LIKE
            'AL_____' OR Request_To_ID LIKE 'MP_____' OR
            Request_To_ID LIKE 'SJ_____'),
    CONSTRAINT pk_client_case_pnt_requests PRIMARY KEY
        (Request_From_ID, Request_To_ID, Case_ID)
);
```



Joining_Requests

```
CREATE TABLE "Joining_Requests" (  
    Request_From_ID VARCHAR(10) REFERENCES "User" (User_ID),  
    Request_To_ID VARCHAR(10) REFERENCES "Lawyer" (ID),  
    Request_Status VARCHAR NOT NULL CHECK (Request_Status IN  
        ('Request_Sent', 'Request_Accepted', 'Request_Rejected')),  
    CONSTRAINT request_from_id_format  
        CHECK (Request_From_ID LIKE 'IL_____' OR Request_From_ID  
            LIKE 'PT_____' ),  
    CONSTRAINT request_to_id_format  
        CHECK (Request_To_ID LIKE 'MP_____' ),  
    CONSTRAINT pk_joining_requests PRIMARY KEY (Request_From_ID,  
        Request_To_ID)  
);
```

General_Queries

```
CREATE TABLE "General_Queries" (  
    Query_From_ID VARCHAR(10) REFERENCES "User" (User_ID),  
    Query_No INTEGER,  
    Query_Handler_ID VARCHAR(10) REFERENCES "Bar_Council" (ID),  
    Query_Status VARCHAR NOT NULL CHECK (Query_Status IN ('Open',  
        'Closed')),  
    Query_Description VARCHAR,  
    CONSTRAINT query_from_id_format  
        CHECK (Query_From_ID LIKE ANY ('{IL_____, AL_____,  
            MP_____, SJ_____, JU_____, CL_____, PT_____,  
            FR_____, AC_____, AM_____}' )),  
    CONSTRAINT query_handler_id_format  
        CHECK (Query_Handler_ID LIKE 'AC_____'),  
    CONSTRAINT pk_general_queries PRIMARY KEY (Query_No)  
);
```

License_Request_Queries

```
CREATE TABLE "License_Request_Queries" (  
    Query_From_ID VARCHAR(10) REFERENCES "User" (User_ID),  
    Query_Handler_ID VARCHAR(10) NOT NULL REFERENCES "Bar_Council" (ID),  
    Query_Status VARCHAR NOT NULL CHECK (Query_Status IN ('Accepted',  
        'Rejected')),  
    Name VARCHAR NOT NULL,  
    Resume VARCHAR NOT NULL,  
    CLAT_Score NUMERIC NOT NULL,  
    CONSTRAINT query_from_id_format  
        CHECK (Query_From_ID LIKE ANY ('{IL_____, AL_____,  
            MP_____, SJ_____, JU_____, CL_____,  
            PT_____}' )),  
    CONSTRAINT query_handler_id_format  
        CHECK (Query_Handler_ID LIKE 'AC_____'),  
    CONSTRAINT pk_license_request_queries PRIMARY KEY (Query_From_ID)  
);
```

Manages



```
CREATE TABLE "Manages" (  
    Manager_ID VARCHAR(10) REFERENCES "Lawyer" (ID),  
    Firm_ID VARCHAR(10) REFERENCES "Firm" (Firm_ID),  
    CONSTRAINT pk_manages PRIMARY KEY (Manager_ID, Firm_ID)  
);
```

Supervises

```
CREATE TABLE "Supervises" (  
    Supervisor_ID VARCHAR(10) REFERENCES "Bar_Council" (ID),  
    Supervisee_ID VARCHAR(10) REFERENCES "User" (User_ID),  
    CONSTRAINT pk_supervises PRIMARY KEY (Supervisor_ID, Supervisee_ID)  
);
```

Associated

```
CREATE TABLE "Associated" (  
    Associated_ID VARCHAR(10) REFERENCES "Paralegals_and_Trainees" (ID),  
    Associated_With_ID VARCHAR(8) REFERENCES "Case" (Case_ID),  
    CONSTRAINT pk_associated PRIMARY KEY (Associated_ID,  
        Associated_With_ID)  
);
```

Hires

```
CREATE TABLE "Hires" (  
    Hires_From_ID VARCHAR(10) REFERENCES "Client" (ID),  
    Hires_To_ID VARCHAR(10) REFERENCES "User" (User_ID),  
    CONSTRAINT pk_hires PRIMARY KEY (Hires_From_ID, Hires_To_ID)  
);
```