



**Project: Build
Data Mart**

The Development Phase

Presented by:

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Course:

DLBDSPBDM01

What this project covers :



After completing the design stage which we call the conception phase , we now transition to the implementation phase, where we bring the structure into operation and test it's functionality. In this stage we create SQL table for each entity, insert data and run multiple queries to ensure proper implementation of all features.

Each entity will be represented by an SQL table with appropriate keys, relationships and constraints. To support a successful execution we will build all tables using MySQL Workbench. A sample of 20 rows will be inserted per table to generate realistic test data.

The goal of this Airbnb project is to evaluate the overall performance of the platform , including how hosts handle payments and whether listings are being manged effectively.

Core entities of the Airbnb Schema



Guest: This entity stores data about people who book the properties.

guest_id	first_name	last_name	phone.no	email
61	Sarah	Oaks	569-322-0134	sarah.oaks@gmail.com
62	John	Treys	432-607-8094	john.treys@yahoo.com
63	Emily	Duncans	765-980-4444	emily.duncans@hotmail.com
64	Amanda	Ink	556-000-3425	amanda.ink@yahoo.com
65	Queen	Maya	333-562-1111	queen.maya@gmail.com
66	Rita	Greggs	347-678-9000	rita.greggs@gmail.com
67	Betty	Woods	646-876-9870	betty.woods@hotmail.com
68	Zara	Albert	231-765-4569	zara.albert@hotmail.com
69	Portia	Polls	915-543-2222	portia.polls@gmail.com
70	Peter	Drolls	876-555-5432	peter.drolls@hotmail.com
71	Kukie	Hams	714-766-4320	kukie.hams@gmail.com
72	Tracy	Carton	324-776-0923	tracy.carton@yahoo.com
73	Uriah	Biston	449-000-7897	uriah.biston@gmail.com
74	Azariah	Bens	564-234-5555	azariah.bens@gmail.com
75	Grace	Phillips	324-567-8766	grace.phillips@yahoo.com
76	Dion	Tills	211-890-3456	dion.tills@hotmail.com
77	Fiona	Mars	655-894-4556	fiona.mars@hotmail.com
78	Anold	Ampy	916-780-3333	anold.ampy@yahoo.com
79	Trish	Wells	219-567-2654	trish.wells@gmail.com
80	Chris	Martin	657-873-7777	chris.martin@gmail.com

```
CREATE TABLE `airbnb project`.`guest` (
  `guest_id` INT NOT NULL AUTO_INCREMENT,
  `first_name` VARCHAR(256) NOT NULL,
  `last_name` VARCHAR(256) NOT NULL,
  `phone.no` VARCHAR(256) NOT NULL,
  `email` VARCHAR(256) NOT NULL,
  PRIMARY KEY (`guest_id`),
  UNIQUE INDEX `email_UNIQUE` (`email` ASC) VISIBLE);
```

Host:
the entity stores the information about people who manage the listings.

	id	first_name	last_name	email	profile pic	phone.no	address
1	Nina	Hamilton	Hamilton	nina.hamilton@gmail.com	NULL	222-967-0989	123 Jack Street Poland
2	Nora	Mouse	Mouse	nora.mouse@yahoo.com	NULL	312-567-2222	23 Mills Road Canada
3	Nontle	Retty	Retty	nontle.retty@hotmail.com	NULL	614-900-9021	90 Park Street South Africa
4	Ayanda	Trice	Trice	ayanda.trice@gmail.com	NULL	612-950-4309	21 Red Street Russia
5	Sipho	Buffle	Buffle	sipho.buffle@hotmail.com	NULL	278-900-3211	900 Hills Street New York
6	John	Clerk	Clerk	john.clerk@gmail.com	NULL	912-345-2333	98 Flock Street United Kingdom
7	Jacob	Jupiter	Jupiter	jacob.jupiter@gmail.com	NULL	456-212-3444	76 Hags Street Italy
8	Jeremiah	Alvion	Alvion	jeremiah.alvion@gmail.com	NULL	678-344-8765	211 Amos Street New York
9	Lina	Point	Point	lina.point@yahoo.com	NULL	321-084-2144	56 Bed Street Canada
10	Laurah	Johnson	Johnson	laurah.johnson@hotmail.com	NULL	256-897-0000	32 Lily Road Australia
11	Jack	Avon	Avon	jack.avon@hotmail.com	NULL	433-090-2132	19 Rosewell Street Kuala Lumpur
12	Cynthia	Treat	Treat	cynthia.treat@gmail.com	NULL	901-765-2123	13 Garden Road Switzerland
13	Alex	Emilton	Emilton	alex.emilton@gmail.com	NULL	324-211-8721	32 Dobby Street Canada
14	Robert	Bricks	Bricks	robert.bricks@yahoo.com	NULL	809-709-0321	22 Flames Street United Kingdom
15	Trevor	Drop	Drop	trevor.drop@gmail.com	NULL	255-765-3456	18 Truck Drive Paris
16	Rose	Makky	Makky	rose.makky@yahoo.com	NULL	873-802-1190	10 Reed Street Mexico
17	Alice	Gotwill	Gotwill	alice.gotwill@gmail.com	NULL	723-211-7004	90 Part Street Thailand
18	Calton	Orbit	Orbit	calton.orbit@gmail.com	NULL	568-011-3344	31 Wells Street India
19	Pretty	Kellton	Kellton	pretty.kellton@yahoo.com	NULL	709-123-4321	76 George Drive Sweden
20	Susan	Woolies	Woolies	susan.woolies@yahoo.com	NULL	612-093-2112	98 Happy Road France

```
CREATE TABLE `airbnb project`.`host` (
  `id` INT NOT NULL AUTO_INCREMENT,
  `first_name` VARCHAR(258) NOT NULL,
  `last_name` VARCHAR(258) NOT NULL,
  `email` VARCHAR(258) NOT NULL,
  `profile pic` VARCHAR(256) NULL,
  `phone.no` VARCHAR(258) NULL,
  `address` VARCHAR(258) NOT NULL,
  PRIMARY KEY (`id`),
  UNIQUE INDEX `email_UNIQUE` (`email` ASC) VISIBLE);
```

Insert into statements for guest and host tables

Guest table

```
1 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Sarah', 'Oaks', '569-322-0134', 'sarah.oaks@gmail.com');
2 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('John', 'Treys', '432-607-8094', 'john.treys@yahoo.com');
3 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Emily', 'Duncans', '765-980-4444', 'emily.duncans@hotmail.com');
4 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Amanda', 'Ink', '556-000-3425', 'amanda.ink@yahoo.com');
5 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Queen', 'Maya', '333-562-1111', 'queen.maya@gmail.com');
6 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Rita', 'Greggs', '347-678-9000', 'rita.greggs@gmail.com');
7 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Betty', 'Woods', '646-876-9870', 'betty.woods@hotmail.com');
8 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Zara', 'Albert', '231-765-4569', 'zara.albert@hotmail.com');
9 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Portia', 'Polls', '915-543-2222', 'portia.polls@gmail.com');
10 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Peter', 'Drolls', '876-555-5432', 'peter.drolls@hotmail.com');
11 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Kukie', 'Hams', '714-766-4320', 'kukie.hams@gmail.com');
12 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Tracy', 'Carton', '324-776-0923', 'tracy.carton@yahoo.com');
13 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Uriah', 'Biston', '449-000-7897', 'uriah.biston@gmail.com');
14 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Azariah', 'Bens', '564-234-5555', 'azariah.bens@gmail.com');
15 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Grace', 'Phillips', '324-567-8766', 'grace.phillips@yahoo.com');
16 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Dion', 'Tills', '211-890-3456', 'dion.tills@hotmail.com');
17 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Fiona', 'Mars', '655-894-4556', 'fiona.mars@hotmail.com');
18 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Anold', 'Ampy', '916-780-3333', 'anold.ampy@yahoo.com');
19 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Trish', 'Wells', '219-567-2654', 'trish.wells@gmail.com');
20 INSERT INTO `airbnb project`.`guest` ('first_name', 'last_name', 'phone.no', 'email') VALUES ('Chris', 'Martin', '657-873-7777', 'chris.martin@gmail.com');
```

Host table

```
1 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
2 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
3 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
4 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
5 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
6 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
7 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
8 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
9 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
10 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
11 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
12 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
13 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
14 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
15 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
16 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
17 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
18 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
19 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
20 INSERT INTO `airbnb project`.`host` ('first_name', 'last_name', 'email', 'phc
```

Address: stores the location of users on the platform.

	id	city	country	postal code
▶	29	Berlin	Germany	10115
	30	New York	United States	10001
	31	Oslo	Norway	0155
	32	Paris	France	75001
	33	Madrid	Spain	28001
	34	Rome	Italy	00184
	35	Sydney	Australia	2000
	36	Cape Town	South Africa	8001
	37	Sao Paulo	Brazil	01000-000
	38	Beijing	China	100000
	39	Seoul	South Korea	04524
	40	Mexico City	Mexico	01000
	41	Tokyo	Japan	100-0001
	42	Stockholm	Sweden	111 20
	43	Athens	Greece	105 52
	44	Zurich	Switzerland	8001
	45	Auckland	New Zealand	1010
	46	Moscow	Russia	101000
	47	Lisbon	Portugal	1100-038
	48	Istanbul	Turkey	34110

```
CREATE TABLE `airbnb project`.`address` (
  `id` INT NOT NULL,
  `city` VARCHAR(256) NULL,
  `country` VARCHAR(256) NULL,
  `postal code` INT NULL,
  PRIMARY KEY (`id`));
```

Pets:
shows us whether
pets are allowed or
not at a certain
property.

	id	name	type	size	breed
1	Tookie	bird	NULL	NULL	
2	Rex	dog	NULL	NULL	
3	Lexy	cat	NULL	NULL	
4	Rooster	reptile	NULL	NULL	
5	Bubbles	fish	NULL	NULL	
6	Shelly	guinea pig	NULL	NULL	
7	Cookie	dog	NULL	NULL	
8	Nitty	hamster	NULL	NULL	
9	Petty	bird	NULL	NULL	
10	Trookie	rabbit	NULL	NULL	

```
CREATE TABLE `airbnb project`.`pets` (  
  `id` INT NOT NULL AUTO_INCREMENT,  
  `name` VARCHAR(256) NOT NULL,  
  `type` VARCHAR(256) NOT NULL,  
  `size` INT NULL,  
  `breed` VARCHAR(256) NULL,  
  PRIMARY KEY (`id`));
```

Insert into statements for address and pets tables

Address table

```
1 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
2 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
3 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
4 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
5 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
6 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
7 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
8 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
9 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
10 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
11 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
12 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
13 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
14 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
15 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
16 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
17 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
18 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
19 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL  
20 INSERT INTO `airbnb project`.`address` (`city`, `country`, `postal code`) VALL
```

Pets table

```
1 INSERT INTO `airbnb project`.`pets` (`name`, `type`) VALUES ('Tookie', 'bird');  
2 INSERT INTO `airbnb project`.`pets` (`name`, `type`) VALUES ('Rex', 'dog');  
3 INSERT INTO `airbnb project`.`pets` (`name`, `type`) VALUES ('Lexy', 'cat');  
4 INSERT INTO `airbnb project`.`pets` (`name`, `type`) VALUES ('Rooster', 'reptile');  
5 INSERT INTO `airbnb project`.`pets` (`name`, `type`) VALUES ('Bubbles', 'fish');  
6 INSERT INTO `airbnb project`.`pets` (`name`, `type`) VALUES ('Shelly', 'guinea pi');  
7 INSERT INTO `airbnb project`.`pets` (`name`, `type`) VALUES ('Cookie', 'dog');  
8 INSERT INTO `airbnb project`.`pets` (`name`, `type`) VALUES ('Nitty', 'hamster');  
9 INSERT INTO `airbnb project`.`pets` (`name`, `type`) VALUES ('Petty', 'bird');  
10 INSERT INTO `airbnb project`.`pets` (`name`, `type`) VALUES ('Trookie', 'rabbit');  
11
```



Payments:

This entity manages financial transactions between hosts and guests.

	payment_id	host_id	guest_id	payment_date	amount_paid
47	1	61	2010-01-25	25.00000	
48	2	62	2018-01-25	32.00000	
49	3	63	2014-02-25	36.50000	
50	4	64	2018-02-25	42.50000	
51	5	65	2013-03-25	45.00000	
52	6	66	2014-03-25	50.00000	
53	7	67	2020-03-25	65.00000	
54	8	68	2022-03-25	68.50000	
55	9	69	2011-04-25	75.00000	
56	10	70	2013-04-25	82.50000	
57	11	71	2019-04-25	90.00000	
58	12	72	2023-04-25	95.40000	
59	13	73	2025-04-25	100.00000	
60	14	74	2012-05-25	120.00000	
61	15	75	2014-05-25	125.00000	
62	16	76	2016-06-25	130.00000	
63	17	77	2017-06-25	220.00000	
64	18	78	2020-06-25	350.00000	
65	19	79	2021-06-25	400.00000	
▶	66	20	80	2024-06-25	450.00000

```
CREATE TABLE Payment(  
    payment_id INT PRIMARY KEY AUTO_INCREMENT,  
    host_id INT NOT NULL,  
    guest_id INT NOT NULL,  
    payment_date DATE,  
    amount_paid DECIMAL (11,5),  
    FOREIGN KEY (host_id) REFERENCES Host(host_id) ON DELETE CASCADE ON UPDATE CASCADE,  
    FOREIGN KEY (guest_id) REFERENCES Guest(guest_id) ON DELETE CASCADE ON UPDATE CASCADE);
```

Region:

This entity stores information about the regions and their descriptions.

	id	name	type	description
▶	1	West Africa	Subregion	A subregion with 16 countries
	2	Northern Africa	Subregion	This one has mediterranean countries
	3	Central Africa	Subregion	A region with rainforests
	4	Northern Europe	Subregion	A region with cold climates
	5	Southern Europe	Subregion	A region known for Mediterranean c...
	6	Eastern Europe	Subregion	A region that includes Poland and R...
	7	Western Europe	Subregion	A highly developed region
	8	East Africa	Subregion	Well known for wildlife
	9	Sahara Desert	Desert Region	Largest desert in the world
	10	Kalahari Desert	Desert Region	Sandy region in Southern Africa
	11	Great Rift Valley	Geographical Region	A huge valley known for biodiversity
	12	Namib Desert	Desert Region	This one is the world's oldest desert
	13	Atlas Mountains	Mountain Range	Well known for its rich climate
	14	Horn of Africa	Geographical Region	The region is known for drought
	15	Drakensberg Mo...	Mountain Range	Well known for how beautiful it is

```
CREATE TABLE `region` (
  `id` int NOT NULL AUTO_INCREMENT,
  `name` varchar(255) NOT NULL,
  `type` varchar(58) NOT NULL,
  `description` varchar(258) NOT NULL,
  PRIMARY KEY (`id`),
  UNIQUE KEY `name_UNIQUE` (`name`)
```

Insert into statements for payment and region tables

Payment table

```
1 INSERT INTO `airbnb project`.`payment` (`payment_date`, `amount_paid`) VA  
2 INSERT INTO `airbnb project`.`payment` (`payment_date`, `amount_paid`) VA  
3 INSERT INTO `airbnb project`.`payment` (`payment_date`, `amount_paid`) VA  
4 INSERT INTO `airbnb project`.`payment` (`payment_date`, `amount_paid`) VA  
5 INSERT INTO `airbnb project`.`payment` (`payment_date`, `amount_paid`) VA  
6 INSERT INTO `airbnb project`.`payment` (`payment_date`, `amount_paid`) VA  
7 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
8 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
9 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
10 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
11 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
12 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
13 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
14 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
15 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
16 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
17 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
18 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
19 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)  
20 INSERT INTO `airbnb project`.`payment` (`host_id`, `guest_id`, `payment_date`)
```

Region table

```
1 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('V  
2 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('N  
3 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('C  
4 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('N  
5 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('S  
6 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('E  
7 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('V  
8 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('E  
9 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('S  
10 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('K  
11 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('C  
12 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('N  
13 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('A  
14 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('T  
15 INSERT INTO `airbnb project`.`region` (`name`, `type`, `description`) VALUES ('C  
16
```

Location:

This entity stores information of the geographic location.

	id	city	country	name	region
	1	Toronto	Canada		North America
	2	Mexico City	Mexico		North America
	3	Cairo	Egypt		Northern Africa
	4	Madrid	Spain		Iberian Peninsula
	5	Rome	Italy		Southern Europe
	6	Lisbon	Portugal		Iberian Peninsula
	7	Athens	Greece		Southern Europe
▶	8	Oslo	Norway		Scandinavia
	9	Brussels	Belgium		Western Europe
	10	Amsterdam	Netherlands		Western Europe
	11	New Delhi	India		South Asia
	12	Beijing	China		East Asia
	13	Luanda	Angola		Central Africa
	14	Dakar	Senegal		West Africa
	15	Vienna	Austria		Central Europe
	16	New York ...	United States		North America
	17	Tokyo	Japan		East Asia
	18	Seoul	South Korea		East Asia
	19	Moscow	Russia		Eastern Europe
	20	Sydney	Australia		Australia

```
CREATE TABLE `location` (
  `id` int NOT NULL AUTO_INCREMENT,
  `name` varchar(258) DEFAULT NULL,
  `country` varchar(258) NOT NULL,
  `city` varchar(258) NOT NULL,
  `region` varchar(258) NOT NULL,
  PRIMARY KEY (`id`)
```

Service Provider:

This entity stores the service providers' contact details and type of services they offer.

```
1   CREATE TABLE `airbnb project`.`service provider` (
2     `id` INT NOT NULL AUTO_INCREMENT,
3     `email` VARCHAR(258) NOT NULL,
4     `phone n.o` VARCHAR(258) NOT NULL,
5     `name` VARCHAR(258) NOT NULL,
6     `type` VARCHAR(58) NOT NULL,
7     `service fee` DECIMAL(12,3) NOT NULL,
8     PRIMARY KEY (`id`),
9     UNIQUE INDEX `email_UNIQUE` (`email` ASC) VISIBLE);
10
```

	id	email	phone n.o	name	type	service fee
81	info@smartshine cleaning.c...	312-040-2134		SmartShine Cleaning ...	Cleaning service	45.000
82	contact@probit plumbing.com	213-345-5211		Probit Plumbing	Plumbing service	65.000
83	service@volt edge electric...	411-900-3321		Volt Edge Electricals	Electrician service	50.000
84	name@doodlewise repairs....	511-099-4333		DoodleWise Repairs	Repair services	85.500
85	contact@delicious delicacie...	602-067-4444		Delicious Delicacies	Cooking sevice	25.000
86	name@sillwood tech suppo...	900-233-3445		Sillwood Tech Support	IT service	90.000
87	infor@kukie meals.com	712-322-5555		Kukie Meals	Catering service	105.500
88	service@beauty hair salon....	421-678-0000		Beauty Hair Salon	Hairdressing service	150.340
89	name@nails by susie.com	302-555-6723		Nails by Susie	Manicure and pedicure service	165.500
90	contact@fancy cuts barber...	222-700-3421		Fancy Cuts Barber	Barber service	130.000
91	infor@luxurious touch mas...	503-333-0921		Luxurious Touch Mas...	Massage service	200.500
92	name@freshnest dry clean...	303-328-0711		FreshNest Dry Cleaners	Dry cleaning service	250.000
93	name@loving touch care.com	754-090-2100		Loving Touch Care	Babysitting service	300.000
94	service@sour guard securit...	621-050-4233		Sour Guard Security	Security service	350.000
95	contact@maintenance bre...	402-222-7801		Maintenance Breed	Pool service	130.000
96	infor@fit hub centre.com	600-231-8080		Fit Hub Centre	Gym service	125.000
97	name@one time fix.com	300-218-8210		One Time Fix	Gadgets repair service	100.000
98	service@soccer hub trainin...	206-777-0544		Soccer Hub Training	Football coaching	145.500
99	contact@tennis way trainin...	699-033-5477		Tennis Way Training	Tennis lessons	135.500
100	info@swift link relocations....	890-311-5464		Swift Link Relocations	Moving service	140.500

Insert into statements for service provider and location table

Service provider table

```
INSERT INTO `service provider`  
VALUES (81,'info@smartshine cleaning.com','312-040-2134','SmartShine Cleaning Co.', 'Cleaning service ',45.000),  
(82,'contact@probit plumbing.com','213-345-5211','Probit Plumbing','Plumbing service',65.000),  
(83,'service@volt edge electricals.com','411-900-3321','Volt Edge Electricals ','Electrician service ',50.000)  
(84,'name@doodlewise repairs.com','511-099-4333','DoodleWise Repairs','Repair services',85.500),  
(85,'contact@delicious delicacies.com','602-067-4444','Delicious Delicacies','Cooking sevice ',25.000),  
(86,'name@sillwood tech support.com','900-233-3445','Sillwood Tech Support','IT service',90.000),  
(87,'infor@kukie meals.com','712-322-5555','Kukie Meals','Catering service',105.500),  
(88,'service@beauty hair salon.com','421-678-0000','Beauty Hair Salon','Hairstressing service',150.340),  
(89,'name@nails by susie.com','302-555-6723','Nails by Susie','Manicure and pedicure service ',165.500),  
(90,'contact@fancy cuts barber.com','222-700-3421','Fancy Cuts Barber','Barber service ',130.000),  
(91,'infor@luxurious touch massage.com','503-333-0921','Luxurious Touch Massage','Massage service ',200.500),  
(92,'name@freshnest dry cleaners.com','303-328-0711','FreshNest Dry Cleaners','Dry cleaning service',250.000),  
(93,'name@loving touch care.com','754-090-2100','Loving Touch Care ','Babysitting service',300.000),  
(94,'service@sour guard security.com','621-050-4233','Sour Guard Security','Security service',350.000),  
(95,'contact@maintenance breed.com','402-222-7801','Maintenance Breed','Pool service',130.000),  
(96,'infor@fit hub centre.com','600-231-8080','Fit Hub Centre','Gym service',125.000),  
(97,'name@one time fix.com','300-218-8210','One Time Fix','Gadgets repair service',100.000),  
(98,'service@soccer hub training.com','206-777-0544','Soccer Hub Training','Football coaching ',145.500),  
(99,'contact@tennis way training.com','699-033-5477','Tennis Way Training ','Tennis lessons',135.500),  
(100,'info@swift link relocations.com','890-311-5464','Swift Link Relocations ','Moving service',140.500),  
(101,NULL,NULL,NULL,'',NULL);
```

Location table

```
1   INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
2   INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
3   INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
4   INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
5   INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
6   INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
7   INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
8   INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
9   INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
10  INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
11  INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
12  INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
13  INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
14  INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
15  INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
16  INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
17  INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
18  INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
19  INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES  
20  INSERT INTO `airbnb project`.`location` (`country`, `name`, `region`) VALUES
```

Availability:
This entity stores
the dates of when
certain properties
will be available.

	id	start_date	end_date	availability_status	minimum_stay	maximum_stay
	1	2025-05-10	2025-05-12	available	3	5
	2	2025-06-12	2025-06-14	available	4	6
	3	2025-04-09	2025-04-12	unavailable	6	8
	4	2025-09-07	2025-09-09	available	8	9
	5	2025-02-11	2025-02-13	unavailable	4	7
	6	2025-03-16	2025-03-18	available	2	5
	7	2025-01-11	2025-01-13	available	1	3
	8	2025-02-19	2025-02-21	unavailable	9	10
	9	2025-07-07	2025-07-10	unavailable	5	8
	10	2025-08-13	2025-08-15	available	3	6
	11	2025-03-10	2025-03-13	available	8	9
	12	2025-10-08	2025-10-11	unavailable	2	7
	13	2025-11-13	2025-11-15	available	6	8
	14	2025-01-16	2025-01-19	available	9	11
	15	2025-05-17	2025-05-19	unavailable	2	5
	16	2025-06-18	2025-06-20	available	5	8
	17	2025-03-09	2025-03-11	unavailable	7	9
	18	2025-12-10	2025-12-13	available	8	10
	19	2025-08-08	2025-08-14	unavailable	1	4
	20	2025-05-21	2025-05-24	available	9	12

```
CREATE TABLE `airbnb project`.`availability` (
  `id` INT NOT NULL AUTO_INCREMENT,
  `start_date` DATE NOT NULL,
  `end_date` DATE NOT NULL,
  `availability_status` VARCHAR(256) NOT NULL,
  `minimum_stay` INT NOT NULL,
  `maximum_stay` INT NOT NULL,
  PRIMARY KEY (`id`));
```

Rating:
This entity stores
information about the
scores given by
guests to the
property.

```
CREATE TABLE `airbnb project`.`rating` (
  `rating_id` INT NOT NULL AUTO_INCREMENT,
  `listing_id` INT NOT NULL,
  `rating_score` DECIMAL(11,5) NOT NULL,
  `rating_type` VARCHAR(58) NOT NULL,
  PRIMARY KEY (`rating_id`),
  INDEX `fk_rating_listing_idx` (`listing_id` ASC) VISIBLE,
  CONSTRAINT `fk_rating_listing`
    FOREIGN KEY (`listing_id`)
    REFERENCES `airbnb project`.`listing` (`id`)
    ON DELETE CASCADE
    ON UPDATE CASCADE);
```

	rating_id	listing_id	rating_score	rating_type
▶	1	1	3.00000	communication
▶	2	2	2.00000	friendliness
▶	3	3	5.00000	accuracy
▶	4	4	4.00000	amenities
▶	5	5	1.00000	cleanliness
▶	6	6	3.00000	politeness
▶	7	7	5.00000	responsiveness
▶	8	8	2.00000	noise level
▶	9	9	1.00000	privacy
▶	10	10	5.00000	security
▶	11	11	4.00000	amount of fresh air
▶	12	1	2.00000	scenery
▶	13	3	3.00000	lighting

Insert into statements for availability and rating

Availability table

```
1  INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
2  INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
3  INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
4  INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
5  INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
6  INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
7  INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
8  INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
9  INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
10 INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
11 INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
12 INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
13 INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
14 INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
15 INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
16 INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
17 INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
18 INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
19 INSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
20 TNSERT INTO `airbnb project`.`availability` (`start_date`, `end_date`, `availabi
```

Rating table

```
1  INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
2  INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
3  INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
4  INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
5  INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
6  INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
7  INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
8  INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
9  INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
10 INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
11 INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
12 INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
13 INSERT INTO `airbnb project`.`rating` (`listing_id`, `rating_score`, `rating_type`)
14
```

Booking:

This entity stores information about the reservations made by guests.

Booking_id	Date	n.o of guests	check_in	check_out
1	2001-07-25	12	2009-01-25	2010-01-25
2	2012-07-25	14	2011-01-25	2012-01-25
3	2014-07-25	23	2013-01-25	2014-01-25
4	2018-07-25	45	2010-02-25	2012-02-25
5	2022-07-25	65	2013-02-25	2015-02-25
6	2010-08-25	68	2006-03-25	2007-03-25
7	2013-08-25	72	2010-03-25	2011-03-25
8	2016-08-25	78	2012-03-25	2014-03-25
9	2020-08-25	83	2016-03-25	2018-03-25
10	2022-08-25	86	2008-04-25	2010-04-25
11	2009-09-25	88	2011-04-25	2012-04-25
12	2014-02-25	90	2013-04-25	2014-04-25
13	2018-03-25	92	2016-04-25	0008-04-25
14	2021-04-25	95	2022-04-25	2024-04-25
15	2024-09-25	98	2008-05-25	2010-05-25
16	2010-05-25	102	2010-05-25	2012-05-25
17	2019-11-25	105	2011-05-25	2014-05-25
18	2012-10-25	110	2012-05-25	2013-05-25
19	2013-07-25	112	2018-05-25	2020-05-25
20	2012-02-25	115	2019-06-25	2022-06-25

```
CREATE TABLE `airbnb project`.`booking` (
  `Booking_id` INT NOT NULL AUTO_INCREMENT,
  `Date` DATE NOT NULL,
  `n.o of guests` INT NOT NULL,
  `check_in` DATE NOT NULL,
  `check_out` DATE NOT NULL,
  PRIMARY KEY (`Booking_id`));
```

Insurance: This entity stores insurance provider's details.

	id	provider_name	coverage_type	coverage_period
1	StayAlert Insurance	Outdoor property damage	2025-03-04 to 2027-03-01	
2	PeacefulNest	Structural Damage	2025-06-10 to 2027-06-03	
3	SafeHood	Indoor property damage	2025-09-12 to 2027-09-02	
4	Comfort Guard	Water Damage	2025-02-10 to 2027-02-01	
5	SecureHome	Rental income loss	2025-10-10 to 2027-10-07	
6	AirHaven	Fire Damage	2025-01-02 to 2027-01-02	
7	Protect Shield	Liability and Theft	2025-07-08 to 2027-07-09	
8	Alert Cover	Residence Damage	2025-03-12 to 2027-03-14	
9	Urban Ease	Emergency coverage	2025-04-01 to 2027-04-07	
10	Suburban Host	Flood coverage	2025-11-11 to 2027-11-08	
11	Cozy Nest	Personal Injury	2025-04-09 to 2027-04-13	
12	Quick Scoop Insurance	Flood Damage	2025-08-08 to 2027-08-08	
13	Flexi Cover	Electrical Damage	2025-05-09 to 2027-05-02	
14	Safe Guard	Pet Damage Protection	2025-06-19 to 2027-06-15	
15	Wise Harbor Protection	Appliances coverage	2025-12-03 to 2027-12-08	

```
CREATE TABLE `airbnb project`.`insurance` (
  `id` INT NOT NULL AUTO_INCREMENT,
  `provider_name` VARCHAR(258) NOT NULL,
  `coverage_type` VARCHAR(258) NOT NULL,
  `coverage_period` VARCHAR(258) NOT NULL,
  PRIMARY KEY (`id`));
```

Insert into statements for insurance and booking table

Insurance table

```
1 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
2 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
3 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
4 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
5 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
6 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
7 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
8 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
9 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
10 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
11 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
12 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
13 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
14 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
15 INSERT INTO `airbnb project`.`insurance` (`provider_name`, `coverage_type`, `c  
16
```

Booking table

```
1 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
2 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
3 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
4 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
5 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
6 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
7 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
8 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
9 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
10 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
11 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
12 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
13 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
14 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
15 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
16 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
17 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
18 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
19 INSERT INTO `airbnb project`.`booking` (`Date`, `n.o of guests`, `check_in`, `  
20 TNSERT INTO `airbnb project`.`hooking` (`Date`, `n.o of guests`, `check in`)
```

Admin:

This entity stores the administrator's profile information.

```
CREATE TABLE `airbnb project`.`admin` (
  `admin_id` INT NOT NULL AUTO_INCREMENT,
  `first_name` VARCHAR(256) NOT NULL,
  `last_name` VARCHAR(256) NOT NULL,
  `email` VARCHAR(256) NOT NULL,
  `bio` VARCHAR(256) NULL,
  `address` VARCHAR(256) NOT NULL,
  PRIMARY KEY (`admin_id`),
  UNIQUE INDEX `email_UNIQUE` (`email` ASC) VISIBLE);
```

admin_id	first_name	last_name	email	bio	address
161	Janet	Jackson	janet.jackson@gmail.com	HULL	11 Green Street Netherlands
162	Tyler	Perry	tyler.perry@yahoo.com	HULL	12 Artwell Street Portugal
163	Chris	Maple	chris.maple@hotmail.com	HULL	89 Orange Road New York
164	Tony	Hills	tony.hills@gmail.com	HULL	123 Hagle Way Norway
165	Bridgette	Bone	bridgette.bone@hotmail	HULL	125 Figtree Street United Kingdom
166	Sonja	Clerk	sonja.cerk@hotmail.com	HULL	34 Harwil Court Street Sweden
167	Princess	Tiara	princess.tiara@gmail.com	HULL	12 Ample Street Spain
168	Rose	Made	rose.made@hotmail.com	HULL	78 Luther Court Street Switzerland
169	Amos	Horn	amos.horn@gmail.com	HULL	32 Greggs Street France
170	Anabel	Viffy	anabel.viffy@hotmail.com	HULL	65 Fanny Street Finland
171	Alice	Hen	alice.hen@gmail.com	HULL	23 Light Street Canada
172	Peter	Jupiter	peter.jupiter@yahoo.com	HULL	87 Pot Way Street Australia
173	Trish	Years	trish.years@yahoo.com	HULL	10 Higgy Road Kuala Lumpur
174	Gregory	July	gregory.july@hotmail.com	HULL	90 Pet Street Poland
175	Juni	Trent	juni.trent@gmail.com	HULL	43 Queen Street Italy
176	Beauty	June	beauty.june@yahoo.com	HULL	88 Amber Way India
177	Hannah	Quacks	hannah.quacks@yahoo...	HULL	65 Doric Street China
178	Christine	Jackson	christine.jackson@gmail...	HULL	778 Red Street Mexico
179	Rebecca	Oats	rebecca.oats@yahoo.com	HULL	421 Neon Way Tanzania
180	Jane	Jills	jane.jills@hotmail.com	HULL	090 Bake Street Botswana

Regulations:
This entity stores
information about
the rules that are to
be followed by the
guests.

```
CREATE TABLE `airbnb project`.`regulations` (
  `id` INT NOT NULL AUTO_INCREMENT,
  `type` VARCHAR(256) NOT NULL,
  `code` VARCHAR(9) NULL,
  `name` VARCHAR(256) NOT NULL,
  PRIMARY KEY (`id`),
  UNIQUE INDEX `code_UNIQUE` (`code` ASC) VISIBLE);
```

	id	type	code	name
	1	Safety	NULL	Fire extinguisher
	2	Health	NULL	Hand Sanitizer needs to be available
	3	Noise	NULL	Noise monitoring devices
	4	Legal	NULL	Guest Identification
▶	5	Financial	NULL	Tax should be charged for guest's extension period
	6	Environmental	NULL	Recycle Bins for waste
	7	Accessibility	NULL	Proper parking space

Insert into statements for admin and regulations table

Admin table

```
1 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
2 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
3 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
4 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
5 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
6 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
7 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
8 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
9 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
10 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
11 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
12 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
13 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
14 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
15 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
16 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
17 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
18 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
19 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
20 INSERT INTO `airbnb project`.`admin` (`first_name`, `last_name`, `email`, `a
```

Regulations table

```
1 INSERT INTO `airbnb project`.`regulations` (`type`, `name`) VALUES ('Safety', 'Fir
2 INSERT INTO `airbnb project`.`regulations` (`type`, `name`) VALUES ('Health', 'Hea
3 INSERT INTO `airbnb project`.`regulations` (`type`, `name`) VALUES ('Noise', 'Noi
4 INSERT INTO `airbnb project`.`regulations` (`type`, `name`) VALUES ('Legal', 'Gua
5 INSERT INTO `airbnb project`.`regulations` (`type`, `name`) VALUES ('Financial', 'Fin
6 INSERT INTO `airbnb project`.`regulations` (`type`, `name`) VALUES ('Environmental', 'Env
7 INSERT INTO `airbnb project`.`regulations` (`type`, `name`) VALUES ('Accessibility', 'Acces
```

Reviews:
This entity stores feedback given by guests about their experience at the property.

reviews_id	booking_id	property_id	rating	date
11	4	1	3	2025-06-06
12	8	2	2	2025-07-05
13	11	3	5	2025-06-04
14	15	4	1	2025-08-10
15	9	5	4	2025-09-04
16	12	6	2	2025-04-02
17	6	7	1	2025-03-15
18	10	8	5	2025-06-20
19	16	9	2	2025-02-14
20	7	1	4	2025-01-19

```
| CREATE TABLE `reviews` (
|   `reviews_id` int NOT NULL AUTO_INCREMENT,
|   `booking_id` int NOT NULL,
|   `property_id` int NOT NULL,
|   `rating` int NOT NULL,
|   `date` date NOT NULL,
|   PRIMARY KEY (`reviews_id`),
|   KEY `fk_reviews_property_idx` (`property_id`),
|   KEY `fk_reviews_booking_idx` (`booking_id`),
|   CONSTRAINT `fk_reviews_booking` FOREIGN KEY (`booking_id`) REFERENCES `booking` (`Booking_id`) ON DELETE CASCADE ON UPDATE CASCADE,
|   CONSTRAINT `fk_reviews_property` FOREIGN KEY (`property_id`) REFERENCES `propertyfeatures` (`property_id`) ON DELETE CASCADE ON UPDATE CASCADE
```

Security Features:

This entity stores information about the security features of each property.

```
CREATE TABLE `airbnb project`.`security features` (
  `id` INT NOT NULL AUTO_INCREMENT,
  `property_id` INT NOT NULL,
  `name` VARCHAR(256) NOT NULL,
  `Type` VARCHAR(256) NOT NULL,
  PRIMARY KEY (`id`),
  CONSTRAINT `fk_Property_id_security features`
    FOREIGN KEY (`id`)
    REFERENCES `airbnb project`.`listing` (`id`)
    ON DELETE CASCADE
    ON UPDATE CASCADE);
```

	id	property_id	name	Type
1	2		security camera	entry
2	3		fire alarm system	fire
3	4		emergency exit	general
4	5		monitor sensor light	general
5	6		security guards	entry
6	7		intercom system	entry
7	8		smoke detector	fire
8	9		fire extinguisher	fire
9	10		burglar alarm	entry
10	11		secure gate	entry

Insert into statements for security features and reviews tables

Security features table

```
1 INSERT INTO `airbnb project`.`security features` (`name`, `Type`) VALUES ('secu
2 INSERT INTO `airbnb project`.`security features` (`name`, `Type`) VALUES ('fire a
3 INSERT INTO `airbnb project`.`security features` (`name`, `Type`) VALUES ('eme
4 INSERT INTO `airbnb project`.`security features` (`name`, `Type`) VALUES ('mon
5 INSERT INTO `airbnb project`.`security features` (`name`, `Type`) VALUES ('secu
6 INSERT INTO `airbnb project`.`security features` (`name`, `Type`) VALUES ('inter
7 INSERT INTO `airbnb project`.`security features` (`name`, `Type`) VALUES ('smol
8 INSERT INTO `airbnb project`.`security features` (`name`, `Type`) VALUES ('fire t
9 INSERT INTO `airbnb project`.`security features` (`name`, `Type`) VALUES ('burg
10 INSERT INTO `airbnb project`.`security features` (`name`, `Type`) VALUES ('secu
11
```

Reviews table

```
1 INSERT INTO `airbnb project`.`reviews` (`booking_id`, `property_id`, `rating`, `d
2 INSERT INTO `airbnb project`.`reviews` (`booking_id`, `property_id`, `rating`, `d
3 INSERT INTO `airbnb project`.`reviews` (`booking_id`, `property_id`, `rating`, `d
4 INSERT INTO `airbnb project`.`reviews` (`booking_id`, `property_id`, `rating`, `d
5 INSERT INTO `airbnb project`.`reviews` (`booking_id`, `property_id`, `rating`, `d
6 INSERT INTO `airbnb project`.`reviews` (`booking_id`, `property_id`, `rating`, `d
7 INSERT INTO `airbnb project`.`reviews` (`booking_id`, `property_id`, `rating`, `d
8 INSERT INTO `airbnb project`.`reviews` (`booking_id`, `property_id`, `rating`, `d
9 INSERT INTO `airbnb project`.`reviews` (`booking_id`, `property_id`, `rating`, `d
10 INSERT INTO `airbnb project`.`reviews` (`booking_id`, `property_id`, `rating`, `d
```

Property Features: This entity stores features for listing

```
CREATE TABLE `airbnb project`.`property features` (  
  `property_id` INT NOT NULL AUTO_INCREMENT,  
  `price_per_night` DECIMAL(11,5) NOT NULL,  
  `name` VARCHAR(255) NOT NULL,  
  `type` VARCHAR(54) NULL,  
  PRIMARY KEY (`property_id`));
```

property_id	name	type	price_per_night
1	dreamy light	house	65.00000
2	oatshade	cabin	90.00000
3	Willowstar	studio	100.00000
4	Treemark	apartment	150.00000
5	Castlelight	villa	180.00000
6	Dewymount	loft	200.00000
7	Nest Pot	cottage	250.00000
8	Ghost Pine	treehouse	280.00000
9	Red Edge	tent	300.00000

Amenities:

This entity stores the facilities available in the platform.

	id	property_id	name	type
	1	1	patio	NULL
	2	1	gym	NULL
	3	2	kitchen	NULL
	4	3	oven	NULL
	5	4	bread maker	NULL
	6	5	pool	NULL
	7	6	dishwasher	NULL
	8	7	washing machine	NULL
	9	8	dryer	NULL
	10	9	microwave	NULL
	11	10	toaster	NULL
	12	11	iron	NULL
	13	12	refridgerator	NULL
	14	13	coffee maker	NULL
	15	14	bbq grill	NULL
	16	15	tub	NULL
	17	16	blender	NULL
	18	17	stove	NULL
	19	18	couch	NULL
▶	20	19	television	NULL

```
CREATE TABLE `airbnb project`.`amenities` (
  `id` INT NOT NULL AUTO_INCREMENT,
  `property_id` INT NOT NULL,
  `name` VARCHAR(256) NOT NULL,
  `type` VARCHAR(256) NULL,
  PRIMARY KEY (`id`),
  CONSTRAINT `fk_property_listing`
    FOREIGN KEY (`id`)
    REFERENCES `airbnb project`.`listing` (`id`)
    ON DELETE CASCADE
    ON UPDATE CASCADE);
```

Insert into statements for property features and amenities tables

Property features table

```
1 INSERT INTO `airbnb project`.`propertyfeatures` (`name`, `type`, `price_per_night`)
2 INSERT INTO `airbnb project`.`propertyfeatures` (`name`, `type`, `price_per_night`)
3 INSERT INTO `airbnb project`.`propertyfeatures` (`name`, `type`, `price_per_night`)
4 INSERT INTO `airbnb project`.`propertyfeatures` (`name`, `type`, `price_per_night`)
5 INSERT INTO `airbnb project`.`propertyfeatures` (`name`, `type`, `price_per_night`)
6 INSERT INTO `airbnb project`.`propertyfeatures` (`name`, `type`, `price_per_night`)
7 INSERT INTO `airbnb project`.`propertyfeatures` (`name`, `type`, `price_per_night`)
8 INSERT INTO `airbnb project`.`propertyfeatures` (`name`, `type`, `price_per_night`)
9 INSERT INTO `airbnb project`.`propertyfeatures` (`name`, `type`, `price_per_night`)
10
```

Amenities table

```
1 UPDATE `airbnb project`.`amenities` SET `property_id` = '1' WHERE (`id` = '1')
2 UPDATE `airbnb project`.`amenities` SET `property_id` = '1' WHERE (`id` = '2')
3 UPDATE `airbnb project`.`amenities` SET `property_id` = '2' WHERE (`id` = '3')
4 UPDATE `airbnb project`.`amenities` SET `property_id` = '3' WHERE (`id` = '4')
5 UPDATE `airbnb project`.`amenities` SET `property_id` = '4' WHERE (`id` = '5')
6 UPDATE `airbnb project`.`amenities` SET `property_id` = '5' WHERE (`id` = '6')
7 UPDATE `airbnb project`.`amenities` SET `property_id` = '6' WHERE (`id` = '7')
8 UPDATE `airbnb project`.`amenities` SET `property_id` = '7' WHERE (`id` = '8')
9 UPDATE `airbnb project`.`amenities` SET `property_id` = '8' WHERE (`id` = '9')
10 UPDATE `airbnb project`.`amenities` SET `property_id` = '9' WHERE (`id` = '10')
11 UPDATE `airbnb project`.`amenities` SET `property_id` = '10' WHERE (`id` = '1')
12 UPDATE `airbnb project`.`amenities` SET `property_id` = '11' WHERE (`id` = '1')
13 UPDATE `airbnb project`.`amenities` SET `property_id` = '12' WHERE (`id` = '1')
14 UPDATE `airbnb project`.`amenities` SET `property_id` = '13' WHERE (`id` = '1')
15 UPDATE `airbnb project`.`amenities` SET `property_id` = '14' WHERE (`id` = '1')
16 UPDATE `airbnb project`.`amenities` SET `property_id` = '15' WHERE (`id` = '1')
17 UPDATE `airbnb project`.`amenities` SET `property_id` = '16' WHERE (`id` = '1')
18 UPDATE `airbnb project`.`amenities` SET `property_id` = '17' WHERE (`id` = '1')
19 UPDATE `airbnb project`.`amenities` SET `property_id` = '18' WHERE (`id` = '1')
20 UPDATE `airbnb project`.`amenities` SET `property_id` = '19' WHERE (`id` = '1')
```

Listing:

This entity stores data listings for each property.

```
CREATE TABLE `airbnb project`.`listing` (  
    `id` INT NOT NULL AUTO_INCREMENT,  
    `host_id` INT NOT NULL,  
    `price_per_night` DECIMAL(11,5) NOT NULL,  
    `room_type` VARCHAR(256) NOT NULL,  
    `rating` DECIMAL(11,5) NULL,  
    `address` VARCHAR(256) NULL,  
    PRIMARY KEY (`id`));
```

	id	host_id	price_per_night	room_type	rating	address
	1	3	65.00000	bedroom	NULL	NULL
	2	5	82.00000	bathroom	NULL	NULL
	3	9	90.00000	living room	NULL	NULL
	4	12	98.00000	kitchen	NULL	NULL
	5	4	100.00000	pantry	NULL	NULL
	6	8	120.00000	game room	NULL	NULL
	7	16	230.00000	laundry room	NULL	NULL
	8	2	250.00000	dining room	NULL	NULL
	9	7	280.00000	private room	NULL	NULL
	10	14	300.00000	guest suite	NULL	NULL
▶	11	1	310.00000	home theater	NULL	NULL

Housekeeper: This entity stores the housekeeper's user profile information.

	id	first_name	last_name	email	phone n.o
▶	1	Snow	Reeds	snow.reeds@gmail.com	567-080-1843
	2	Peter	White	peter.white@hotmail.com	654-030-2110
	3	Amos	Red	amos.red@gmail.com	200-902-3041
	4	Anabel	High	anabel.high@gmail.com	321-090-4059
	5	Trish	Sweets	trish.sweets@yahoo.com	512-333-2012
	6	Chantel	Leak	chantel.leak@hotmail.com	212-454-2213
	7	Lori	Kenneth	lori.kenneth@gmail.com	321-431-9001
	8	Courtney	Harvey	courtney.harvey@gmail.c...	402-906-0213
	9	Rick	Jones	rick.jones@gmail.com	506-000-2134
	10	Sarah	Ross	sarah.ross@gmail.com	312-433-9056
	11	Fiona	Wales	fiona.wales@gmail.com	601-456-2245
	12	Zack	Suite	zack.suite@yahoo.com	701-009-3455
	13	Cory	Tipton	cory.tipton@gmail.com	821-432-0821
	14	Raven	Banks	raven.banks@hotmail.com	256-704-4040
	15	Amanda	Blue	amanda.blue@gmail.com	450-001-3234
	16	Karen	Sky	karen.sky@hotmail.com	509-021-1111
	17	Yolanda	Bens	yolanda.bens@yahoo.com	901-305-6548
	18	Mirabel	Biston	mirabel.biston@gmail.com	310-033-2900
	19	Angel	Hover	angel.hover@gmail.com	600-044-5555
	20	Troy	Bolton	troy.bolton@gmail.com	290-913-3232

```
CREATE TABLE `housekeeper` (
  `id` int NOT NULL AUTO_INCREMENT,
  `first_name` varchar(258) NOT NULL,
  `last_name` varchar(258) NOT NULL,
  `email` varchar(258) NOT NULL,
  `phone n.o` varchar(258) NOT NULL,
  PRIMARY KEY (`id`),
  UNIQUE KEY `email_UNIQUE` (`email`)
```

Pricing:
This entity stores
information for
the cost of each
property.

	<code>id</code>	<code>property_id</code>	<code>price_per_night</code>
1	1		65.00000
2	2		90.00000
3	3		100.00000
4	4		150.00000
5	5		180.00000
6	6		200.00000
7	7		250.00000
8	8		280.00000
9	9		300.00000

```
CREATE TABLE PropertyPricing(
    id INT AUTO_INCREMENT PRIMARY KEY,
    property_id INT NOT NULL,
    price_per_night DECIMAL(11,5) NOT NULL,
    CONSTRAINT fk_property_features
        FOREIGN KEY (property_id) REFERENCES PropertyFeatures(property_id)
        ON DELETE CASCADE
        ON UPDATE CASCADE
);
```

Insert into statements for pricing, listing and housekeeper tables

Pricing table

```
1 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('25.00');
2 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('38.50');
3 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('45.00');
4 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('48.00');
5 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('54.50');
6 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('62.50');
7 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('65.00');
8 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('70.00');
9 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('75.00');
10 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('78.50');
11 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('80.00');
12 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('85.50');
13 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('90.00');
14 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('150.00');
15 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('180.00');
16 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('200.00');
17 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('250.00');
18 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('300.00');
19 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('320.50');
20 INSERT INTO `airbnb project`.`pricing` ('price per night') VALUES ('400.00');
```

Housekeeper table

```
1 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
2 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
3 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
4 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
5 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
6 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
7 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
8 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
9 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
10 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
11 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
12 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
13 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
14 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
15 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
16 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
17 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
18 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
19 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
20 INSERT INTO `airbnb project`.`housekeeper` (`first_name`, `last_name`, `ema
```

Listing table

```
1 INSERT INTO `airbnb project`.`listing` (`price_per_night`, `room_type`) VALUES ()  
2 INSERT INTO `airbnb project`.`listing` (`price_per_night`, `room_type`) VALUES ()  
3 INSERT INTO `airbnb project`.`listing` (`price_per_night`, `room_type`) VALUES ()  
4 INSERT INTO `airbnb project`.`listing` (`price_per_night`, `room_type`) VALUES ()  
5 INSERT INTO `airbnb project`.`listing` (`price_per_night`, `room_type`) VALUES ()  
6 INSERT INTO `airbnb project`.`listing` (`price_per_night`, `room_type`) VALUES ()  
7 INSERT INTO `airbnb project`.`listing` (`price_per_night`, `room_type`) VALUES ()  
8 INSERT INTO `airbnb project`.`listing` (`price_per_night`, `room_type`) VALUES ()  
9 INSERT INTO `airbnb project`.`listing` (`price_per_night`, `room_type`) VALUES ()  
10 INSERT INTO `airbnb project`.`listing` (`price_per_night`, `room_type`) VALUES ()  
11 INSERT INTO `airbnb project`.`listing` (`price_per_night`, `room_type`) VALUES ()  
12
```

Test Cases

Test case 1

- Suppose we want to assess listings that are missing important amenities like an iron, microwave and be able to figure out who the host is, room type and the cost per night. This is helpful because we get to see which listing lacks essential amenities.

```
1 •  SELECT
2     listing.id,
3     host.first_name,
4     host.last_name,
5     host.email,
6     listing.room_type,
7     propertypricing.price_per_night,
8     COUNT(DISTINCT amenities.name) AS included_amenities
9     FROM listing
10    JOIN host ON listing.host_id = host.host_id
11    JOIN propertypricing ON propertypricing.property_id = listing.id
12    LEFT JOIN amenities ON amenities.property_id = listing.id
13      AND amenities.name IN ('iron', 'toaster', 'microwave')
14    GROUP BY id, host.first_name, host.last_name, host.email, listing.room_type, propertypricing.price_
15    HAVING COUNT(DISTINCT amenities.name) < 3;
16
```

Result Grid							
	id	first_name	last_name	email	room_type	price_per_night	included_amenities
▶	1	Sipho	Buffle	sipho.buffle@hotmail....	bedroom	65.00000	0
	2	Nontle	Retty	nontle.retty@hotmail....	bathroom	90.00000	0
	3	Jeremiah	Alvion	jeremiah.alvion@gmai...	living room	100.00000	0
	4	John	Clerk	john.clerk@gmail.com	kitchen	150.00000	0
	5	Nora	Mouse	nora.mouse@yahoo.c...	pantry	180.00000	0
	6	Cynthia	Treat	cynthia.treat@gmail.c...	game room	200.00000	0
	7	Lina	Point	lina.point@yahoo.com	laundry room	250.00000	0
	8	Nora	Mouse	nora.mouse@yahoo.c...	dining room	280.00000	0
	9	Nina	Hamilton	nina.hamilton@gmail....	private room	300.00000	1

Test case 2

- This query collects comprehensive information about the hosts and their allotted housekeepers
- Amenities required for the host's property will be included
- The insurance and property's location is also needed for everything to run smoothly
- All this information is for us to be well informed about how each host's property is being maintained and the one in charge of the maintenance.
- This test case covers 5 tables(housekeeper, location, amenities, host and insurance)

SELECT

```
host.first_name || ' ' || host.last_name AS host_name,  
host.email AS host_email,  
housekeeper.first_name || ' ' || housekeeper.last_name AS housekeeper_name,  
amenities.name AS amenities_name,  
amenities.type AS amenities_type,  
location.city,  
location.country,  
location.name AS location_name,  
location.region,  
insurance.coverage_type,  
insurance.coverage_period,  
insurance.provider_name
```

FROM host

```
JOIN housekeeper ON housekeeper.id = host.host_id  
JOIN amenities ON amenities.property_id = host.host_id  
JOIN location ON location.id = amenities.property_id  
JOIN insurance ON 1 = 1  
ORDER BY host.first_name;
```

Result Grid											
Filter Rows: <input type="checkbox"/> Export: <input type="button" value="CSV"/> Wrap Cell Content: <input type="checkbox"/>											
host_name	host_email	housekeeper_name	amenities_name	amenities_type	city	country	location_name	region	coverage_type	coverage_period	provider_r
0	alex.emilton@gmail.com	0	coffee maker	NULL		Angola	Luanda	Central Africa	Outdoor property dam...	2025-03-04 to 2027-03-01	StayAlert I
0	alex.emilton@gmail.com	0	coffee maker	NULL		Angola	Luanda	Central Africa	Pet Damage Protection	2025-06-19 to 2027-06-15	Safe Guard
0	alex.emilton@gmail.com	0	coffee maker	NULL		Angola	Luanda	Central Africa	Electrical Damage	2025-05-09 to 2027-05-02	Flexi Cover
0	alex.emilton@gmail.com	0	coffee maker	NULL		Angola	Luanda	Central Africa	Flood Damage	2025-08-08 to 2027-08-08	Quick Scoo
0	alex.emilton@gmail.com	0	coffee maker	NULL		Angola	Luanda	Central Africa	Personal Injury	2025-04-09 to 2027-04-13	Cozy Nest
0	alex.emilton@gmail.com	0	coffee maker	NULL		Angola	Luanda	Central Africa	Liability and Theft	2025-07-08 to 2027-07-09	Protect Shi

Test case 3

- To see the types of rooms in great demand, frequently reserved and that bring high income on the platform,

We want to calculate:

- the average price per night for each room type,
- the available listings for each room type,
- amount of revenue we get from our bookings.
- This test case covers four tables: listing, booking, payment and region.

```
1  SELECT
2      listing.room_type,
3      listing.address AS region_info,
4      COUNT(booking.booking_id) AS total_bookings,
5      ROUND(AVG(listing.price_per_night), 2) AS average_price,
6      ROUND(SUM(payment.amount_paid), 2) AS total_earnings
7  FROM listing
8  LEFT JOIN booking ON listing.id = booking.booking_id
9  LEFT JOIN payment ON listing.host_id = payment.host_id
10 GROUP BY listing.room_type, listing.address
11 ORDER BY total_earnings DESC;
```

Result Grid					
	room_type	region_info	total_bookings	average_price	total_earnings
▶	game room	NULL	1	120.00	95.40
	guest suite	NULL	1	300.00	82.50
	laundry room	NULL	1	230.00	75.00
	living room	NULL	1	90.00	68.50
	kitchen	NULL	1	98.00	50.00
	bedroom	NULL	1	65.00	45.00
	home theater	NULL	1	310.00	42.50
	bathroom	NULL	1	82.00	36.50
	pantry	NULL	1	100.00	32.00
	dining room	NULL	1	250.00	32.00
	private room	NULL	1	280.00	25.00

Entities and their corresponding slides

- | | | |
|--------------------------------|------------------------------|-------------------------|
| • Slide 04 → Guests | Slide 05 → Hosts | Slide 07 → Address |
| • Slide 08 → Pets | Slide 10 → Payments | Slide 11 → Region |
| • Slide 13 → Location | Slide 14 → Service Provider | Slide 16 → Availability |
| • Slide 17 → Rating | Slide 19 → Booking | Slide 20 → Insurance |
| • Slide 22 → Admin | Slide 23 → Regulations | Slide 25 → Review |
| • Slide 26 → Security Features | Slide 28 → Property Features | Slide 29 → Amenities |
| • Slide 31 → Listing | Slide 32 → Housekeeper | Slide 33 → Pricing |

Conclusion



During the implementation phase, we noticed that some ERD adjustments were necessary to ensure a smooth transition from the design phase to development.



However, to avoid introducing inconsistencies we proceeded with the existing design and it all went well.



This phase enhanced our problem solving skills and database management knowledge



All SQL project files will be uploaded to GitHub for convenient access.
<https://github.com/Desireemukwashu/Data-Mart-Project-/tree/main>

