DAILFORHELP

Management database

**Overview**:-

The **DailForHelp** database is designed to support a platform that connects users with a wide range of service providers, allowing users to request, manage, and review services easily. It organizes and maintains data on users, service providers, service categories, requests, payments, reviews, notifications, and service history. This database is structured to facilitate efficient querying and retrieval of information, ensuring seamless interaction between users and providers. With key relational tables and referential integrity, DailForHelp provides a robust foundation for managing real-time service interactions and supporting user and provider needs in a dynamic environment.

**DATA Modeling**

**1. Conceptual Data Model**

In the conceptual stage, we identify the entities, relationships, and high-level structure of the system without diving into specific attributes or constraints.

**Key Entities:**

1. **Users** - End-users who create requests for services.
2. **Service Providers** - Professionals offering services across various categories.
3. **Service Categories** - Types of services offered.
4. **Requests** - Service requests made by users.
5. **Reviews** - Feedback given by users on completed requests.
6. **Locations** - Geographical information associated with providers.
7. **Service Availability** - Schedule of availability for each provider.
8. **Payment** - Payment information for service requests.
9. **Notifications** - Messages sent to users or providers.
10. **Service History** - Log of past services.

**Relationships:**

* **Users** can make multiple **Requests**.
* **Service Providers** belong to one **Location** and one **Service Category**.
* Each **Request** is associated with a **User**, a **Service Provider**, and a **Service Category**.
* **Service Providers** have multiple **Service Availability** records.
* **Requests** can generate **Payments** and **Notifications**.
* **Reviews** are given for each **Request** and are tied to both **Users** and **Service Providers**.
* **Service History** records the completed or canceled requests for each **User** and **Provider**.

**2. Logical Data Model**

In this stage, we refine entities with attributes, data types, and relationships, without considering physical storage.

**Logical Model:**

1. **Users**:
   * user\_id (Primary Key), Full\_name, email, phone\_number, address, role
2. **Service Providers**:
   * provider\_id (Primary Key), Full\_name, service\_category\_id, contact\_info, experience, rating, location\_id, availability\_status
   * Foreign Keys: service\_category\_id (references **Service\_Categories**), location\_id (references **Locations**)
3. **Service Categories**:
   * service\_category\_id (Primary Key), Full\_name, Description, parent\_category\_id
   * Self-Referencing Foreign Key: parent\_category\_id (references **Service\_Categories**)
4. **Requests**:
   * request\_id (Primary Key), user\_id, provider\_id, service\_category\_id, description, status
   * Foreign Keys: user\_id (references **Users**), provider\_id (references **Service\_Providers**), service\_category\_id (references **Service\_Categories**)
5. **Reviews**:
   * review\_id (Primary Key), request\_id, user\_id, provider\_id, rating, review\_text
   * Foreign Keys: request\_id (references **Requests**), user\_id (references **Users**), provider\_id (references **Service\_Providers**)
6. **Locations**:
   * location\_id (Primary Key), city, state, zipcode, latitude, longitude
7. **Service Availability**:
   * availability\_id (Primary Key), provider\_id, day\_of\_week, start\_time, end\_time, is\_available
   * Foreign Key: provider\_id (references **Service\_Providers**)
8. **Payment**:
   * payment\_id (Primary Key), request\_id, user\_id, provider\_id, amount, payment\_status, payment\_method
   * Foreign Keys: request\_id (references **Requests**), user\_id (references **Users**), provider\_id (references **Service\_Providers**)
9. **Notifications**:
   * notification\_id (Primary Key), user\_id, provider\_id, message, notification\_type, is\_read
   * Foreign Keys: user\_id (references **Users**), provider\_id (references **Service\_Providers**)
10. **Service History**:
    * history\_id (Primary Key), user\_id, provider\_id, service\_category\_id, service\_description, service\_date, completion\_status
    * Foreign Keys: user\_id (references **Users**), provider\_id (references **Service\_Providers**), service\_category\_id (references **Service\_Categories**)

**3. Physical Data Model**

The physical model specifies the actual SQL code for table creation, along with any constraints, data types, and indexing needed for efficient data storage.

The provided SQL script you've written aligns closely with the physical model requirements, where each table includes:

* **Primary Keys** for unique identification of records.
* **Foreign Keys** to establish relationships across tables.
* **Data Types** appropriate for each attribute, such as VARCHAR, INT, DECIMAL, and ENUM.
* **Constraints** like NOT NULL, CHECK, and default values.

**Additional Suggestions for the Physical Model:**

1. **Indexing**: Add indexes to frequently queried columns, such as user\_id, provider\_id, and service\_category\_id in the **Requests** table for faster query performance.
2. **Triggers or Stored Procedures** (if required): Implement triggers to update **Service History** when a request is completed or canceled.
3. **Partitioning** (for large data volumes): Consider partitioning the **Service History** and **Requests** tables by completion\_status or service\_date to optimize performance.

This three-step modeling approach provides a structured way to design a system from high-level concepts to implementation-ready SQL.

create database dialforhelp;

use dialforhelp;

-- 1. Users Table

CREATE TABLE **Users** (

user\_id INT PRIMARY KEY AUTO\_INCREMENT,

Full\_name VARCHAR(100) NOT NULL,

email VARCHAR(100) UNIQUE NOT NULL,

phone\_number VARCHAR(15) UNIQUE NOT NULL,

address TEXT,

role varchar(90) NOT NULL

);

-- 2. Service\_Providers Table

CREATE TABLE **Service\_Providers** (

provider\_id INT PRIMARY KEY AUTO\_INCREMENT,

Full\_name VARCHAR(100) NOT NULL,

service\_category\_id INT,

contact\_info TEXT,

experience INT, -- years of experience

rating DECIMAL(2, 1),

location\_id INT,

availability\_status ENUM('available', 'unavailable') NOT NULL,

FOREIGN KEY (service\_category\_id) REFERENCES Service\_Categories(service\_category\_id),

FOREIGN KEY (location\_id) REFERENCES Locations(location\_id)

);

-- 3. Service\_Categories Table

CREATE TABLE **Service\_Categories** (

service\_category\_id INT PRIMARY KEY AUTO\_INCREMENT,

Full\_name VARCHAR(100) NOT NULL,

Description TEXT,

parent\_category\_id INT,

FOREIGN KEY (parent\_category\_id) REFERENCES Service\_Categories(service\_category\_id)

);

-- 4. Requests Table

CREATE TABLE **Requests** (

request\_id INT PRIMARY KEY AUTO\_INCREMENT,

user\_id INT NOT NULL,

provider\_id INT,

service\_category\_id INT NOT NULL,

description TEXT,

status ENUM('pending', 'accepted', 'completed') DEFAULT 'pending',

FOREIGN KEY (user\_id) REFERENCES Users(user\_id),

FOREIGN KEY (provider\_id) REFERENCES Service\_Providers(provider\_id),

FOREIGN KEY (service\_category\_id) REFERENCES Service\_Categories(service\_category\_id)

);

-- 5. Reviews Table

CREATE TABLE **Reviews** (

review\_id INT PRIMARY KEY AUTO\_INCREMENT,

request\_id INT NOT NULL,

user\_id INT NOT NULL,

provider\_id INT NOT NULL,

rating INT CHECK (rating BETWEEN 1 AND 5),

review\_text TEXT,

FOREIGN KEY (request\_id) REFERENCES Requests(request\_id),

FOREIGN KEY (user\_id) REFERENCES Users(user\_id),

FOREIGN KEY (provider\_id) REFERENCES Service\_Providers(provider\_id)

);

-- 6. Locations Table

CREATE TABLE **Locations** (

location\_id INT PRIMARY KEY AUTO\_INCREMENT,

city VARCHAR(100) NOT NULL,

state VARCHAR(100) NOT NULL,

zipcode VARCHAR(10),

latitude DECIMAL(9, 6),

longitude DECIMAL(9, 6)

);

-- 7. Service\_Availability Table

CREATE TABLE **Service\_Availability** (

availability\_id INT PRIMARY KEY AUTO\_INCREMENT,

provider\_id INT NOT NULL,

day\_of\_week ENUM('Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday') NOT NULL,

start\_time TIME,

end\_time TIME,

is\_available ENUM('Yes', 'No'),

FOREIGN KEY (provider\_id) REFERENCES Service\_Providers(provider\_id)

);

-- 8. Payment Table

CREATE TABLE **Payment** (

payment\_id INT PRIMARY KEY AUTO\_INCREMENT,

request\_id INT NOT NULL,

user\_id INT NOT NULL,

provider\_id INT NOT NULL,

amount DECIMAL(10, 2) NOT NULL,

payment\_status ENUM('pending', 'completed') DEFAULT 'pending',

payment\_method ENUM( 'debit\_card', 'UPI', 'net\_banking', 'cash'),

FOREIGN KEY (request\_id) REFERENCES Requests(request\_id),

FOREIGN KEY (user\_id) REFERENCES Users(user\_id),

FOREIGN KEY (provider\_id) REFERENCES Service\_Providers(provider\_id)

);

-- 9. Notifications Table

CREATE TABLE **Notifications** (

notification\_id INT PRIMARY KEY AUTO\_INCREMENT,

user\_id INT,

provider\_id INT,

message TEXT NOT NULL,

notification\_type ENUM('new\_request', 'service\_update', 'offer', 'reminder') NOT NULL,

is\_read ENUM ('Read', 'Unread'),

FOREIGN KEY (user\_id) REFERENCES Users(user\_id),

FOREIGN KEY (provider\_id) REFERENCES Service\_Providers(provider\_id)

);

-- 10. Service\_History Table

CREATE TABLE **Service\_History** (

history\_id INT PRIMARY KEY AUTO\_INCREMENT,

user\_id INT NOT NULL,

provider\_id INT NOT NULL,

service\_category\_id INT NOT NULL,

service\_description TEXT,

service\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

completion\_status ENUM('completed', 'cancelled') NOT NULL,

FOREIGN KEY (user\_id) REFERENCES Users(user\_id),

FOREIGN KEY (provider\_id) REFERENCES Service\_Providers(provider\_id),

FOREIGN KEY (service\_category\_id) REFERENCES Service\_Categories(service\_category\_id)

);

-- INSERT VALUES --

INSERT INTO **Users** (Full\_name, email, phone\_number, address, role) VALUES

('Amit Sharma', 'amit.sharma@example.com', '9876543210', '123, MG Road, Mumbai, Maharashtra', 'customer'),

('Rahul Mehta', 'rahul.mehta@example.com', '9876543211', '456, Brigade Road, Bengaluru, Karnataka', 'customer'),

('Sneha Verma', 'sneha.verma@example.com', '9876543212', '789, Anna Nagar, Chennai, Tamil Nadu', 'customer'),

('Karan Singh', 'karan.singh@example.com', '9876543213', '101, Park Street, Kolkata, West Bengal', 'customer'),

('Pooja Gupta', 'pooja.gupta@example.com', '9876543214', '121, Connaught Place, Delhi', 'customer'),

('Vikram Desai', 'vikram.desai@example.com', '9876543215', '135, MG Road, Ahmedabad, Gujarat', 'customer'),

('Riya Patel', 'riya.patel@example.com', '9876543216', '147, Churchgate, Mumbai, Maharashtra', 'customer'),

('Anil Yadav', 'anil.yadav@example.com', '9876543217', '258, Brigade Road, Bengaluru, Karnataka', 'service\_provider'),

('Sunita Rao', 'sunita.rao@example.com', '9876543218', '369, Nungambakkam, Chennai, Tamil Nadu', 'customer'),

('Nitin Jain', 'nitin.jain@example.com', '9876543219', '741, Salt Lake, Kolkata, West Bengal', 'customer'),

('Deepak Nair', 'deepak.nair@example.com', '9876543220', '852, Connaught Place, Delhi', 'service\_provider'),

('Meera Kaur', 'meera.kaur@example.com', '9876543221', '963, Ellis Bridge, Ahmedabad, Gujarat', 'customer'),

('Rajesh Iyer', 'rajesh.iyer@example.com', '9876543222', '147, Hennur, Bengaluru, Karnataka', 'service\_provider'),

('Tanya Singh', 'tanya.singh@example.com', '9876543223', '258, Kotturpuram, Chennai, Tamil Nadu', 'customer'),

('Suresh Bansal', 'suresh.bansal@example.com', '9876543224', '369, Jadavpur, Kolkata, West Bengal', 'service\_provider'),

('Kriti Sethi', 'kriti.sethi@example.com', '9876543225', '741, Noida Sector 15, Delhi', 'customer'),

('Vinay Malhotra', 'vinay.malhotra@example.com', '9876543226', '852, Maninagar, Ahmedabad, Gujarat', 'customer'),

('Rohit Sharma', 'rohit.sharma@example.com', '9876543227', '963, Koramangala, Bengaluru, Karnataka', 'service\_provider'),

('Shilpa Agrawal', 'shilpa.agrawal@example.com', '9876543228', '147, Nungambakkam, Chennai, Tamil Nadu', 'customer'),

('Aakash Mehta', 'aakash.mehta@example.com', '9876543229', '258, Salt Lake, Kolkata, West Bengal', 'customer'),

('Kajal Jain', 'kajal.jain@example.com', '9876543230', '369, Connaught Place, Delhi', 'customer');

INSERT INTO **Service\_Providers** (Full\_name, service\_category\_id, contact\_info, experience, rating, location\_id, availability\_status) VALUES

('Amit Kumar', 1, 'amit.kumar@example.com, 9876543210', 5, 4.5, 1, 'available'), -- Plumber

('Rajesh Mehta', 2, 'rajesh.mehta@example.com, 9876543211', 7, 4.2, 2, 'available'), -- Electrician

('Neha Gupta', 3, 'neha.gupta@example.com, 9876543212', 3, 4.8, 3, 'available'), -- AC Mechanic

('Karan Singh', 4, 'karan.singh@example.com, 9876543213', 6, 4.0, 4, 'unavailable'), -- TV Repair

('Pooja Sharma', 5, 'pooja.sharma@example.com, 9876543214', 4, 4.7, 5, 'available'), -- RO Service

('Vikram Desai', 6, 'vikram.desai@example.com, 9876543215', 5, 4.1, 6, 'available'), -- Pest Control

('Sunil Yadav', 7, 'sunil.yadav@example.com, 9876543216', 8, 4.5, 1, 'unavailable'), -- Carpenter

('Riya Patel', 8, 'riya.patel@example.com, 9876543217', 3, 4.6, 2, 'available'), -- Painter

('Anil Nair', 9, 'anil.nair@example.com, 9876543218', 10, 4.3, 3, 'available'), -- Plumber

('Deepak Sharma', 10, 'deepak.sharma@example.com, 9876543219', 5, 4.0, 4, 'available'), -- Electrician

('Kajal Jain', 11, 'kajal.jain@example.com, 9876543220', 2, 4.2, 5, 'available'), -- AC Mechanic

('Rohit Iyer', 12, 'rohit.iyer@example.com, 9876543221', 7, 4.5, 6, 'unavailable'), -- TV Repair

('Shilpa Agarwal', 13, 'shilpa.agarwal@example.com, 9876543222', 1, 4.1, 1, 'available'), -- RO Service

('Ajay Kumar', 14, 'ajay.kumar@example.com, 9876543223', 6, 4.3, 1, 'available'), -- Pest Control

('Nitin Deshmukh', 15, 'nitin.deshmukh@example.com, 9876543224', 5, 4.0, 2, 'unavailable'), -- Carpenter

('Sanjay Verma', 16, 'sanjay.verma@example.com, 9876543225', 9, 4.4, 3, 'available'), -- Painter

('Tanya Singh', 17, 'tanya.singh@example.com, 9876543226', 3, 4.6, 5, 'available'), -- Plumber

('Meera Nair', 18, 'meera.nair@example.com, 9876543227', 2, 4.2, 6, 'available'), -- Electrician

('Vinay Patil', 19, 'vinay.patil@example.com, 9876543228', 4, 4.3, 1, 'available'), -- AC Mechanic

('Rahul Joshi', 20, 'rahul.joshi@example.com, 9876543229', 8, 4.5, 2, 'unavailable'), -- TV Repair

('Anjali Gupta', 1, 'anjali.gupta@example.com, 9876543230', 1, 4.7, 3, 'available'), -- RO Service

('Suresh Bansal', 3, 'suresh.bansal@example.com, 9876543231', 6, 4.0, 6, 'available'), -- Pest Control

('Kiran Malhotra', 3, 'kiran.malhotra@example.com, 9876543232', 5, 4.4, 1, 'unavailable'), -- Carpenter

('Ramesh Yadav', 2, 'ramesh.yadav@example.com, 9876543233', 4, 4.2, 4, 'available'), -- Painter

('Aakash Bhatia', 5, 'aakash.bhatia@example.com, 9876543234', 7, 4.5, 5, 'available'), -- Plumber

('Shweta Soni', 6, 'shweta.soni@example.com, 9876543235', 2, 4.3, 6, 'available'), -- Electrician

('Kartik Jain', 8, 'kartik.jain@example.com, 9876543236', 3, 4.1, 2, 'unavailable'), -- AC Mechanic

('Parul Mishra', 8, 'parul.mishra@example.com, 9876543237', 8, 4.0, 1, 'available'), -- TV Repair

('Devendra Rao', 9, 'devendra.rao@example.com, 9876543238', 5, 4.6, 3, 'available'), -- RO Service

('Geeta Yadav', 11, 'geeta.yadav@example.com, 9876543239', 6, 4.2, 4, 'unavailable'), -- Pest Control

('Manoj Singh', 12, 'manoj.singh@example.com, 9876543240', 4, 4.5, 6, 'available'), -- Carpenter

('Priya Kapoor', 13, 'priya.kapoor@example.com, 9876543241', 9, 4.7, 3, 'available'), -- Painter

('Harish Sethi', 13, 'harish.sethi@example.com, 9876543242', 3, 4.3, 4, 'available'), -- Plumber

('Nisha Verma', 14, 'nisha.verma@example.com, 9876543243', 1, 4.6, 2, 'unavailable'), -- Electrician

('Ravi Kumar', 8, 'ravi.kumar@example.com, 9876543244', 6, 4.1, 3, 'available'), -- AC Mechanic

('Geeta Rani', 15, 'geeta.rani@example.com, 9876543245', 8, 4.5, 3, 'available'), -- TV Repair

('Rajender Das', 6, 'rajender.das@example.com, 9876543246', 4, 4.4, 4, 'unavailable'), -- RO Service

('Veena Singh', 8, 'veena.singh@example.com, 9876543247', 5, 4.2, 3, 'available'), -- Pest Control

('Sanjay Sharma', 9, 'sanjay.sharma@example.com, 9876543248', 2, 4.3, 3, 'available'), -- Carpenter

('Renu Kapoor', 13, 'renu.kapoor@example.com, 9876543249', 3, 4.1, 4, 'unavailable'); -- Painter

INSERT INTO **Service\_Categories** (Full\_name, Description, parent\_category\_id) VALUES

('Plumbing', 'Services related to installation and repair of piping systems.', NULL),

('Electrical', 'Services involving electrical systems, wiring, and installations.', NULL),

('AC Repair', 'Repair and maintenance services for air conditioning units.', NULL),

('TV Repair', 'Services for the repair and maintenance of television sets.', NULL),

('RO Service', 'Repair and maintenance of Reverse Osmosis water purifiers.', NULL),

('Pest Control', 'Services for the management and elimination of pests.', NULL),

('Carpentry', 'Services related to woodworking and installation of wooden structures.', NULL),

('Painting', 'Services for painting and decorating buildings and structures.', NULL),

('HVAC', 'Heating, ventilation, and air conditioning services.', NULL),

('Landscaping', 'Services related to the design and maintenance of outdoor spaces.', NULL),

('Cleaning', 'Residential and commercial cleaning services.', NULL),

('Moving', 'Services for residential and commercial moving.', NULL),

('Home Security', 'Installation and maintenance of security systems for homes.', NULL),

('Appliance Repair', 'Repair services for household appliances like washers and dryers.', NULL),

('Roofing', 'Services related to installation and repair of roofs.', NULL),

('Masonry', 'Services for brick, stone, and concrete work.', NULL),

('Flooring', 'Installation and repair services for various flooring types.', NULL),

('Window Installation', 'Services for the installation of windows and glass fixtures.', NULL),

('Siding', 'Installation and repair of exterior siding for buildings.', NULL),

('Gutter Cleaning', 'Cleaning and maintenance services for gutters and downspouts.', NULL);

INSERT INTO **Requests** (user\_id, provider\_id, service\_category\_id, description, status) VALUES

(1, 81, 1, 'Leaking faucet in the kitchen needs urgent repair.', 'pending'),

(1, 82, 2, 'Need electrical wiring for new lighting installation.', 'pending'),

(1, 83, 3, 'AC not cooling properly; need a technician.', 'pending'),

(2, 84, 4, 'Television screen is cracked, requires repair.', 'pending'),

(2, 85, 5, 'RO water purifier is leaking, needs service.', 'pending'),

(3, 86, 6, 'Cockroach infestation in the kitchen; need pest control.', 'pending'),

(3, 87, 7, 'Need carpenter to install new shelves.', 'pending'),

(4, 88, 8, 'House painting required before the festival.', 'pending'),

(4, 89, 9, 'Need HVAC maintenance for summer.', 'pending'),

(5, 90, 10, 'Cleaning service required for entire house.', 'pending'),

(1, 91, 11, 'Bathroom sink is clogged; requires immediate attention.', 'pending'),

(1, 93, 12, 'AC unit needs servicing before summer.', 'pending'),

(6, 92, 13, 'Wiring issues in the living room.', 'pending'),

(2, 94, 14, 'Need TV wall mounting and installation.', 'pending'),

(5, 96, 15, 'Termite problem in the wooden furniture.', 'pending'),

(7, 97, 16, 'Build a new wooden cabinet in the bedroom.', 'pending'),

(8, 98, 17, 'Exterior house painting required.', 'pending'),

(3, 109, 18, 'Service required for heating system.', 'pending'),

(4, 100, 19, 'Deep cleaning for carpet and upholstery.', 'pending'),

(1, 111, 20, 'Toilet flush is not working; urgent repair needed.', 'pending'),

(2, 120, 1, 'RO filter replacement required.', 'pending'),

(3, 117, 1, 'Need cleaning service after a party.', 'pending'),

(4, 114, 3, 'Get rid of mosquitoes in the backyard.', 'pending'),

(5, 117, 4, 'Fix broken window frame.', 'pending'),

(6, 111, 5, 'Need a fresh coat of paint in the living room.', 'pending'),

(7, 93, 6, 'Inspect and service the air heater.', 'pending'),

(8, 90, 7, 'Post-renovation cleaning required.', 'pending'),

(9, 91, 3, 'Install new plumbing for the washing machine.', 'pending'),

(10, 103, 5, 'Fix electrical short circuit in the garage.', 'pending'),

(11, 103, 2, 'Check AC refrigerant levels.', 'pending'),

(12, 109, 1, 'Repair TV audio issue.', 'pending'),

(13, 105, 1, 'Service water purifier; slow water flow.', 'pending'),

(14, 112, 1, 'Ant infestation in the garden; need treatment.', 'pending'),

(15, 117, 10, 'Install new wooden flooring.', 'pending'),

(16, 119, 10, 'Paint touch-up required after water leakage.', 'pending'),

(17, 82, 12, 'Check heating thermostat issues.', 'pending'),

(18, 99, 15, 'Commercial cleaning service needed.', 'pending'),

(19, 100, 18, 'Replace old kitchen sink with a new one.', 'pending'),

(20, 108, 19, 'Install ceiling fans in all rooms.', 'pending'),

(21, 102, 20, 'Service central AC unit.', 'pending');

INSERT INTO **Reviews** (request\_id, user\_id, provider\_id, rating, review\_text) VALUES

(81, 1, 81, 5, 'Excellent service! The plumber fixed the leak quickly and efficiently. Highly recommend!'),

(82, 1, 82, 4, 'The electrician was prompt and professional. A little pricey, but overall good service.'),

(83, 1, 83, 3, 'AC technician was okay. It took longer than expected, but the issue was resolved.'),

(84, 2, 84, 2, 'The TV repair was subpar. It took too long, and the problem wasn\'t completely fixed.'),

(85, 2, 85, 5, 'Fantastic service for the RO water purifier! Fast and reliable.'),

(86, 3, 86, 1, 'Pest control did not resolve the issue at all. Very disappointed.'),

(87, 3, 87, 3, 'The carpenter did a decent job but missed the deadline.'),

(88, 4, 98, 5, 'Painter did an amazing job! The house looks brand new.'),

(89, 4, 89, 4, 'Good service from HVAC technician, but communication could be better.'),

(90, 5, 110, 3, 'Cleaning service was average. Could have been more thorough.'),

(91, 1, 120, 5, 'Fast response to my plumbing issue. Very satisfied with the work done!'),

(92, 1, 89, 4, 'Good service, but I expected a quicker turnaround.'),

(93, 6, 83, 3, 'The AC service was alright, nothing special.'),

(94, 2, 94, 2, 'TV repair service was not satisfactory. Issues remain.'),

(95, 5, 96, 5, 'Pest control was effective and professional. Highly recommend!'),

(96, 7, 87, 4, 'The carpenter did a nice job on the shelves but was a bit late.'),

(97, 8, 98, 5, 'The painting job exceeded my expectations! Beautiful work.'),

(98, 3, 99, 4, 'HVAC technician was knowledgeable and fixed the issue quickly.'),

(99, 4, 117, 3, 'Cleaning was decent, but missed some spots.'),

(100, 1, 119, 5, 'Best plumbing service I have ever used! Very professional.'),

(101, 2, 94, 2, 'The electrical work was not up to the mark. Would not recommend.'),

(102, 3, 96, 4, 'AC was fixed, but the technician could be more friendly.'),

(103, 4, 97, 5, 'Great service! My TV is working perfectly now.'),

(104, 5, 98, 4, 'RO service was good, but took longer than expected.'),

(105, 6, 99, 1, 'Pest control didn\'t work. Infestation returned quickly.'),

(106, 7, 100, 4, 'Carpenter was professional and did a good job on the cabinets.'),

(107, 8, 104, 5, 'Loved the painting! The team was quick and tidy.'),

(108, 9, 103, 3, 'Good heating service but could use better equipment.'),

(109, 10, 101, 2, 'The cleaning was rushed and not thorough. Disappointed.'),

(110, 1, 110, 5, 'Quick and effective plumbing service. Very happy!'),

(111, 1, 112, 4, 'Good job with electrical repairs, but a bit slow.'),

(112, 3, 87, 3, 'Average service; nothing stood out.'),

(113, 4, 84, 5, 'TV is working like new! Excellent repair service.'),

(114, 5, 85, 4, 'RO service was timely and efficient.'),

(115, 6, 86, 1, 'Waste of money; pest control did not work.'),

(116, 7, 87, 3, 'The carpenter was decent but could improve on finishing touches.'),

(117, 8, 88, 5, 'Amazing painting service! Highly recommend.'),

(118, 9, 89, 4, 'Good service for heating. Will use again.'),

(119, 10, 90, 2, 'Cleaning service needs improvement; not very thorough.'),

(120, 1, 99, 5, 'Fantastic job! Will hire again for plumbing issues.'),

(81, 2, 100, 4, 'The electrician did a great job but was a bit expensive.'),

(92, 3, 109, 3, 'AC service was okay, but technician was a bit rude.'),

(113, 4, 94, 5, 'Great TV repair! Very happy with the results.'),

(84, 5, 95, 4, 'RO water service was efficient and friendly.'),

(85, 6, 96, 1, 'Terrible experience; pest control didn’t work at all.'),

(96, 7, 97, 4, 'Carpenter was skilled but a bit late.'),

(117, 8, 98, 5, 'Exceptional painting work! Very satisfied.'),

(119, 9, 99, 3, 'HVAC service was okay; expected better.'),

(88, 10, 90, 2, 'Cleaning was subpar; missed many areas.'),

(90, 1, 91, 5, 'Excellent plumbing work! Highly recommend to others.');

INSERT INTO **Locations** (city, state, zipcode, latitude, longitude) VALUES

('Mumbai', 'Maharashtra', '400001', 19.0760, 72.8777),

('Delhi', 'Delhi', '110001', 28.6139, 77.2090),

('Bangalore', 'Karnataka', '560001', 12.9716, 77.5946),

('Chennai', 'Tamil Nadu', '600001', 13.0827, 80.2707),

('Kolkata', 'West Bengal', '700001', 22.5726, 88.3639),

('Hyderabad', 'Telangana', '500001', 17.3850, 78.4867);

select \* from **Service\_Availability**;

INSERT INTO Service\_Availability (provider\_id, day\_of\_week, start\_time, end\_time, is\_available) VALUES

(81, 'Monday', '09:00:00', '17:00:00', 'Yes'),

(81, 'Tuesday', '09:00:00', '17:00:00', 'Yes'),

(81, 'Wednesday', '09:00:00', '17:00:00', 'Yes'),

(81, 'Thursday', '09:00:00', '17:00:00', 'Yes'),

(81, 'Friday', '09:00:00', '17:00:00', 'Yes'),

(81, 'Saturday', '10:00:00', '14:00:00', 'Yes'),

(81, 'Sunday', NUll, NUll, 'No'),

(82, 'Monday', '10:00:00', '18:00:00', 'Yes'),

(82, 'Tuesday', '10:00:00', '18:00:00', 'Yes'),

(82, 'Wednesday', '10:00:00', '18:00:00', 'Yes'),

(84, 'Thursday', '10:00:00', '18:00:00', 'Yes'),

(83, 'Friday', '10:00:00', '18:00:00', 'Yes'),

(87, 'Saturday', '10:00:00', '15:00:00', 'Yes'),

(98, 'Sunday', NUll, NUll, 'No'),

(99, 'Monday', '08:00:00', '16:00:00', 'Yes'),

(100, 'Tuesday', '08:00:00', '16:00:00', 'Yes'),

(104, 'Wednesday', '08:00:00', '16:00:00', 'Yes'),

(103, 'Thursday', '08:00:00', '16:00:00', 'Yes'),

(105, 'Friday', '08:00:00', '16:00:00', 'Yes'),

(116, 'Saturday', NUll, NUll, 'No'),

(119, 'Sunday', NUll, NUll, 'No'),

(114, 'Monday', '11:00:00', '19:00:00', 'Yes'),

(106, 'Tuesday', '11:00:00', '19:00:00', 'Yes'),

(104, 'Wednesday', '11:00:00', '19:00:00', 'Yes'),

(94, 'Thursday', '11:00:00', '19:00:00', 'Yes'),

(84, 'Friday', '11:00:00', '19:00:00', 'Yes'),

(104, 'Saturday', '12:00:00', '17:00:00', 'Yes'),

(114, 'Sunday', NUll, NUll, 'No'),

(115, 'Monday', '09:00:00', '18:00:00', 'Yes'),

(105, 'Tuesday', '09:00:00', '18:00:00', 'Yes'),

(117, 'Wednesday', '09:00:00', '18:00:00', 'Yes'),

(114, 'Thursday', '09:00:00', '18:00:00', 'Yes'),

(115, 'Friday', '09:00:00', '18:00:00', 'Yes'),

(119, 'Saturday', NUll, NUll, 'No'),

(105, 'Sunday', NUll, NUll, 'No'),

(116, 'Monday', '09:00:00', '17:00:00', 'Yes'),

(106, 'Tuesday', '09:00:00', '17:00:00', 'Yes'),

(116, 'Wednesday', '09:00:00', '17:00:00', 'Yes'),

(108, 'Thursday', '09:00:00', '17:00:00', 'Yes'),

(107, 'Friday', '09:00:00', '17:00:00', 'Yes'),

(110, 'Saturday', '10:00:00', '15:00:00', 'Yes'),

(110, 'Sunday', NUll, NUll, 'No'),

(99, 'Monday', '10:00:00', '19:00:00', 'Yes'),

(89, 'Tuesday', '10:00:00', '19:00:00', 'Yes'),

(94, 'Wednesday', '10:00:00', '19:00:00', 'Yes'),

(97, 'Thursday', '10:00:00', '19:00:00', 'Yes'),

(92, 'Friday', '10:00:00', '19:00:00', 'Yes'),

(91, 'Saturday', '10:00:00', '15:00:00', 'Yes'),

(97, 'Sunday', NUll, NUll, 'No'),

(98, 'Monday', '08:00:00', '16:00:00', 'Yes'),

(98, 'Tuesday', '08:00:00', '16:00:00', 'Yes'),

(89, 'Wednesday', '08:00:00', '16:00:00', 'Yes'),

(88, 'Thursday', '08:00:00', '16:00:00', 'Yes'),

(85, 'Friday', '08:00:00', '16:00:00', 'Yes'),

(84, 'Saturday', NUll, NUll, 'No'),

(82, 'Sunday', NUll, NUll, 'No'),

(90, 'Monday', '11:00:00', '19:00:00', 'Yes'),

(91, 'Tuesday', '11:00:00', '19:00:00', 'Yes'),

(94, 'Wednesday', '11:00:00', '19:00:00', 'Yes'),

(98, 'Thursday', '11:00:00', '19:00:00', 'Yes'),

(99, 'Friday', '11:00:00', '19:00:00', 'Yes'),

(109, 'Saturday', '12:00:00', '17:00:00', 'Yes'),

(109, 'Sunday', NUll, NUll, 'No'),

(101, 'Monday', '09:00:00', '18:00:00', 'Yes'),

(105, 'Tuesday', '09:00:00', '18:00:00', 'Yes'),

(107, 'Wednesday', '09:00:00', '18:00:00', 'Yes'),

(109, 'Thursday', '09:00:00', '18:00:00', 'Yes'),

(101, 'Friday', '09:00:00', '18:00:00', 'Yes'),

(101, 'Saturday', NUll, NUll, 'No'),

(105, 'Sunday', NUll, NUll, 'No');

INSERT INTO **Payment** (request\_id, user\_id, provider\_id, amount, payment\_status, payment\_method) VALUES

(81, 1, 81, 1500.00, 'completed', 'UPI'),

(82, 1, 82, 1200.00, 'completed', 'Cash'),

(83, 2, 83, 800.00, 'pending', 'Net\_Banking'),

(84, 2, 84, 3000.00, 'completed', 'Debit\_Card'),

(85, 3, 85, 2000.00, 'completed', 'UPI'),

(86, 3, 86, 900.00, 'pending', 'Debit\_Card'),

(87, 4, 87, 1100.00, 'completed', 'Cash'),

(88, 4, 88, 500.00, 'completed', 'Net\_Banking'),

(89, 5, 89, 650.00, 'completed', 'UPI'),

(90, 5, 90, 1500.00, 'pending', 'Debit\_Card'),

(91, 6, 91, 2200.00, 'completed', 'Cash'),

(92, 6, 92, 1800.00, 'completed', 'UPI'),

(93, 7, 93, 1700.00, 'pending', 'Net\_Banking'),

(94, 7, 94, 1600.00, 'completed', 'Debit\_Card'),

(95, 8, 95, 2500.00, 'completed', 'UPI'),

(96, 8, 96, 700.00, 'completed', 'Cash'),

(97, 9, 97, 1300.00, 'pending', 'Debit\_Card'),

(98, 9, 98, 2200.00, 'completed', 'Net\_Banking'),

(99, 10, 99, 1250.00, 'completed', 'UPI'),

(100, 10, 100, 400.00, 'pending', 'Cash'),

(101, 11, 101, 900.00, 'completed', 'Debit\_Card'),

(102, 11, 102, 1300.00, 'completed', 'UPI'),

(103, 12, 103, 2200.00, 'pending', 'Net\_Banking'),

(104, 12, 104, 3000.00, 'completed', 'Cash'),

(105, 13, 105, 1700.00, 'completed', 'Debit\_Card'),

(106, 13, 106, 800.00, 'pending', 'UPI'),

(107, 14, 107, 950.00, 'completed', 'Net\_Banking'),

(108, 14, 108, 600.00, 'completed', 'Cash'),

(109, 15, 109, 1200.00, 'completed', 'UPI'),

(110, 15, 110, 1400.00, 'pending', 'Debit\_Card'),

(111, 16, 111, 1100.00, 'completed', 'Cash'),

(112, 16, 112, 1300.00, 'completed', 'UPI'),

(113, 17, 113, 900.00, 'pending', 'Net\_Banking'),

(114, 17, 114, 2000.00, 'completed', 'Debit\_Card'),

(115, 18, 115, 1800.00, 'completed', 'UPI'),

(116, 18, 116, 800.00, 'completed', 'Cash'),

(117, 19, 117, 2100.00, 'pending', 'Debit\_Card'),

(118, 19, 118, 950.00, 'completed', 'Net\_Banking'),

(119, 20, 119, 650.00, 'completed', 'UPI'),

(120, 20, 120, 1750.00, 'pending', 'Cash'),

(101, 1, 81, 1550.00, 'completed', 'UPI'),

(102, 1, 82, 1250.00, 'completed', 'Cash'),

(103, 2, 83, 850.00, 'pending', 'Net\_Banking'),

(104, 2, 84, 3050.00, 'completed', 'Debit\_Card'),

(105, 3, 85, 2050.00, 'completed', 'UPI'),

(106, 3, 86, 950.00, 'pending', 'Debit\_Card'),

(107, 4, 87, 1150.00, 'completed', 'Cash'),

(108, 4, 88, 550.00, 'completed', 'Net\_Banking'),

(109, 5, 89, 700.00, 'completed', 'UPI'),

(110, 5, 90, 1550.00, 'pending', 'Debit\_Card'),

(111, 6, 91, 2250.00, 'completed', 'Cash'),

(112, 6, 92, 1850.00, 'completed', 'UPI'),

(113, 7, 93, 1750.00, 'pending', 'Net\_Banking'),

(114, 7, 94, 1650.00, 'completed', 'Debit\_Card'),

(115, 8, 95, 2550.00, 'completed', 'UPI'),

(116, 8, 96, 750.00, 'completed', 'Cash'),

(117, 9, 97, 1350.00, 'pending', 'Debit\_Card'),

(118, 9, 98, 2250.00, 'completed', 'Net\_Banking'),

(119, 10, 99, 1300.00, 'completed', 'UPI'),

(120, 10, 100, 450.00, 'pending', 'Cash');

INSERT INTO **Notifications** (user\_id, provider\_id, message, notification\_type, is\_read) VALUES

(1, NULL, 'Your service request for plumbing has been accepted.', 'new\_request', 'Unread'),

(2, 81, 'New offers available for electric services this week!', 'offer', 'Unread'),

(3, NULL, 'Reminder: Your appointment for AC maintenance is scheduled for tomorrow.', 'reminder', 'Unread'),

(4, 83, 'Your request for pest control has been completed successfully.', 'service\_update', 'Read'),

(5, NULL, 'Special discount on painting services for the next 3 days!', 'offer', 'Unread'),

(1, 82, 'Your payment for the service has been received.', 'service\_update', 'Read'),

(6, NULL, 'Reminder: Your carpet cleaning service is scheduled for this Saturday.', 'reminder', 'Unread'),

(7, 84, 'Your request for TV repair has been accepted.', 'new\_request', 'Unread'),

(2, 85, 'Your recent feedback on the service has been noted. Thank you!', 'service\_update', 'Read'),

(3, 86, 'New service categories have been added to your account.', 'service\_update', 'Unread'),

(8, NULL, 'Reminder: Your home cleaning service is due for a review.', 'reminder', 'Unread'),

(4, 87, 'Your service request for car wash has been completed.', 'service\_update', 'Read'),

(5, NULL, 'Limited-time offer on electrical repairs! Check it out!', 'offer', 'Unread'),

(6, NULL, 'Your request for gardening service has been assigned to a provider.', 'new\_request', 'Unread'),

(7, 88, 'You have a new message from your service provider.', 'service\_update', 'Unread'),

(8, NULL, 'Special offer on plumbing services for returning customers!', 'offer', 'Unread'),

(9, NULL, 'Reminder: Your furniture assembly service is scheduled for next week.', 'reminder', 'Unread'),

(10, 89, 'Your feedback is appreciated! Thanks for reviewing the service.', 'service\_update', 'Read'),

(11, NULL, 'New service alert: We now offer pest control in your area!', 'offer', 'Unread'),

(12, 90, 'Your service provider has updated their availability for the week.', 'service\_update', 'Unread'),

(13, NULL, 'Your service request for door repair has been completed.', 'service\_update', 'Read'),

(14, 91, 'A new provider has been assigned to your cleaning service.', 'new\_request', 'Unread'),

(15, 92, 'Your service feedback is important! Please share your thoughts.', 'service\_update', 'Read'),

(16, NULL, 'Last chance to avail discounts on home renovation services!', 'offer', 'Unread'),

(17, NULL, 'Your appointment for appliance repair is confirmed.', 'reminder', 'Unread'),

(18, 93, 'Your recent payment was successful. Thank you!', 'service\_update', 'Read'),

(19, NULL, 'New offers available for electrical inspections!', 'offer', 'Unread'),

(20, NULL, 'Your service request for sofa cleaning is pending confirmation.', 'new\_request', 'Unread');

INSERT INTO **Service\_History** (user\_id, provider\_id, service\_category\_id, service\_description, service\_date, completion\_status) VALUES

(1, 81, 1, 'Plumbing service to fix leaky faucet in kitchen.', '2024-10-01 10:30:00', 'completed'),

(2, 82, 2, 'Electrical wiring installation for living room lights.', '2024-10-02 14:00:00', 'completed'),

(3, 83, 3, 'AC maintenance and cleaning service.', '2024-10-03 09:15:00', 'completed'),

(1, 84, 4, 'TV repair for malfunctioning remote control.', '2024-10-04 11:00:00', 'completed'),

(4, 81, 1, 'Pest control treatment for kitchen area.', '2024-10-05 13:45:00', 'completed'),

(2, 85, 5, 'Carpentry work for custom shelving in bedroom.', '2024-10-06 12:00:00', 'completed'),

(3, 86, 6, 'Painting service for living room walls.', '2024-10-07 15:00:00', 'completed'),

(5, 82, 2, 'Electrical inspection of house wiring.', '2024-10-08 16:30:00', 'completed'),

(6, 83, 3, 'AC repair for cooling issues.', '2024-10-09 08:30:00', 'completed'),

(1, 84, 4, 'Door repair service for front door.', '2024-10-10 10:00:00', 'completed'),

(2, 81, 1, 'Cancelled plumbing service due to scheduling conflict.', '2024-10-11 11:00:00', 'cancelled'),

(3, 85, 5, 'Requested pest control service for bedroom.', '2024-10-12 14:15:00', 'completed'),

(4, 86, 6, 'TV wall mounting service completed.', '2024-10-13 09:00:00', 'completed'),

(5, 82, 2, 'Installed new electrical outlets in kitchen.', '2024-10-14 13:30:00', 'completed'),

(6, 83, 3, 'AC filter replacement and servicing.', '2024-10-15 11:30:00', 'completed'),

(7, 84, 4, 'Completed furniture assembly service.', '2024-10-16 12:45:00', 'completed'),

(8, 81, 1, 'Installed new plumbing fixtures in bathroom.', '2024-10-17 10:15:00', 'completed'),

(9, 82, 2, 'Electrical panel upgrade service completed.', '2024-10-18 15:00:00', 'completed'),

(10, 85, 5, 'Repaired broken shelves in garage.', '2024-10-19 09:30:00', 'completed'),

(11, 86, 6, 'Cancelled service for wall painting due to rain.', '2024-10-20 11:15:00', 'cancelled'),

(12, 83, 3, 'Scheduled AC maintenance check completed.', '2024-10-21 10:45:00', 'completed'),

(13, 81, 1, 'Emergency plumbing service for burst pipe.', '2024-10-22 08:00:00', 'completed'),

(14, 82, 2, 'Completed wiring installation for outdoor lighting.', '2024-10-23 14:30:00', 'completed'),

(15, 84, 4, 'Fixed TV screen issues and updated software.', '2024-10-24 16:00:00', 'completed'),

(16, 85, 5, 'Carpentry service for building custom furniture.', '2024-10-25 10:30:00', 'completed'),

(17, 86, 6, 'Pest control for backyard service completed.', '2024-10-26 13:00:00', 'completed'),

(18, 83, 3, 'AC repair service due to gas leak.', '2024-10-27 12:00:00', 'completed'),

(19, 82, 2, 'Completed electrical maintenance check.', '2024-10-28 09:15:00', 'completed'),

(20, 81, 1, 'Cancelled service request for water heater repair.', '2024-10-29 11:30:00', 'cancelled'),

(21, 87, 3, 'AC thermostat replacement and calibration.', '2024-10-30 10:45:00', 'completed'),

(21, 88, 4, 'Home entertainment system installation.', '2024-10-31 14:15:00', 'completed'),

(20, 89, 5, 'Repaired dining table and reinforced joints.', '2024-11-01 09:00:00', 'completed'),

(19, 90, 6, 'Exterior house painting.', '2024-11-02 13:30:00', 'completed'),

(18, 91, 1, 'Sink installation in guest bathroom.', '2024-11-03 15:00:00', 'completed'),

(17, 92, 2, 'Replaced outdated electrical fuse box.', '2024-11-04 11:30:00', 'completed'),

(16, 93, 3, 'AC servicing for bedroom unit.', '2024-11-05 08:45:00', 'completed'),

(15, 94, 4, 'Set up wireless router and smart TV.', '2024-11-06 10:00:00', 'completed'),

(14, 95, 5, 'Built custom workbench in garage.', '2024-11-07 13:15:00', 'completed'),

(13, 96, 6, 'Interior painting of bedroom and hallways.', '2024-11-08 14:30:00', 'completed'),

(12, 97, 1, 'Fixed drainage blockage in kitchen.', '2024-11-09 09:45:00', 'completed'),

(11, 98, 2, 'Upgraded kitchen lighting system.', '2024-11-10 12:30:00', 'completed'),

(10, 99, 3, 'Annual maintenance for AC units.', '2024-11-11 10:15:00', 'completed'),

(9, 100, 4, 'Replaced faulty remote control for TV.', '2024-11-12 14:00:00', 'completed'),

(8, 101, 5, 'Constructed custom wooden bookcase.', '2024-11-13 15:45:00', 'completed'),

(7, 102, 6, 'Painted garden shed and exterior fence.', '2024-11-14 13:00:00', 'completed'),

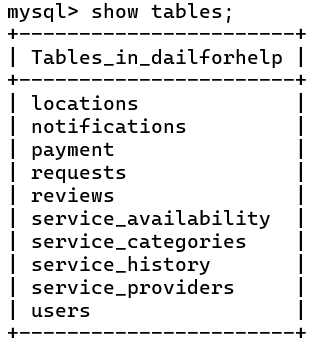
(6, 103, 1, 'Repaired bathroom shower drain.', '2024-11-15 10:30:00', 'completed'),

(5, 104, 2, 'Installed dimmer switches in living room.', '2024-11-16 09:00:00', 'completed'),

(4, 105, 3, 'Recharged AC refrigerant and cleaned filters.', '2024-11-17 08:30:00', 'completed'),

(3, 106, 4, 'Configured new cable setup for TV.', '2024-11-18 12:15:00', 'completed');

**Select \* Desc**



select \* from Users ;

select \* from Service\_Providers ;

select \* from Service\_Categories ;

select \* from Requests ;

select \* from Reviews ;

select \* from Locations ;

select \* from Service\_Availability ;

select \* from Payment ; --

select \* from Notifications ; --

select \* from Service\_History ; --

DESC Users ;A close-up of a table

Description automatically generated

DESC Service\_Providers ;

A close-up of a document

Description automatically generated

DESC Service\_Categories ;A white paper with black text

Description automatically generated

DESC Requests ;A black and white line with text

Description automatically generated with medium confidence

DESC Reviews ;A close-up of a grid

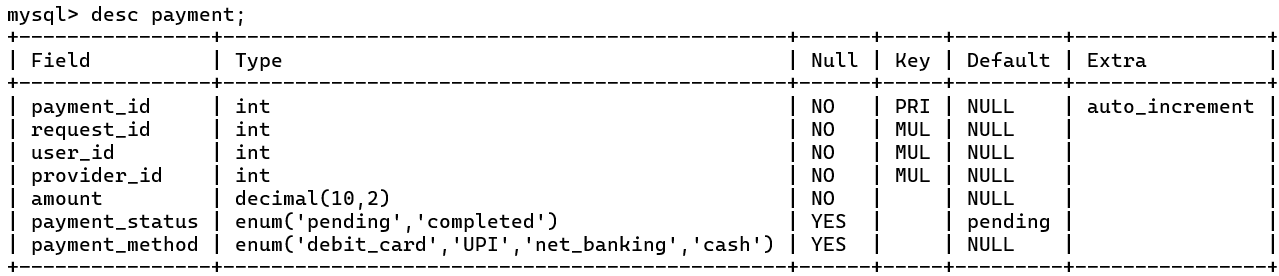
Description automatically generated

DESC Locations ;A table with black text

Description automatically generated with medium confidence

DESC Service\_Availability ;A black text on a white background

Description automatically generated

DESC Payment ;

DESC Notifications ;A close-up of a box

Description automatically generated

DESC Service\_History ;

A white paper with black text

Description automatically generated

**ER Diagram**

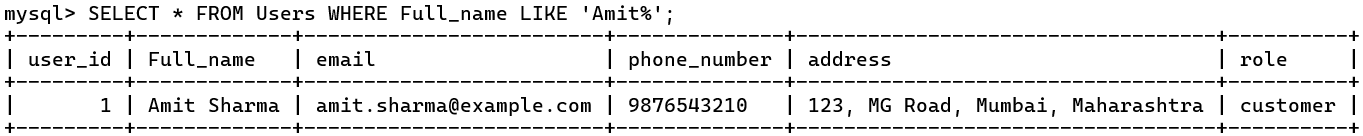
**A computer screen shot of a computer

Description automatically generated**

-- Questions --

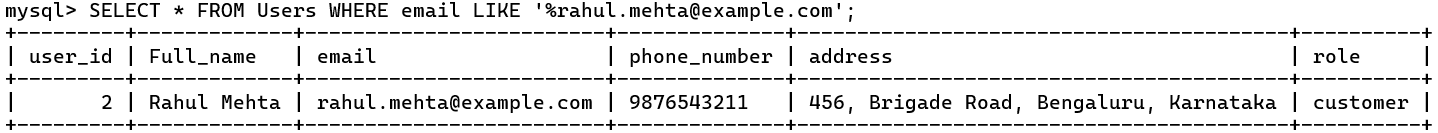
-- all users whose names start with "Amit"

SELECT \* FROM Users WHERE Full\_name LIKE 'Amit%';



-- retrieves all users with an email address that ends with "@example.com"

SELECT \* FROM Users WHERE email LIKE '%rahul.mehta@example.com';



-- Get a List of Service Providers by Category:

SELECT sp.Full\_name, sp.experience, sp.rating

FROM Service\_Providers sp

JOIN Service\_Categories sc ON sp.service\_category\_id = sc.service\_category\_id

WHERE sc.Full\_name = 'Plumbing';

A screenshot of a computer program

Description automatically generated

-- Find All Requests Made by a Specific User:

SELECT r.\*

FROM Requests r

WHERE r.user\_id = 1;

A close-up of a document

Description automatically generated

-- Count the Number of Service Requests by Status:

SELECT status, COUNT(\*) AS request\_count

FROM Requests

GROUP BY status;

A close-up of a number

Description automatically generated

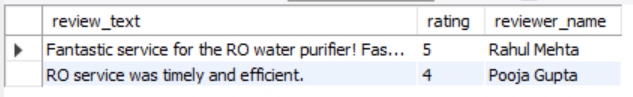
-- Get Reviews for a Specific Service Provider:

SELECT r.review\_text, r.rating, u.Full\_name AS reviewer\_name

FROM Reviews r

JOIN Users u ON r.user\_id = u.user\_id

WHERE r.provider\_id = 85;

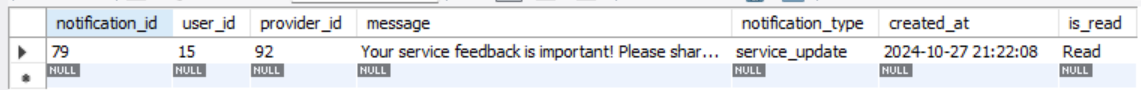


-- Retrieve Notifications for a Specific User:

SELECT n.\*

FROM Notifications n

WHERE n.user\_id = 15;



-- Find All Services Provided in a Specific Location:

SELECT sp.Full\_name, sp.availability\_status

FROM Service\_Providers sp

JOIN Locations l ON sp.location\_id = l.location\_id

WHERE l.city = 'Mumbai' AND l.state = 'Maharashtra';

A screen shot of a computer program

Description automatically generated

-- Get Service History for a Specific User:

SELECT sh.service\_description, sh.service\_date, sh.completion\_status

FROM Service\_History sh

WHERE sh.user\_id = 11;

A screenshot of a computer

Description automatically generated

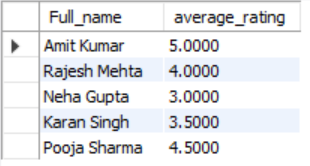
-- Get Average Rating for Each Service Provider:

SELECT sp.Full\_name, AVG(r.rating) AS average\_rating

FROM Service\_Providers sp

LEFT JOIN Reviews r ON sp.provider\_id = r.provider\_id

GROUP BY sp.provider\_id;



-- Retrieve All Payments Made by a User:

SELECT p.amount, p.payment\_status, p.payment\_method

FROM Payment p

WHERE p.user\_id =9;

A screenshot of a computer

Description automatically generated

-- Find the Top 5 Service Categories by Number of Requests:

SELECT sc.Full\_name, COUNT(r.request\_id) AS request\_count

FROM Service\_Categories sc

LEFT JOIN Requests r ON sc.service\_category\_id = r.service\_category\_id

GROUP BY sc.service\_category\_id

ORDER BY request\_count DESC

LIMIT 5;

A screenshot of a computer

Description automatically generated

-- Check Availability of a Provider on a Specific Day:

SELECT sa.\*

FROM Service\_Availability sa

WHERE sa.provider\_id =99 AND sa.day\_of\_week = 'Monday';

A screenshot of a computer

Description automatically generated

-- Get Users Who Have Given a Review with a Rating of 5:

SELECT DISTINCT u.Full\_name

FROM Users u

JOIN Reviews r ON u.user\_id = r.user\_id

WHERE r.rating = 5;

A screenshot of a computer

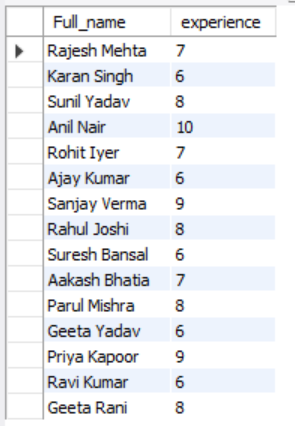
Description automatically generated

-- Find Service Providers with More than a Certain Years of Experience:

SELECT Full\_name, experience

FROM Service\_Providers

WHERE experience > 5;



-- Retrieve All Requests and Their Associated Service Provider Names:

SELECT r.request\_id, u.Full\_name AS user\_name, sp.Full\_name AS provider\_name, r.status

FROM Requests r

JOIN Users u ON r.user\_id = u.user\_id

LEFT JOIN Service\_Providers sp ON r.provider\_id = sp.provider\_id

limit 10;

A screenshot of a computer

Description automatically generated

-- Count Users by Role:

SELECT role, COUNT(\*) AS user\_count

FROM Users

GROUP BY role;

A screenshot of a computer

Description automatically generated

-- Get Service Category Descriptions:

SELECT Full\_name, Description

FROM Service\_Categories;

A screenshot of a computer

Description automatically generated

-- Find the Most Recent Service Request for Each User:

SELECT r.user\_id, r.request\_id, r.description, r.status

FROM Requests r

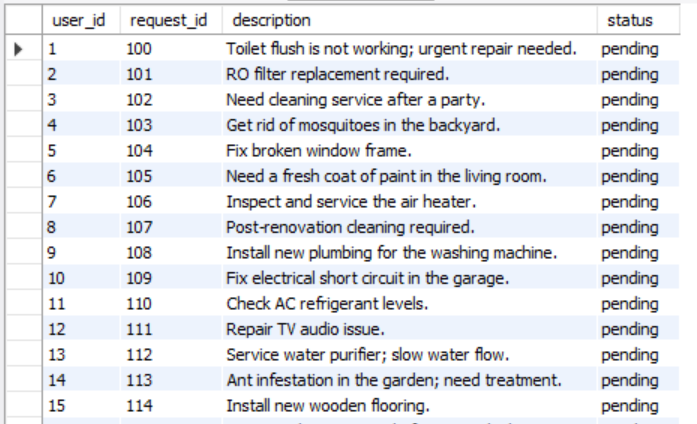
WHERE r.request\_id IN (

SELECT MAX(request\_id)

FROM Requests

GROUP BY user\_id

);



-- Retrieve All Notifications That Are Unread:

SELECT \*

FROM Notifications

WHERE is\_read = 'Unread' limit 10;

A screenshot of a computer screen

Description automatically generated

-- Get the Number of Reviews per Service Provider:

SELECT sp.Full\_name, COUNT(r.review\_id) AS review\_count

FROM Service\_Providers sp

LEFT JOIN Reviews r ON sp.provider\_id = r.provider\_id

GROUP BY sp.provider\_id limit 10;

A screenshot of a computer

Description automatically generated

-- Get Users and Their Latest Review:

SELECT u.Full\_name AS user\_name, r.review\_text, r.rating

FROM Users u

JOIN Reviews r ON u.user\_id = r.user\_id

WHERE r.review\_id IN (

SELECT MAX(review\_id)

FROM Reviews

GROUP BY user\_id

A screenshot of a computer

Description automatically generated);

-- List Service Availability for All Providers:

SELECT sp.Full\_name, sa.day\_of\_week, sa.start\_time, sa.end\_time

FROM Service\_Providers sp

JOIN Service\_Availability sa ON sp.provider\_id = sa.provider\_id limit 15;

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Description automatically generated

-- Calculate the Total Amount of Payments Made by Each User:

SELECT p.user\_id, SUM(p.amount) AS total\_payments

FROM Payment p

GROUP BY p.user\_id;

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-- Get Service Providers Who Are Currently Unavailable:

SELECT Full\_name, location\_id

FROM Service\_Providers

WHERE availability\_status = 'unavailable';

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-- List All Unique Cities Where Service Providers Are Located:

SELECT DISTINCT l.city

FROM Locations l

JOIN Service\_Providers sp ON l.location\_id = sp.location\_id;

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-- Count of Service Requests for Each Category:

SELECT sc.Full\_name, COUNT(r.request\_id) AS request\_count

FROM Service\_Categories sc

LEFT JOIN Requests r ON sc.service\_category\_id = r.service\_category\_id

GROUP BY sc.service\_category\_id limit 10;

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**Conclusion**:-

the **DailForHelp** database provides a comprehensive and well-structured foundation for managing interactions between users and service providers. By organizing information across key entities, such as users, service providers, service categories, requests, and payments, it ensures seamless data flow and efficient management of services. The relational structure supports data integrity and accuracy, enabling robust features like real-time service availability, secure payment processing, and user feedback. This database is scalable and adaptable, making it suitable for growing service platforms that aim to enhance user experience and streamline service delivery through an accessible and efficient system.

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\*\*\* THE END \*\*\*

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