

TITLE OF THE PROJECT:
BOSTON HOUSE RENTAL MANAGEMENT SYSTEM
GROUP 41

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Percentage of Effort Contributed by Student 1: 50%
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Signature of student 1: Tanay Malviya
Signature of student 2: Gargi Gokhale

Submission date: 12th November 2023

5 Queries are as follows:

Query 1) Retrieve all properties along with their owners' details

Query 1

```
1 • use housing_system;
2
3 • SELECT Property.property_id, Property.address, Owner.contact_number AS owner_contact
4 FROM Property
5 JOIN Owner ON Property.owner_id = Owner.owner_id;
6
7
8
9
10
```

Result Grid

	property_id	address	owner_contact
▶	1	640 Arizona Circle	297-911-6070
	3	65336 Evergreen Parkway	863-214-1500
	4	5461 Nancy Trail	989-109-0001
	6	34 Arrowood Point	110-786-9847
	7	95 Pierstorff Avenue	476-346-8504
	8	7 Westend Street	576-606-1377
	13	8045 Magdeline Crossing	387-800-8510
	14	3737 Riverside Terrace	638-295-0072
	19	02 Morningstar Circle	285-206-3519
	20	523 Maple Pass	948-895-0758
	22	6 Walton Drive	348-638-1728
	24	69674 Saint Paul Lane	452-494-0023
▶	25	69674 Saint Paul Lane	452-494-0023

Result 18

Output

Action Output

#	Time	Action	Message
✓ 156	16:43:32	SELECT property_id, address, rooms FROM Property WHERE rooms = (SELECT MAX(rooms) FROM Pr...	1 row(s) returned
✓ 157	16:53:05	SELECT Property.property_id, Property.address, Owner.contact_number AS owner_contact FROM Pro...	31 row(s) returned

Query 2) Find the total number of maintenance requests in "Pending" status.

Query 1

```
1 • use housing_system;
2
3 • SELECT COUNT(*) AS pending_requests
4 FROM Maintenance_Request
5 WHERE status = 'Pending';
6
7
8
9
```

Result Grid

	pending_requests
▶	2

Result 19

Output

Action Output

#	Time	Action	Message
✓ 155	16:41:23	SELECT * FROM Review WHERE user_ratings > 4 LIMIT 0, 50000	6 row(s) returned
✓ 156	16:43:32	SELECT property_id, address, rooms FROM Property WHERE rooms = (SELECT MAX(rooms) FROM Pr...	1 row(s) returned
✓ 157	16:53:05	SELECT Property.property_id, Property.address, Owner.contact_number AS owner_contact FROM Pro...	31 row(s) returned
✓ 158	16:59:33	SELECT COUNT(*) AS pending_requests FROM Maintenance_Request WHERE status = 'Pending' LI...	1 row(s) returned

Query 3) List the tenants along with their lease agreement details

Query 1

```

1 • use housing_system;
2
3 • SELECT Tenant.tenant_id, Tenant.contact_number AS tenant_contact, Lease_Agreement.*
4 FROM Tenant
5 JOIN Lease_Agreement ON Tenant.lease_agreement_id = Lease_Agreement.lease_agreement_id;
6
7
8
9

```

Result Grid

	tenant_id	tenant_contact	lease_agreement_id	property_id	T_and_C	rental_period	payment_schedules
▶	1	911-137-6445	1	1	Deposits and fees	3.6	4
	3	474-173-9673	3	3	Repairs and maintenance	3.2	3
	4	466-202-4428	4	4	Limits on occupancy	3.7	9
	6	398-405-3194	6	6	Deposits and fees	6.4	5
	7	837-581-6523	7	7	Term of the tenancy	2.3	6
	8	631-335-0291	8	8	Deposits and fees	4.5	6
	19	433-126-5841	19	19	Term of the tenancy	5.7	2
	20	775-373-9528	20	20	Term of the tenancy	4.8	2
	24	965-947-6223	24	24	Names of all tenants	4.0	11
	28	775-100-0082	28	28	Limits on occupancy	2.9	2
	30	332-708-6351	30	30	Names of all tenants	6.3	11

Result 20

Output

Action Output

#	Time	Action	Message
✓	156 16:43:32	SELECT property_id, address, rooms FROM Property WHERE rooms = (SELECT MAX(rooms) FROM Pr...	1 row(s) returned
✓	157 16:53:05	SELECT Property.property_id, Property.address, Owner.contact_number AS owner_contact FROM Pro...	31 row(s) returned
✓	158 16:59:33	SELECT COUNT(*) AS pending_requests FROM Maintenance_Request WHERE status = 'Pending' LI...	1 row(s) returned
✓	159 17:02:30	SELECT Tenant.tenant_id, Tenant.contact_number AS tenant_contact, Lease_Agreement.* FROM Te...	25 row(s) returned

Query 4) Retrieve reviews with ratings greater than 4

Query 1

```

1 • use housing_system;
2
3 • SELECT *
4 FROM Review
5 WHERE user_ratings > 4;
6
7
8
9

```

Result Grid

	review_id	lease_agreement_id	user_ratings	comments
▶	22	22	5	Good
	28	28	5	Best
	41	41	5	Need Improvement
	56	56	5	Loved it
	62	62	5	Bad
	65	65	5	Good
*	NULL	NULL	NULL	NULL

Review 21

Output

Action Output

#	Time	Action	Message
✓	157 16:53:05	SELECT Property.property_id, Property.address, Owner.contact_number AS owner_contact FROM Pro...	31 row(s) returned
✓	158 16:59:33	SELECT COUNT(*) AS pending_requests FROM Maintenance_Request WHERE status = 'Pending' LI...	1 row(s) returned
✓	159 17:02:30	SELECT Tenant.tenant_id, Tenant.contact_number AS tenant_contact, Lease_Agreement.* FROM Te...	25 row(s) returned
✓	160 17:05:27	SELECT * FROM Review WHERE user_ratings > 4 LIMIT 0, 50000	6 row(s) returned

Query 5) Retrieve the names and contact numbers of tenants who have submitted maintenance requests and the status of those requests

Query 1 x

```

1 • use housing_system;
2
3 • SELECT t.tenant_id, t.contact_number, mr.status
4 FROM Tenant t
5 JOIN Lease_Agreement la ON t.lease_agreement_id = la.lease_agreement_id
6 JOIN Maintenance_Request mr ON la.lease_agreement_id = mr.lease_agreement_id;
7
8
9

```

Result Grid

	tenant_id	contact_number	status
1	911-137-6445	Completed	
4	466-202-4428	Closed	
6	398-405-3194	Completed	
7	837-581-6523	On Hold	
8	631-335-0291	Closed	
19	433-126-5841	Cancelled	
20	775-373-9528	Cancelled	
28	775-100-0082	In Process	
30	332-708-6351	Pending	
40	527-553-8616	Completed	
41	692-867-5906	On Hold	

Result 22 x

Output

Action Output

#	Time	Action	Message
✓ 159	17:02:30	SELECT Tenant.tenant_id, Tenant.contact_number AS tenant_contact, Lease_Agreement.* FROM Te...	25 row(s) returned
✓ 160	17:05:27	SELECT * FROM Review WHERE user_ratings > 4 LIMIT 0, 50000	6 row(s) returned
✗ 161	17:07:08	SELECT p.property_id, p.address, COUNT(mr.request_id) AS total_requests FROM Property p LEFT JOI...	Error Code: 1054. Unknown column 'mr.property_id' in 'on clause'
✓ 162	17:07:54	SELECT t.tenant_id, t.contact_number, mr.status FROM Tenant t JOIN Lease_Agreement la ON t.lease...	19 row(s) returned

SQL Code for creating all tables

Local instance MySQL80 x unconnecte

File Edit View Query Database Server

Navigator

SCHEMAS

Filter objects

- awesome chocolates
- housing_system
 - Tables
 - agent
 - contract
 - lease_agreement
 - location
 - maintenance_request
 - owner
 - payment
 - property
 - property_image
 - review
 - tenant
 - user
 - Views
 - Stored Procedures
 - Functions
- purchase

Administration Schemas

Information

USE Housing_System;

```
CREATE TABLE Owner (  
    owner_id int NOT NULL,  
    contact_number varchar(25),  
    PRIMARY KEY (owner_id)  
);
```

```
CREATE TABLE Location (  
    location_id int NOT NULL,  
    city varchar(0),  
    state varchar(30),  
    zip_code varchar(10),  
    PRIMARY KEY (location_id)  
);
```

```
CREATE TABLE User (  
    user_id int NOT NULL,  
    name varchar(30),  
    contact_number varchar(15),  
    login_credentials varchar(20),  
    PRIMARY KEY (user_id)  
);
```

```
CREATE TABLE Property (  
    property_id int NOT NULL,  
    owner_id int,  
    address varchar(50),  
    size int,  
    rooms int,  
    amenities varchar(30),  
    PRIMARY KEY (property_id),  
    FOREIGN KEY (owner_id) REFERENCES Owner(owner_id)  
);
```

```
CREATE TABLE Lease_Agreement (  
    lease_agreement_id int NOT NULL,  
    property_id int,  
    T_and_C varchar(50),  
    rental_period varchar(20),  
    payment_schedules varchar(20),  
    PRIMARY KEY (lease_agreement_id),  
    FOREIGN KEY (property_id) REFERENCES Property(property_id)  
);
```

```
CREATE TABLE Tenant (  
    tenant_id int NOT NULL,  
    lease_agreement_id int,  
    contact_number varchar(20),  
    tenant_history varchar(50),  
    PRIMARY KEY (tenant_id),  
    FOREIGN KEY (lease_agreement_id) REFERENCES Lease_Agreement(lease_agreement_id)
```

);

```
CREATE TABLE Property_Image (  
    image_id int NOT NULL,  
    image_URL varchar(100),  
    property_id int,  
    description varchar(50),  
    PRIMARY KEY (image_id),  
    FOREIGN KEY (property_id) REFERENCES Property(property_id)  
);
```

```
CREATE TABLE Maintenance_Request (  
    request_id int NOT NULL,  
    lease_agreement_id int,  
    request_type varchar(50),  
    description varchar(50),  
    status varchar(25),  
    PRIMARY KEY (request_id),  
    FOREIGN KEY (lease_agreement_id) REFERENCES Lease_Agreement(lease_agreement_id)  
);
```

```
CREATE TABLE Review (  
    review_id int NOT NULL,  
    lease_agreement_id int,  
    user_ratings int,  
    comments varchar(30),  
    PRIMARY KEY (review_id),  
    FOREIGN KEY (lease_agreement_id) REFERENCES Lease_Agreement(lease_agreement_id)  
);
```

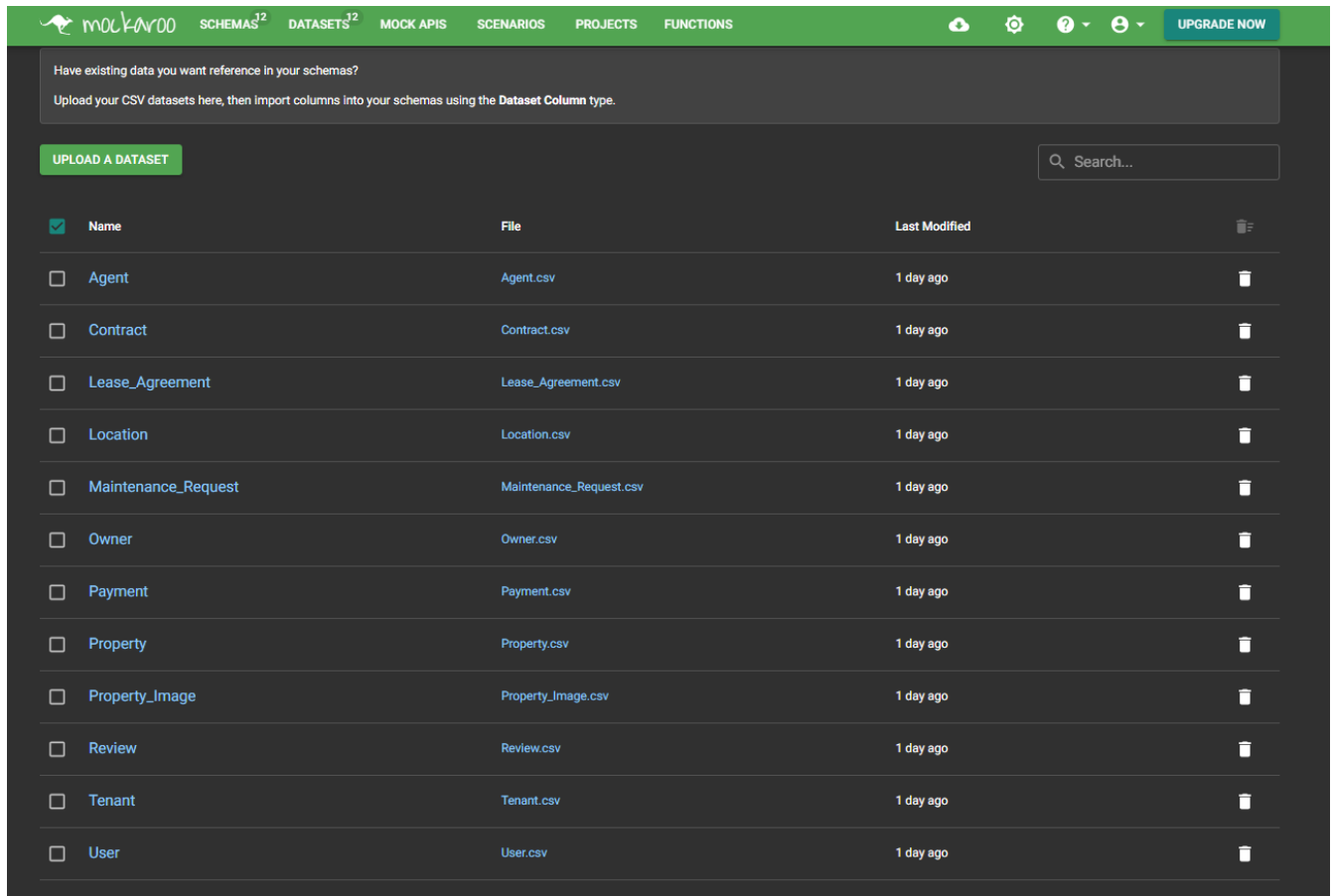
```
CREATE TABLE Payment (  
    payment_id int NOT NULL,  
    lease_agreement_id int,  
    amount varchar(15),  
    payment_method varchar(25),  
    PRIMARY KEY (payment_id),  
    FOREIGN KEY (lease_agreement_id) REFERENCES Lease_Agreement(lease_agreement_id)  
);
```

```
CREATE TABLE Agent (  
    agent_id int,  
    lease_agreement_id int,  
    contact_number varchar(15),  
    services_offered varchar(30),  
    PRIMARY KEY (agent_id),  
    FOREIGN KEY (lease_agreement_id) REFERENCES Lease_Agreement(lease_agreement_id)  
);
```

```
CREATE TABLE Contract (  
    contract_id int,  
    lease_agreement_id int,  
    terms varchar(50),  
    legal_obligations varchar(50),
```

```
PRIMARY KEY (contract_id),
FOREIGN KEY (lease_agreement_id) REFERENCES Lease_Agreement(lease_agreement_id)
);
```

List of datasets created from mockaroo site



Have existing data you want reference in your schemas? Upload your CSV datasets here, then import columns into your schemas using the Dataset Column type.			
UPLOAD A DATASET			
Search...			
<input checked="" type="checkbox"/>	Name	File	Last Modified
<input type="checkbox"/>	Agent	Agent.csv	1 day ago
<input type="checkbox"/>	Contract	Contract.csv	1 day ago
<input type="checkbox"/>	Lease_Agreement	Lease_Agreement.csv	1 day ago
<input type="checkbox"/>	Location	Location.csv	1 day ago
<input type="checkbox"/>	Maintenance_Request	Maintenance_Request.csv	1 day ago
<input type="checkbox"/>	Owner	Owner.csv	1 day ago
<input type="checkbox"/>	Payment	Payment.csv	1 day ago
<input type="checkbox"/>	Property	Property.csv	1 day ago
<input type="checkbox"/>	Property_Image	Property_Image.csv	1 day ago
<input type="checkbox"/>	Review	Review.csv	1 day ago
<input type="checkbox"/>	Tenant	Tenant.csv	1 day ago
<input type="checkbox"/>	User	User.csv	1 day ago

Directly imported datasets csv files to the MySQL Tables