

# Project: Build Data Mart in SQL

Finalization Phase Showcase  
Oskar Wolf



# Introduction

Welcome to the Database Showcase of the Booking and Accommodation System. In this demonstration, we will provide you with a visual glimpse of the database's functionality. Please note that the images presented here showcase a subset of the database with a minimum of 20 entries for each table. This simplified display will give you an overview of how the system stores and manages crucial data related to accommodations, bookings, users, and more. Let's dive in and explore the core elements of our database management system.



# User Details Group

## User Table:

	userid	username	email	password	profilepicture	phonenumber	gender	nationality	age
1	1	John Doe	john@example.com	password123	https://example.com/profile.jpg	123-456-7890	M	USA	30
2	2	Jane Smith	jane@example.com	securepwd456	https://example.com/jane.jpg	987-654-3210	F	Canada	28
3	3	Michael Johnson	michael@example.com	strongpass789	https://example.com/michael.jpg	555-555-5555	M	France	35
4	4	Alice Brown	alice@example.com	alicesecret	https://example.com/alice.jpg	111-222-3333	F	Japan	22
5	5	Robert Lee	robert@example.com	robertpass	https://example.com/robert.jpg	444-555-6666	M	USA	40
6	6	Emily Davis	emily@example.com	emilypassword	https://example.com/emily.jpg	777-888-9999	F	Spain	31
7	7	Daniel Johnson	daniel@example.com	danielpass	https://example.com/daniel.jpg	222-333-4444	M	Germany	28
8	8	Sarah Williams	sarah@example.com	sarah123	https://example.com/sarah.jpg	555-666-7777	F	USA	25
9	9	David Smith	david@example.com	davidpass	https://example.com/david.jpg	888-999-0000	M	Australia	45
10	10	Olivia Miller	olivia@example.com	oliviapass	https://example.com/olivia.jpg	666-777-8888	F	Canada	33
11	11	William Taylor	william@example.com	williampass	https://example.com/william.jpg	999-000-1111	M	UK	29
12	12	Sophia Johnson	sophia@example.com	sophiapass	https://example.com/sophia.jpg	777-888-9999	F	USA	28
13	13	Jacob Martinez	jacob@example.com	jacobpass	https://example.com/jacob.jpg	222-111-3333	M	Canada	24
14	14	Emma Wilson	emma@example.com	emmapass	https://example.com/emma.jpg	555-888-1111	F	USA	27
15	15	James Anderson	james@example.com	jamespass	https://example.com/james.jpg	777-555-2222	M	UK	31
16	16	Grace Harris	grace@example.com	gracepass	https://example.com/grace.jpg	999-222-1111	F	Australia	29
17	17	Josephine Clark	josephine@example.com	josephinepass	https://example.com/josephine.jpg	333-666-9999	F	Canada	26
18	18	Liam Walker	liam@example.com	liampass	https://example.com/liam.jpg	888-111-4444	M	Germany	30
19	19	Ava Mitchell	ava@example.com	avapass	https://example.com/ava.jpg	222-888-7777	F	UK	25
20	20	Ethan Turner	ethan@example.com	ethanpass	https://example.com/ethan.jpg	444-222-5555	M	Australia	28
21	21	Grace Lee	gracelee@example.com	gracepass123	https://example.com/gracelee.jpg	555-666-7777	F	USA	27
22	22	Daniel Brown	danielbrown@example.com	danielpass456	https://example.com/danielbrown.jpg	444-555-6666	M	Canada	40
23	23	Oliver Turner	oliver@example.com	oliverpass789	https://example.com/oliver.jpg	888-999-0000	M	UK	30
24	24	Sophia Davis	sophiadavis@example.com	sophiapass123	https://example.com/sophiadavis.jpg	666-777-8888	F	Australia	33
25	25	James Smith	jamesmith@example.com	jamespass456	https://example.com/jamesmith.jpg	222-888-7777	M	Germany	25
26	26	Liam Wilson	liamwilson@example.com	liampass789	https://example.com/liamwilson.jpg	444-222-5555	M	Australia	28
27	27	Ava Johnson	avajohnson@example.com	avapass123	https://example.com/avajohnson.jpg	333-444-5555	F	USA	29
28	28	Ethan Williams	ethanwilliams@example.com	ethanpass456	https://example.com/ethanwilliams.jpg	111-222-3333	M	UK	31
29	29	Isabella Martin	isabella@example.com	isabellapass789	https://example.com/isabella.jpg	555-555-5555	F	Australia	22
30	30	Noah Harris	noah@example.com	noahpass123	https://example.com/noah.jpg	777-777-7777	M	Spain	35
31	31	Emma Davis	emma@example.com	emmapass456	https://example.com/emmadavis.jpg	999-999-9999	F	Canada	26
32	32	Michael Wilson	michaelwilson@example.com	michaelpass789	https://example.com/michaelwilson.jpg	333-333-3333	M	Italy	36
33	33	Sophia Taylor	sophiataylor@example.com	sophiapass123	https://example.com/sophiataylor.jpg	666-666-6666	F	Australia	27
34	34	Liam Brown	liambrown@example.com	liampass456	https://example.com/liambrown.jpg	222-222-2222	M	Germany	30
35	35	Ava Johnson	avajohnson@example.com	avapass789	https://example.com/avajohnson.jpg	444-444-4444	F	USA	31
36	36	Ethan Smith	ethansmith@example.com	ethanpass123	https://example.com/ethansmith.jpg	111-111-1111	M	UK	28
37	37	Isabella Davis	isabelladavis@example.com	isabellapass456	https://example.com/isabelladavis.jpg	555-555-5555	F	Australia	24
38	38	Noah Wilson	noahwilson@example.com	noahpass789	https://example.com/noahwilson.jpg	777-777-7777	M	Canada	29
39	39	Emma Harris	emmaharris@example.com	emmapass123	https://example.com/emmaharris.jpg	999-999-9999	F	USA	32
40	40	Michael Davis	michaeldavis@example.com	michaelpass456	https://example.com/michaeldavis.jpg	333-333-3333	M	UK	37

## Host Table:

	hostid	aboutme	verificationstatus	joindate	userid
1	1	Experienced host offering great accommodations.	1	2023-08-01 00:00:00	4
2	2	Friendly host excited to meet new guests!	0	2023-08-02 00:00:00	5
3	3	Passionate host providing unique stays.	1	2023-08-03 00:00:00	6
4	4	Experienced host with cozy homes.	1	2023-08-04 00:00:00	7
5	5	Warm host providing a home away from home.	0	2023-08-05 00:00:00	8
6	6	Adventurous host offering unique travel experiences.	1	2023-08-06 00:00:00	9
7	7	Enthusiastic host with local insights.	0	2023-08-07 00:00:00	10
8	8	Reliable host ensuring a comfortable stay.	1	2023-08-08 00:00:00	11
9	9	Charming host welcoming guests with open arms.	1	2023-08-09 00:00:00	12
10	10	Knowledgeable host sharing the best local spots.	0	2023-08-10 00:00:00	13
11	11	Attentive host catering to your needs.	1	2023-08-11 00:00:00	14
12	12	Energetic host creating memorable stays.	0	2023-08-12 00:00:00	15
13	13	Friendly host excited to welcome guests.	1	2023-08-13 00:00:00	16
14	14	Experienced host offering comfortable stays.	1	2023-08-14 00:00:00	17
15	15	Welcoming host with a passion for hospitality.	0	2023-08-15 00:00:00	18
16	16	Enthusiastic host eager to share local culture.	1	2023-08-16 00:00:00	19
17	17	Experienced host providing exceptional service.	0	2023-08-17 00:00:00	20
18	18	Caring host making your stay unforgettable.	1	2023-08-18 00:00:00	21
19	19	Passionate host committed to guest satisfaction.	1	2023-08-19 00:00:00	22
20	20	Friendly host excited to meet travelers!	0	2023-08-20 00:00:00	23
21	21	Experienced host with a variety of accommodations.	1	2023-08-21 00:00:00	24
22	22	Welcoming host offering cozy and clean homes.	0	2023-08-22 00:00:00	25

## Guest Table:

	guestid	userid	joindate
1	1	1	2023-08-01 00:00:00
2	2	2	2023-08-02 00:00:00
3	3	3	2023-08-03 00:00:00
4	4	4	2023-08-04 00:00:00
5	5	5	2023-08-05 00:00:00
6	6	6	2023-08-06 00:00:00
7	7	7	2023-08-07 00:00:00
8	8	8	2023-08-08 00:00:00
9	9	9	2023-08-09 00:00:00
10	10	10	2023-08-10 00:00:00
11	11	11	2023-08-11 00:00:00
12	12	12	2023-08-12 00:00:00
13	13	13	2023-08-13 00:00:00
14	14	14	2023-08-14 00:00:00
15	15	15	2023-08-15 00:00:00
16	16	16	2023-08-16 00:00:00
17	17	17	2023-08-17 00:00:00
18	18	18	2023-08-18 00:00:00
19	19	19	2023-08-19 00:00:00
20	20	20	2023-08-20 00:00:00
21	21	21	2023-08-21 00:00:00
22	22	22	2023-08-22 00:00:00
23	23	23	2023-08-23 00:00:00
24	24	24	2023-08-24 00:00:00
25	25	25	2023-08-25 00:00:00
26	26	26	2023-08-26 00:00:00
27	27	27	2023-08-27 00:00:00
28	28	28	2023-08-28 00:00:00
29	29	29	2023-08-29 00:00:00
30	30	30	2023-08-30 00:00:00



## Languages Table:

	LanguageID	LanguageName	UserID
1	1	English	1
2	2	French	2
3	3	Spanish	3
4	4	German	4
5	5	Italian	5
6	6	Chinese	6
7	7	Japanese	7
8	8	Korean	8
9	9	Russian	9
10	10	Arabic	10
11	11	Portuguese	11
12	12	Dutch	12
13	13	Swedish	13
14	14	Turkish	14
15	15	Polish	15
16	16	Danish	16
17	17	Norwegian	17
18	18	Finnish	18
19	19	Greek	19
20	20	Hindi	20

## Verification Status Table:

	VerificationID	VerificationStatus	HostID
1	1	1	1
2	2	0	2
3	3	1	3
4	4	1	4
5	5	0	5
6	6	1	6
7	7	1	7
8	8	0	8
9	9	1	9
10	10	1	10
11	11	0	11
12	12	1	12
13	13	0	13
14	14	1	14
15	15	0	15
16	16	1	16
17	17	1	17
18	18	0	18
19	19	1	19
20	20	1	20

## Host Bank Table:

	HostBankAccountID	HostID	AccountNumber	BankName	RoutingNumber
1	1	1	1 234 567 890	ABC Bank	123456789
2	2	2	9 876 543 210	XYZ Bank	987654321
3	3	3	5 555 555 555	DEF Bank	555555555
4	4	4	1 111 111 111	GHI Bank	111111111
5	5	5	2 222 222 222	JKL Bank	222222222
6	6	6	3 333 333 333	MNO Bank	333333333
7	7	7	4 444 444 444	PQR Bank	444444444
8	8	8	6 666 666 666	STU Bank	666666666
9	9	9	7 777 777 777	VWX Bank	777777777
10	10	10	8 888 888 888	YZ Bank	888888888
11	11	11	1 231 231 231	LMN Bank	111222333
12	12	12	4 564 564 564	OPQ Bank	444555666
13	13	13	7 897 897 897	RST Bank	777888999
14	14	14	1 010 101 010	UVW Bank	000111222
15	15	15	1 313 131 313	XYZ Bank	333444555
16	16	16	1 515 151 515	ABC Bank	666777888
17	17	17	1 717 171 717	DEF Bank	999000111
18	18	18	1 919 191 919	GHI Bank	222333444
19	19	19	2 020 202 020	JKL Bank	555666777
20	20	20	2 222 222 222	MNO Bank	888999000

## UserAccommodation Table:

	useraccommodationid	userid	accomid
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
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8	8	8	8
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12	12	12	2
13	13	13	3
14	14	14	4
15	15	15	5
16	16	16	6
17	17	17	7
18	18	18	8
19	19	19	9
20	20	20	10

# Accommodation Details Group

## Accom Table:

	accomid	hostid	asc title	asc description	createdate
1	1	1	Cozy Downtown Apartment	A comfortable apartment in the heart of the city.	2023-08-01 00:00:00
2	2	2	Seaside Villa with Stunning Views	Relax and enjoy the beachfront in this beautiful villa.	2023-08-02 00:00:00
3	3	3	Mountain Cabin Retreat	Escape to the mountains and unwind in this cozy cabin.	2023-08-03 00:00:00
4	4	4	Urban Loft with Modern Design	Experience city living in this stylish loft.	2023-08-04 00:00:00
5	5	5	Luxurious Resort by the Ocean	Indulge in luxury at this oceanfront resort.	2023-08-05 00:00:00
6	6	6	Rustic Chalet in the Woods	Embrace nature in this charming chalet surrounded by trees.	2023-08-06 00:00:00
7	7	7	Charming Cottage in the Countryside	Get away from it all in this idyllic countryside cottage.	2023-08-07 00:00:00
8	8	8	Modern Apartment with City Views	Enjoy city skyline views from this sleek apartment.	2023-08-08 00:00:00
9	9	9	Quaint Studio near Local Attractions	Explore the city's attractions from this convenient studio.	2023-08-09 00:00:00
10	10	10	Tranquil Lakeside Cabin	Unwind by the lake in this peaceful cabin.	2023-08-10 00:00:00
11	11	11	Historic Mansion Experience	Step back in time in this grand historic mansion.	2023-08-11 00:00:00
12	12	12	Chic Loft in Art District	Immerse yourself in the local art scene in this trendy loft.	2023-08-12 00:00:00
13	13	13	Secluded Forest Retreat	Disconnect from the world in this hidden forest retreat.	2023-08-13 00:00:00
14	14	14	Country Farmhouse Getaway	Experience farm life in this charming country farmhouse.	2023-08-14 00:00:00
15	15	15	Elegant Penthouse with Skyline Views	Indulge in luxury at this upscale penthouse.	2023-08-15 00:00:00
16	16	16	Sunny Beachfront Bungalow	Soak up the sun on the beach in this cozy bungalow.	2023-08-16 00:00:00
17	17	17	Chic Urban Studio	Experience city living in this trendy urban studio.	2023-08-17 00:00:00
18	18	18	Mountain Lodge Retreat	Escape to the mountains and relax in this cozy lodge.	2023-08-18 00:00:00
19	19	19	Rural Cottage with Scenic Views	Enjoy panoramic views in this charming rural cottage.	2023-08-19 00:00:00
20	20	20	Modern Condo in Business District	Stay in the heart of the business district in this sleek condo.	2023-08-20 00:00:00
21	21	21	Cozy Countryside Cabin	Experience the serenity of the countryside in this cozy cabin.	2023-08-21 00:00:00
22	22	22	Charming Lakeside Cottage	Enjoy lakeside living in this charming and serene cottage.	2023-08-22 00:00:00
23	23	23	Stylish Apartment near Cultural District	Immerse yourself in local culture from this central apartment.	2023-08-23 00:00:00
24	24	24	Rustic Farmhouse Retreat	Experience the rustic charm of a farmhouse in the countryside.	2023-08-24 00:00:00
25	25	25	Modern Loft with Skyline Views	Enjoy breathtaking city views from this contemporary loft.	2023-08-25 00:00:00
26	26	26	Secluded Mountain Cabin	Escape to the mountains and disconnect in this serene cabin.	2023-08-26 00:00:00
27	27	27	Oceanfront Retreat with Private Beach	Relax on your private beach in this luxurious oceanfront retreat.	2023-08-27 00:00:00
28	28	28	Chic Studio in Artsy Neighborhood	Explore local art scenes from this stylish studio in the city.	2023-08-28 00:00:00
29	29	29	Luxury Urban Condo	Experience urban luxury in this high-end and modern condo.	2023-08-29 00:00:00

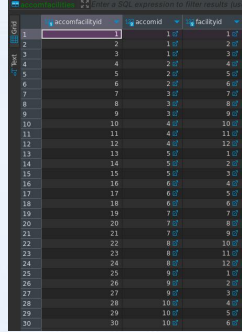
## SpecialOffers Table

	offerid	accomid	offer title	offer description	offerdiscount	offerexpirationdate	hostid
1	1	1	Summer Getaway	Enjoy 20% off for bookings in August.	20	2023-08-31 00:00:00	1
2	2	2	Weekend Retreat	Book 3 nights, get the 4th night free!	25	2023-09-15 00:00:00	2
3	3	3	Last Minute Deal	Get 30% off for bookings within 7 days.	30	2023-08-25 00:00:00	3
4	4	4	Extended Stay Discount	Stay longer and save 15% on your booking.	15	2023-10-01 00:00:00	4
5	5	5	Family Vacation Package	Special package for families with kids.	10	2023-09-30 00:00:00	5
6	6	6	Adventure Bundle	Book accommodations and get 20% off on activities.	20	2023-08-20 00:00:00	6
7	7	7	Business Travelers	Business travelers receive 10% off for bookings.	10	2023-09-10 00:00:00	7
8	8	8	Seasonal Escape	Escape the winter with 15% off bookings in January.	15	2023-12-31 00:00:00	8
9	9	9	Romantic Getaway	Couples enjoy a romantic package with champagne.	12	2023-09-25 00:00:00	9
10	10	10	Holiday Celebration	Celebrate the holidays with 20% off on bookings.	20	2023-12-20 00:00:00	10
11	11	11	Honeymoon Package	Newlyweds enjoy a special honeymoon package.	15	2023-10-31 00:00:00	11
12	12	12	Group Booking Discount	Book multiple rooms and get 15% off for groups.	15	2023-11-15 00:00:00	12
13	13	13	Summer Camp Retreat	Families can enjoy outdoor activities with 10% off.	25	2023-08-15 00:00:00	13
14	14	14	Senior Citizen Discount	Seniors receive 10% off for bookings.	10	2023-09-30 00:00:00	14
15	15	15	Cultural Experience	Experience local culture with 20% off on tours.	20	2023-09-10 00:00:00	15
16	16	16	Wellness Retreat	Enjoy a wellness retreat with yoga sessions.	15	2023-10-15 00:00:00	16
17	17	17	Weekday Escapes	Book on weekdays and get 15% off for business travelers.	15	2023-09-20 00:00:00	17
18	18	18	Anniversary Special	Celebrate your anniversary with a romantic package.	10	2023-11-05 00:00:00	18
19	19	19	Business Workshop	Host your business workshop with special rates.	15	2023-11-30 00:00:00	19
20	20	20	Spring Break Savings	Students get 20% off for spring break bookings.	20	2023-04-30 00:00:00	20

## AccomCity (Link Table)

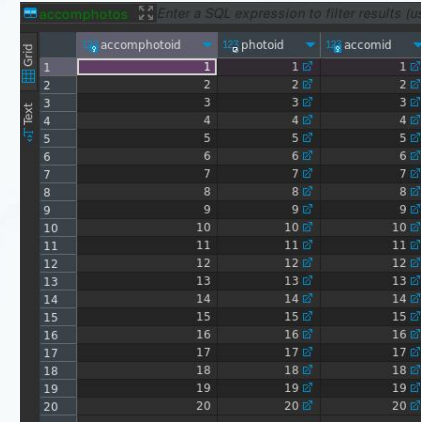
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## AccomFacilities ( Link Table):



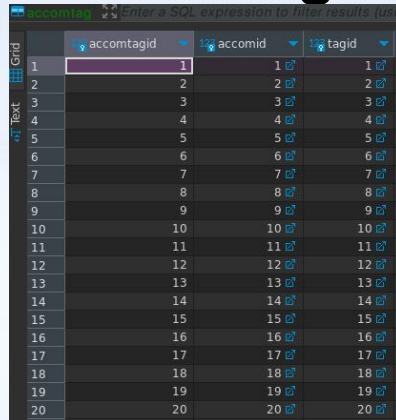
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## AccomPhotos ( Link Table):



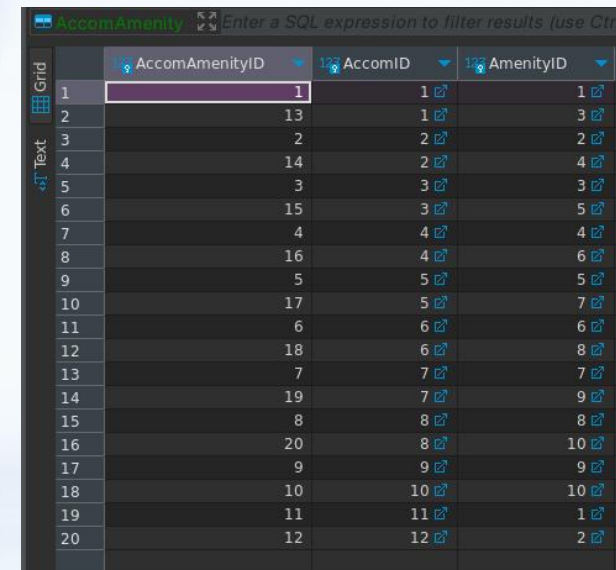
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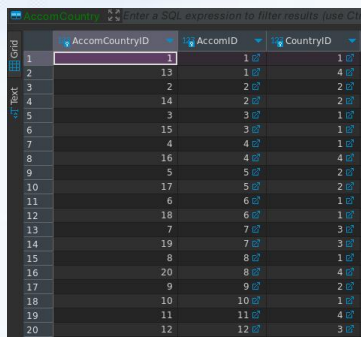
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17	17	17
18	18	18
19	19	19
20	20	20

## AccomAmenity ( Link Table):



AccomAmenityID	AccomID	AmenityID
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2	13	1
3	2	3
4	14	2
5	3	4
6	15	3
7	4	5
8	16	4
9	5	6
10	17	5
11	6	7
12	18	6
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14	19	7
15	8	9
16	20	8
17	9	10
18	10	9
19	11	10
20	12	11

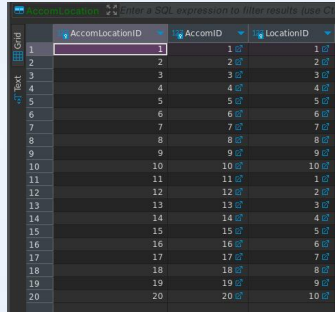
## AccomCountry ( Link Table):



AccomCountryID	AccomID	CountryID
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3	2	4
4	14	2
5	3	2
6	15	1
7	4	3
8	16	1
9	5	4
10	17	2
11	6	1
12	18	1
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14	19	3
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19	11	4
20	12	3

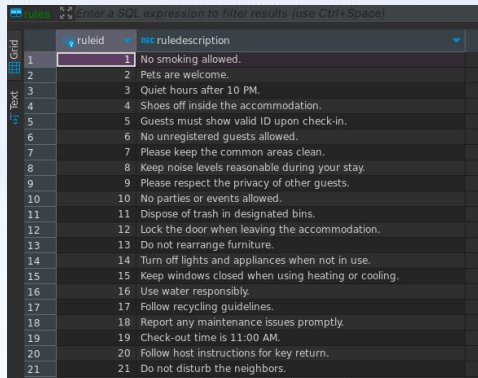


## AccomLocation ( Link Table):



AccommodationID	AccomID	LocationID
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4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20

## Amenities Table:



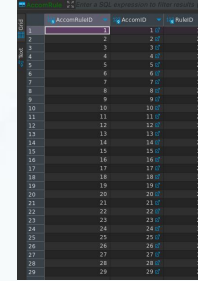
ruleid	ruledescription
1	No smoking allowed.
2	Pets are welcome.
3	Quiet hours after 10 PM.
4	Shoes off inside the accommodation.
5	Guests must show valid ID upon check-in.
6	No unregistered guests allowed.
7	Please keep the common areas clean.
8	Keep noise levels reasonable during your stay.
9	Please respect the privacy of other guests.
10	No parties or events allowed.
11	Dispose of trash in designated bins.
12	Lock the door when leaving the accommodation.
13	Do not rearrange furniture.
14	Turn off lights and appliances when not in use.
15	Keep windows closed when using heating or cooling.
16	Use water responsibly.
17	Follow recycling guidelines.
18	Report any maintenance issues promptly.
19	Check-out time is 11:00 AM.
20	Follow host instructions for key return.
21	Do not disturb the neighbors.

## Countries Table:



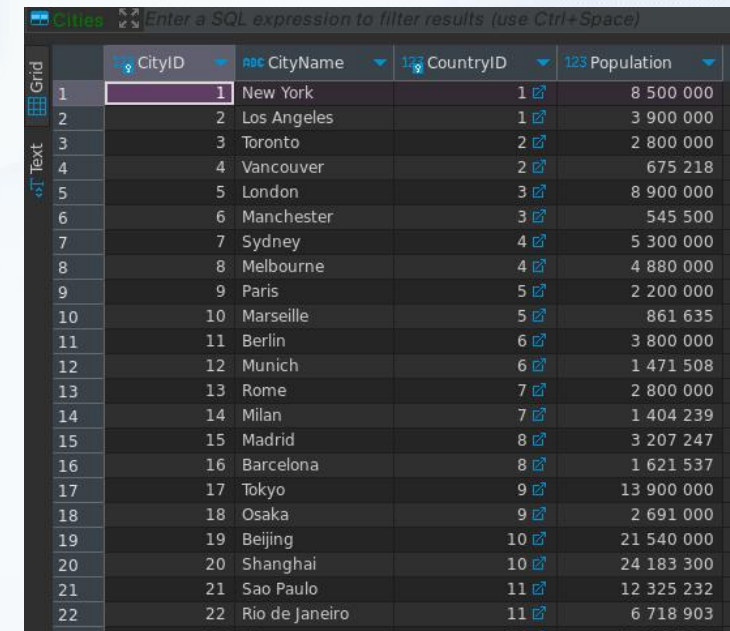
CountryID	CountryName	CountryCode
1	United States	USA
2	Canada	CAN
3	United Kingdom	UK
4	Australia	AUS
5	France	FRA
6	Germany	GER
7	Italy	ITA
8	Spain	ESP
9	Japan	JPN
10	China	CHN
11	Brazil	BRA
12	Russia	RUS
13	India	IND
14	South Korea	KOR
15	Mexico	MEX
16	Argentina	ARG
17	Netherlands	NLD
18	Sweden	SWE
19	Switzerland	CHE
20	New Zealand	NZL
21	Singapore	SGP
22	Thailand	THA
23	Vietnam	VNM
24	South Africa	ZAF

## AccomRule ( Link Table):



AccommodationID	AccomID	RuleID
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20

## Cities Table:



CityID	CityName	CountryID	Population
1	New York	1	8 500 000
2	Los Angeles	1	3 900 000
3	Toronto	2	2 800 000
4	Vancouver	2	675 218
5	London	3	8 900 000
6	Manchester	3	545 500
7	Sydney	4	5 300 000
8	Melbourne	4	4 880 000
9	Paris	5	2 200 000
10	Marseille	5	861 635
11	Berlin	6	3 800 000
12	Munich	6	1 471 508
13	Rome	7	2 800 000
14	Milan	7	1 404 239
15	Madrid	8	3 207 247
16	Barcelona	8	1 621 537
17	Tokyo	9	13 900 000
18	Osaka	9	2 691 000
19	Beijing	10	21 540 000
20	Shanghai	10	24 183 300
21	Sao Paulo	11	12 325 232
22	Rio de Janeiro	11	6 718 903

## Tags Table:

TagID	TagName
1	Family-Friendly
2	Luxury
3	Budget-Friendly
4	Beachfront
5	Mountain Views
6	Urban
7	Rural
8	Historic
9	Relaxing
10	Adventure
11	Romantic
12	City Life
13	Cultural
14	Pet-Friendly
15	Business Travel
16	Wellness
17	Entertainment
18	Nature Retreat
19	Skiing
20	Shopping
21	Waterfront
22	Art and Culture

## Photos Table:

photoid	photolink
1	<a href="https://example.com/photo1.jpg">https://example.com/photo1.jpg</a>
2	<a href="https://example.com/photo2.jpg">https://example.com/photo2.jpg</a>
3	<a href="https://example.com/photo3.jpg">https://example.com/photo3.jpg</a>
4	<a href="https://example.com/photo4.jpg">https://example.com/photo4.jpg</a>
5	<a href="https://example.com/photo5.jpg">https://example.com/photo5.jpg</a>
6	<a href="https://example.com/photo6.jpg">https://example.com/photo6.jpg</a>
7	<a href="https://example.com/photo7.jpg">https://example.com/photo7.jpg</a>
8	<a href="https://example.com/photo8.jpg">https://example.com/photo8.jpg</a>
9	<a href="https://example.com/photo9.jpg">https://example.com/photo9.jpg</a>
10	<a href="https://example.com/photo10.jpg">https://example.com/photo10.jpg</a>
11	<a href="https://example.com/photo11.jpg">https://example.com/photo11.jpg</a>
12	<a href="https://example.com/photo12.jpg">https://example.com/photo12.jpg</a>
13	<a href="https://example.com/photo13.jpg">https://example.com/photo13.jpg</a>
14	<a href="https://example.com/photo14.jpg">https://example.com/photo14.jpg</a>
15	<a href="https://example.com/photo15.jpg">https://example.com/photo15.jpg</a>
16	<a href="https://example.com/photo16.jpg">https://example.com/photo16.jpg</a>
17	<a href="https://example.com/photo17.jpg">https://example.com/photo17.jpg</a>
18	<a href="https://example.com/photo18.jpg">https://example.com/photo18.jpg</a>
19	<a href="https://example.com/photo19.jpg">https://example.com/photo19.jpg</a>
20	<a href="https://example.com/photo20.jpg">https://example.com/photo20.jpg</a>

## Rules Table:

ruleid	ruledescription
1	No smoking allowed.
2	Pets are welcome.
3	Quiet hours after 10 PM.
4	Shoes off inside the accommodation.
5	Guests must show valid ID upon check-in.
6	No unregistered guests allowed.
7	Please keep the common areas clean.
8	Keep noise levels reasonable during your stay.
9	Please respect the privacy of other guests.
10	No parties or events allowed.
11	Dispose of trash in designated bins.
12	Lock the door when leaving the accommodation.
13	Do not rearrange furniture.
14	Turn off lights and appliances when not in use.
15	Keep windows closed when using heating or cooling.
16	Use water responsibly.
17	Follow recycling guidelines.
18	Report any maintenance issues promptly.
19	Check-out time is 11:00 AM.
20	Follow host instructions for key return.
21	Do not disturb the neighbors.
22	No illegal activities allowed on the property.
23	Keep personal belongings secure.
24	Notify host of any early or late check-in/out requests.
25	Be mindful of energy consumption.

## Facilities Table:

facilityid	facilityname
1	Gym
2	Parking Garage
3	Spa
4	Swimming Pool
5	Restaurant
6	Bar
7	Conference Room
8	Kids Play Area
9	Laundry Room
10	Pet-Friendly Area
11	Fitness Center
12	Tennis Court
13	Business Center
14	Sauna
15	Hot Tub
16	Game Room
17	Cafeteria
18	Outdoor Lounge
19	Bike Storage
20	Movie Theater
21	Library
22	BBQ Area

## Location Table:

locationid	locationname	longitude	latitude	address
1	Downtown Area	-73,9857	40,7488	123 Main St, City
2	Beachfront	-118,2437	34,0522	456 Ocean Ave, Coast
3	Mountain Retreat	-79,3832	43,6532	789 Pine Rd, Mountains
4	Countryside	-89,3985	36,7783	101 Meadow Ln, Countryside
5	Urban Center	-0,1278	51,5074	789 Urban St, Metropolis
6	Historic District	2,3522	48,8566	654 Heritage Rd, Town
7	Secluded Island	139,6503	35,6895	987 Island Rd, Oasis
8	Desert Oasis	-115,1728	36,1146	321 Sand Dune St, Desert
9	Lakefront View	-73,4257	45,4215	555 Lakeview Dr, Lakeside
10	Wooded Haven	-77,0369	38,9072	444 Forest Rd, Woods
11	City Center	-87,6298	41,8781	222 Downtown Blvd, City
12	Coastal Escape	-123,1207	49,2827	777 Coastal Rd, Coast
13	Hillside Retreat	-122,4194	37,7749	888 Hillside Dr, Hills
14	Rural Village	-88,7879	30,6954	666 Village Ln, Village
15	Cultural District	-4,2518	40,4637	333 Culture St, District
16	Tropical Paradise	-61,2225	13,1939	111 Palm Beach, Paradise
17	Snowy Wonderland	-106,6291	53,5444	555 Snowy Rd, Snowland
18	Meadow Meadows	-100,0771	35,1495	444 Meadow Rd, Meadows
19	Cosmopolitan Corner	-3,7038	40,4168	222 City Plaza, Corner
20	Riverside Hideout	-87,6291	41,8781	777 Riverside Dr, Riverside
21	Urban Hub	0	0	123 Urban Rd, Hub
22	Island Getaway	0	0	456 Island Rd, Getaway



# Booking And Financial Group

## Payments Table:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	1	1	200	2023-08-10 00:00:00	Credit Card																	
2	2	2	300	2023-08-12 00:00:00	PayPal																	
3	3	3	250	2023-08-15 00:00:00	Bank Transfer																	
4	4	4	150	2023-08-18 00:00:00	Credit Card																	
5	5	5	180	2023-08-20 00:00:00	PayPal																	
6	6	6	220	2023-08-22 00:00:00	Bank Transfer																	
7	7	7	170	2023-08-25 00:00:00	Credit Card																	
8	8	8	280	2023-08-28 00:00:00	PayPal																	
9	9	9	210	2023-08-30 00:00:00	Bank Transfer																	
10	10	10	230	2023-09-02 00:00:00	Credit Card																	
11	11	11	180	2023-09-05 00:00:00	PayPal																	
12	12	12	250	2023-09-08 00:00:00	Bank Transfer																	
13	13	13	220	2023-09-11 00:00:00	Credit Card																	
14	14	14	170	2023-09-14 00:00:00	PayPal																	
15	15	15	280	2023-09-17 00:00:00	Bank Transfer																	
16	16	16	210	2023-09-20 00:00:00	Credit Card																	
17	17	17	230	2023-09-23 00:00:00	PayPal																	
18	18	18	190	2023-09-26 00:00:00	Bank Transfer																	
19	19	19	200	2023-09-29 00:00:00	Credit Card																	
20	20	20	290	2023-10-02 00:00:00	PayPal																	
21	21	21	240	2023-10-05 00:00:00	Bank Transfer																	
22	22	22	170	2023-10-08 00:00:00	Credit Card																	

## Bookings Table:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	1	1	1	2023-08-10 00:00:00	2023-08-15 00:00:00	500	1														
2	2	2	2	2023-09-01 00:00:00	2023-09-05 00:00:00	1 330	0														
3	3	3	3	2023-08-20 00:00:00	2023-08-25 00:00:00	1 064	1														
4	4	4	4	2023-09-10 00:00:00	2023-09-15 00:00:00	1 241	0														
5	5	5	5	2023-09-25 00:00:00	2023-09-30 00:00:00	1 418	1														
6	6	6	6	2023-10-01 00:00:00	2023-10-05 00:00:00	450	1														
7	7	7	7	2023-10-15 00:00:00	2023-10-20 00:00:00	976	0														
8	8	8	8	2023-11-01 00:00:00	2023-11-05 00:00:00	1 595	1														
9	9	9	9	2023-11-20 00:00:00	2023-11-25 00:00:00	1 153	1														
10	10	10	10	2023-12-01 00:00:00	2023-12-05 00:00:00	350	0														
11	11	11	11	2023-12-10 00:00:00	2023-12-15 00:00:00	1 330	1														
12	12	12	12	2023-12-20 00:00:00	2023-12-25 00:00:00	1 064	1														
13	13	13	13	2023-12-30 00:00:00	2024-01-05 00:00:00	1 507	0														
14	14	14	14	2023-08-15 00:00:00	2023-08-20 00:00:00	1 064	1														
15	15	15	15	2023-09-05 00:00:00	2023-09-10 00:00:00	1 241	0														
16	16	16	16	2023-09-20 00:00:00	2023-09-25 00:00:00	976	1														
17	17	17	17	2023-10-05 00:00:00	2023-10-10 00:00:00	1 064	1														
18	18	18	18	2023-10-25 00:00:00	2023-10-30 00:00:00	1 330	0														
19	19	19	19	2023-11-05 00:00:00	2023-11-10 00:00:00	1 418	1														
20	20	20	20	2023-12-10 00:00:00	2023-12-15 00:00:00	450	0														
21	21	21	21	2023-08-22 00:00:00	2023-08-27 00:00:00	976	1														

## Cancellations Table:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
cancelationid	bookingid	cancelationdate	cancelationreason																	
1	1	2023-08-08 00:00:00	Change of plans																	
2	2	2023-09-03 00:00:00	Emergency situation																	
3	3	2023-08-23 00:00:00	Unforeseen circumstances																	
4	4	2023-09-10 00:00:00	Health issues																	
5	5	2023-09-15 00:00:00	Travel restrictions																	
6	6	2023-10-02 00:00:00	Weather-related concerns																	
7	7	2023-10-17 00:00:00	Double booking																	
8	8	2023-11-05 00:00:00	Financial constraints																	
9	9	2023-11-20 00:00:00	Personal reasons																	
10	10	2023-12-12 00:00:00	Work commitments																	
11	11	2023-08-25 00:00:00	Change of plans																	
12	12	2023-09-08 00:00:00	Emergency situation																	
13	13	2023-09-30 00:00:00	Unforeseen circumstances																	
14	14	2023-10-12 00:00:00	Health issues																	
15	15	2023-10-20 00:00:00	Travel restrictions																	
16	16	2023-11-01 00:00:00	Weather-related concerns																	
17	17	2023-11-15 00:00:00	Double booking																	
18	18	2023-12-05 00:00:00	Financial constraints																	
19	19	2023-12-18 00:00:00	Personal reasons																	
20	20	2023-12-28 00:00:00	Work commitments																	

## Commissions Table:

commissions						Enter a SQL expression to filter results (use Ctrl+Space)
	commissionid	bookingid	123 guestcommission	123 hostcommission	123 totalcommission	
1	1	1	25	50	75	
2	2	2	30	45	75	
3	3	3	20	40	60	
4	4	4	15	35	50	
5	5	5	22	42	64	
6	6	6	28	48	76	
7	7	7	18	38	56	
8	8	8	24	44	68	
9	9	9	26	46	72	
10	10	10	32	52	84	
11	11	11	27	47	74	
12	12	12	29	49	78	
13	13	13	23	43	66	
14	14	1	21	41	62	
15	15	2	31	51	82	
16	16	3	17	37	54	
17	17	7	19	39	58	
18	18	8	33	53	86	
19	19	9	16	36	52	
20	20	0	34	54	88	
21	21	14	20	40	60	
22	22	15	25	45	70	
23	23	16	18	38	56	
24	24	17	22	42	64	
25	25	18	28	48	76	

# Social Group

## SocialMedia Table:

	SocialMediaID	UserID	SocialMediaType	ProfileLink
1	1	1	Twitter	<a href="https://twitter.com/user1">https://twitter.com/user1</a>
2	2	2	Instagram	<a href="https://www.instagram.com/user2">https://www.instagram.com/user2</a>
3	3	3	Facebook	<a href="https://www.facebook.com/user3">https://www.facebook.com/user3</a>
4	4	4	Twitter	<a href="https://twitter.com/user4">https://twitter.com/user4</a>
5	5	5	Instagram	<a href="https://www.instagram.com/user5">https://www.instagram.com/user5</a>
6	6	6	Facebook	<a href="https://www.facebook.com/user6">https://www.facebook.com/user6</a>
7	7	7	LinkedIn	<a href="https://www.linkedin.com/in/user7">https://www.linkedin.com/in/user7</a>
8	8	8	Pinterest	<a href="https://www.pinterest.com/user8">https://www.pinterest.com/user8</a>
9	9	9	YouTube	<a href="https://www.youtube.com/user9">https://www.youtube.com/user9</a>
10	10	10	TikTok	<a href="https://www.tiktok.com/@user10">https://www.tiktok.com/@user10</a>
11	11	11	Snapchat	<a href="https://www.snapchat.com/add/user11">https://www.snapchat.com/add/user11</a>
12	12	12	Reddit	<a href="https://www.reddit.com/user/user12">https://www.reddit.com/user/user12</a>
13	13	13	Tumblr	<a href="https://user13.tumblr.com">https://user13.tumblr.com</a>
14	14	14	Twitter	<a href="https://twitter.com/user14">https://twitter.com/user14</a>
15	15	15	Instagram	<a href="https://www.instagram.com/user15">https://www.instagram.com/user15</a>
16	16	16	Facebook	<a href="https://www.facebook.com/user16">https://www.facebook.com/user16</a>
17	17	17	LinkedIn	<a href="https://www.linkedin.com/in/user17">https://www.linkedin.com/in/user17</a>
18	18	18	Pinterest	<a href="https://www.pinterest.com/user18">https://www.pinterest.com/user18</a>
19	19	19	YouTube	<a href="https://www.youtube.com/user19">https://www.youtube.com/user19</a>
20	20	20	TikTok	<a href="https://www.tiktok.com/@user20">https://www.tiktok.com/@user20</a>

## Messaging Table:

	MessageID	SenderID	ReceiverID	MessageContent	MessageDate
1	1	1	2	Hello there!	2023-08-05 08:30:00
2	2	2	1	Hi! How are you?	2023-08-06 10:15:00
3	3	3	1	Good morning!	2023-08-07 07:45:00
4	4	3	1	Hey! Have a great day!	2023-08-08 12:00:00
5	5	5	2	Hi! Ready for the trip?	2023-08-09 15:30:00
6	6	3	2	Absolutely! Can't wait!	2023-08-10 18:20:00
7	7	1	2	Just arrived at the accommodation!	2023-08-11 14:00:00
8	8	2	1	Awesome! How's it looking?	2023-08-12 16:45:00
9	9	1	3	It's fantastic! Great choice!	2023-08-13 09:30:00
10	10	3	1	Glad to hear that! Enjoy!	2023-08-14 11:15:00
11	11	2	3	Excited for our adventure!	2023-08-15 10:30:00
12	12	3	2	Me too! It's going to be amazing!	2023-08-16 12:45:00
13	13	1	2	Hey, remember to pack your swimsuit!	2023-08-17 14:00:00
14	14	2	1	Thanks for the reminder! I'll make sure to bring it!	2023-08-18 16:15:00
15	15	3	1	Just saw some great restaurants nearby!	2023-08-19 09:30:00
16	16	1	3	Sounds great! We'll have to check them out.	2023-08-20 11:45:00
17	17	2	3	What's the weather forecast for tomorrow?	2023-08-21 14:00:00
18	18	3	2	Looks like it's going to be sunny with a high of 28°C.	2023-08-22 16:15:00
19	19	1	2	Perfect beach weather!	2023-08-23 10:30:00
20	20	2	1	Absolutely! Get ready for some fun!	2023-08-24 12:45:00
21	21	1	3	Just got back from a hiking trip.	2023-08-25 14:00:00

## Notifications Table:

	notificationid	userid	notificationmessage	notificationdate
1	1	1	New booking request received.	2023-08-05 10:30:00
2	2	2	Your special offer was accepted!	2023-08-06 14:15:00
3	3	3	Host has responded to your inquiry.	2023-08-07 09:00:00
4	4	1	Check-in instructions for your stay.	2023-08-08 16:00:00
5	5	4	Reminder: Check-out is tomorrow.	2023-08-09 11:30:00
6	6	2	Thank you for staying with us!	2023-08-10 12:45:00
7	7	5	New message from the host.	2023-08-11 08:20:00
8	8	3	Upcoming event near your accommodation.	2023-08-12 17:10:00
9	9	6	Reminder: Leave a review for your stay.	2023-08-13 09:30:00
10	10	4	Your booking has been confirmed.	2023-08-14 14:00:00
11	11	7	New booking request received.	2023-08-15 10:30:00
12	12	8	Your special offer was accepted!	2023-08-16 14:15:00
13	13	9	Host has responded to your inquiry.	2023-08-17 09:00:00
14	14	10	Check-in instructions for your stay.	2023-08-18 16:00:00
15	15	11	Reminder: Check-out is tomorrow.	2023-08-19 11:30:00
16	16	12	Thank you for staying with us!	2023-08-20 12:45:00
17	17	13	New message from the host.	2023-08-21 08:20:00
18	18	14	Upcoming event near your accommodation.	2023-08-22 17:10:00
19	19	15	Reminder: Leave a review for your stay.	2023-08-23 09:30:00
20	20	16	Your booking has been confirmed.	2023-08-24 14:00:00
21	21	17	Reminder: Upcoming event near your accommodation.	2023-08-25 10:00:00
22	22	18	New booking request received.	2023-08-26 14:30:00

# Reviews, Ratings and Favorites Group

## Reviews Table:

	reviewid	guestid	accomid	rating	reviewdate
1	1	1	1	5	2023-08-12 00:00:00
2	2	2	2	4	2023-08-13 00:00:00
3	3	3	3	4	2023-08-15 00:00:00
4	4	4	4	5	2023-08-16 00:00:00
5	5	5	5	5	2023-08-17 00:00:00
6	6	6	6	4	2023-08-18 00:00:00
7	7	7	7	4	2023-08-20 00:00:00
8	8	8	8	5	2023-08-21 00:00:00
9	9	9	9	3	2023-08-22 00:00:00
10	10	10	10	5	2023-08-23 00:00:00
11	11	1	11	4	2023-08-24 00:00:00
12	12	2	12	4	2023-08-25 00:00:00
13	13	3	13	5	2023-08-26 00:00:00
14	14	2	1	4	2023-08-27 00:00:00
15	15	3	2	4	2023-08-28 00:00:00
16	16	4	3	4	2023-08-29 00:00:00
17	17	5	4	5	2023-08-30 00:00:00
18	18	6	5	4	2023-08-31 00:00:00
19	19	7	6	4	2023-09-01 00:00:00
20	20	8	7	5	2023-09-02 00:00:00

## UserRatings Table

	UserRatingID	RatedUserID	RatingType	RatingValue	RatingUserID
1	1	1	Host	4.5	2
2	2	2	Guest	4.5	3
3	3	3	Host	4.7	1
4	4	4	Host	4.6	5
5	5	5	Guest	4.2	4
6	6	6	Host	4.9	7
7	7	7	Guest	4.3	6
8	8	8	Host	4.5	9
9	9	9	Guest	4.8	8
10	10	10	Host	4.6	11
11	11	11	Guest	4.7	10
12	12	12	Host	4.9	13
13	13	13	Guest	4.4	12
14	14	14	Host	4.7	15
15	15	15	Guest	4.6	14
16	16	16	Host	4.8	17
17	17	17	Guest	4.5	16
18	18	18	Host	4.6	19
19	19	19	Guest	4.7	18
20	20	20	Host	4.5	20
21	21	1	Host	4.3	3
22	22	2	Guest	4.2	4
23	23	3	Host	4.4	5
24	24	4	Host	4.7	1
25	25	5	Guest	4.1	6
26	26	6	Host	4.6	5
27	27	7	Guest	4.5	8
28	28	8	Host	4.8	7
29	29	9	Guest	4.7	10
30	30	10	Host	4.6	9
31	31	11	Guest	4.5	12

## Ratings Table:

	RatingID	AccomID	HostID	AccomRating
1	1	1	1	4.5
2	2	2	2	3.8
3	3	3	3	4.2
4	4	4	4	4.7
5	5	5	5	4.9
6	6	6	6	4.3
7	7	7	7	3.7
8	8	8	8	4.8
9	9	9	9	3.5
10	10	10	10	4.6
11	11	11	11	4
12	12	12	12	4.4
13	13	13	13	3.9
14	14	14	14	4.5
15	15	15	15	4.7
16	16	16	16	4.1
17	17	17	17	3.3
18	18	18	18	4.4
19	19	19	19	3.6
20	20	20	20	4.4
21	21	1	11	4.3
22	22	2	12	3.7
23	23	3	13	4
24	24	4	14	4.8
25	25	5	15	4.9
26	26	6	16	4.2
27	27	7	17	3.6
28	28	8	18	4.8
29	29	9	19	3.2

## Favorites Table:

	FavoritesID	GuestID	AccomID	DateAdded
1	1	1	1	2023-08-05 00:00:00
2	2	2	2	2023-08-06 00:00:00
3	3	3	3	2023-08-07 00:00:00
4	4	4	4	2023-08-08 00:00:00
5	5	5	5	2023-08-09 00:00:00
6	6	6	6	2023-08-10 00:00:00
7	7	7	7	2023-08-11 00:00:00
8	8	8	8	2023-08-12 00:00:00
9	9	9	9	2023-08-13 00:00:00
10	10	10	10	2023-08-14 00:00:00
11	11	11	11	2023-08-15 00:00:00
12	12	12	12	2023-08-16 00:00:00
13	13	13	13	2023-08-17 00:00:00
14	14	14	14	2023-08-18 00:00:00
15	15	15	15	2023-08-19 00:00:00
16	16	16	16	2023-08-20 00:00:00
17	17	17	17	2023-08-21 00:00:00
18	18	18	18	2023-08-22 00:00:00
19	19	19	19	2023-08-23 00:00:00
20	20	20	20	2023-08-24 00:00:00

## ReviewsComments Table:

	ReviewCommentID	ReviewID	CommentText	CommentDate
1	1	1	Great experience overall!	2023-08-12 15:20:00
2	2	2	Could be cleaner.	2023-08-13 09:45:00
3	3	3	Loved the amenities.	2023-08-15 18:30:00
4	4	4	Excellent host!	2023-08-16 11:10:00
5	5	5	Beautiful location and com	2023-08-17 14:05:00
6	6	6	The view was breathtaking	2023-08-18 20:15:00
7	7	7	A bit noisy at night.	2023-08-20 08:00:00
8	8	8	Impressed with the cleanl	2023-08-21 13:30:00
9	9	9	Host was very accommod.	2023-08-22 17:45:00
10	10	10	Overall a pleasant experie	2023-08-23 10:20:00
11	11	11	Great value for the price.	2023-08-25 12:55:00
12	12	12	Could use better heating.	2023-08-26 09:10:00
13	13	13	Would recommend to frie	2023-08-27 16:40:00
14	14	14	The staff was very friendl	2023-08-28 11:20:00
15	15	15	Had a great time explorin	2023-08-29 14:15:00
16	16	16	Room was spacious and c	2023-08-30 17:30:00
17	17	17	The location was convenie	2023-09-01 10:45:00
18	18	18	Enjoyed the complementa	2023-09-02 13:20:00
19	19	19	The swimming pool was a	2023-09-03 16:10:00
20	20	20	Would have preferred mor	2023-09-04 09:00:00
21	21	21	Great for families with chil	2023-09-05 11:45:00
22	22	22	The rooftop bar had stunn	2023-09-06 14:30:00
23	23	23	Convenient access to pub	2023-09-07 17:15:00
24	24	24	Spa services were relaxin	2023-09-08 10:30:00
25	25	25	A bit far from the city cen	2023-09-09 12:20:00
26	26	26	Loved the local cuisine in!	2023-09-10 15:10:00
27	27	27	The pet-friendly policy wa	2023-09-11 18:00:00
28	28	28	The cultural district was a	2023-09-12 11:45:00
29	29	29	The game room provided	2023-09-13 14:30:00



# Testing Queries and Results

## Simple Data Retrieval:

```
-- Retrieve the names and email addresses of all users.
SELECT name, email
FROM users;
```

	ABC name	ABC email
1	John Doe	john@example.com
2	Jane Smith	jane@example.com
3	Michael Johnson	michael@example.com
4	Alice Brown	alice@example.com
5	Robert Lee	robert@example.com

## Basic Filtering:

```
-- Get the titles and descriptions of accommodations where the host's verification status is true.
SELECT a.title, a.description
FROM accom a
JOIN hosts h ON a.hostid = h.hostid
WHERE h.verificationstatus = 1;
```

	ABC title	ABC description
1	Cozy Downtown Apartment	A comfortable apartment in the heart of the city.
2	Secluded Forest Retreat	Disconnect from the world in this hidden forest re
3	Modern Loft with Skyline View	Enjoy breathtaking city views from this contempo
4	Mountain Cabin Retreat	Escape to the mountains and unwind in this cozy

## Sorting and Limiting:

```
-- List the names of guests, sorted alphabetically, along with their join dates, limited to the first 5 entries.
SELECT u.name AS guest_name, g.joindate
FROM guests g
JOIN users u ON g.userid = u.userid
ORDER BY guest_name ASC
LIMIT 5;
```

	ABC guest_name	🕒 joindate
1	Alice Brown	2023-08-04 00:00:00
2	Ava Johnson	2023-08-27 00:00:00
3	Ava Mitchell	2023-08-19 00:00:00
4	Daniel Brown	2023-08-22 00:00:00
5	Daniel Johnson	2023-08-07 00:00:00

## Aggregation with Grouping:

```
-- Calculate the average rating of accommodations, grouping them by city.
SELECT c.CityName, AVG(rating) AS average_rating
FROM accom a
JOIN accomcity ac ON a.accomid = ac.accomid
JOIN Cities c ON ac.cityid = c.cityid
LEFT JOIN reviews r ON a.accomid = r.accomid
GROUP BY c.CityName
ORDER BY average_rating DESC;
```

	ABC CityName	📊 average_rating
1	Vancouver	5
2	Melbourne	5
3	Marseille	5
4	London	4,5
5	Sydney	4,5
6	New York	4,33333
7	Toronto	4,33333
8	Los Angeles	4
9	Manchester	4
10	Paris	3



# Testing Queries and Results

## Aggregation with Filtering:

```
-- Find the total number of accommodations hosted by each host who has more than one accommodation.
SELECT h.userid, COUNT(a.accomid) AS total_accommodations
FROM hosts h
JOIN accom a ON h.userid = a.hostid
GROUP BY h.userid
HAVING total_accommodations > 1;
```

	userid	total_accommodations
1	4	3
2	5	3
3	6	2
4	7	2
5	8	2

## Joins for Detailed Information:

```
-- Retrieve the names of guests who have booked accommodations in New York City, along with the accommodation titles and booking dates.
SELECT u.name AS guest_name, a.title AS accommodation_title, b.indate AS booking_date
FROM users u
JOIN guests g ON u.userid = g.userid
JOIN Bookings b ON g.userid = b.guestid
JOIN accom a ON b.accomid = a.accomid
JOIN accomcity ac ON a.accomid = ac.accomid
JOIN Cities c ON ac.cityid = c.cityid
WHERE c.cityname = 'New York'
ORDER BY guest_name, booking_date;
```

	guest_name	accommodation_title	booking_date
1	Grace Lee	Cozy Downtown Apartment	2023-08-22 00:00:00
2	John Doe	Cozy Downtown Apartment	2023-08-10 00:00:00
3	William Taylor	Cozy Downtown Apartment	2023-12-10 00:00:00

## Nested Subquery:

```
-- List the accommodations with a rating greater than the average rating of all accommodations.
SELECT a.title, a.description, r.accomrating
FROM accom a
JOIN Ratings r ON a.accomid = r.accomid
WHERE r.accomrating > (SELECT AVG(accomrating) FROM Ratings);
```

	title	description	accomrating
1	Cozy Downtown Apartment	A comfortable apartment in the heart of the city.	4,5
2	Urban Loft with Modern Desi	Experience city living in this stylish loft.	4,7
3	Luxurious Resort by the Oce	Indulge in luxury at this oceanfront resort.	4,9
4	Rustic Chalet in the Woods	Embrace nature in this charming chalet surround	4,3

## Data Modification:

```
-- Update the price of all bookings with a total price higher than $500 to increase by 10%.
UPDATE Bookings
SET totalprice = totalprice * 1.1
WHERE totalprice > 500;
```

	BookingID	GuestID	AccomID	inDate	outDate	TotalPrice	Status
1	1	1	1	2023-08-10 00:00:00	2023-08-15 00:00:00	500	1
2	2	2	2	2023-09-01 00:00:00	2023-09-05 00:00:00	1 099	0
1	1	1	1	2023-08-10 00:00:00	2023-08-15 00:00:00	500	1
2	2	2	2	2023-09-01 00:00:00	2023-09-05 00:00:00	1 209	0



# Testing Queries and Results

## Correlated Subquery:

```
-- Display the accommodations and their titles that have been favorited by users who are also hosts.
SELECT a.accomid, a.title
FROM accom a
INNER JOIN Favorites f ON a.accomid = f.accomid
INNER JOIN guests g ON f.guestid = g.userid
INNER JOIN hosts h ON g.userid = h.hostid;
```

	123 accomid	ABC title
1		1 Cozy Downtown Apartment
2		2 Seaside Villa with Stunning V
3		3 Mountain Cabin Retreat

## Complex Join and Aggregation:

```
-- Find the average commission earned by hosts from each country, considering both guest and host commission.
SELECT c.CountryName, AVG(cr.totalcommission) AS avg_commission
FROM commissions cr
JOIN Bookings b ON cr.bookingid = b.bookingid
JOIN accom a ON b.accomid = a.accomid
JOIN AccomCountry ac ON a.accomid = ac.accomid
JOIN Countries c ON ac.countryid = c.countryid
GROUP BY c.CountryName;
```

	ABC CountryName	123 avg_commission
1	United States	67,1071
2	Australia	69
3	Canada	66,8889
4	United Kingdom	65,5

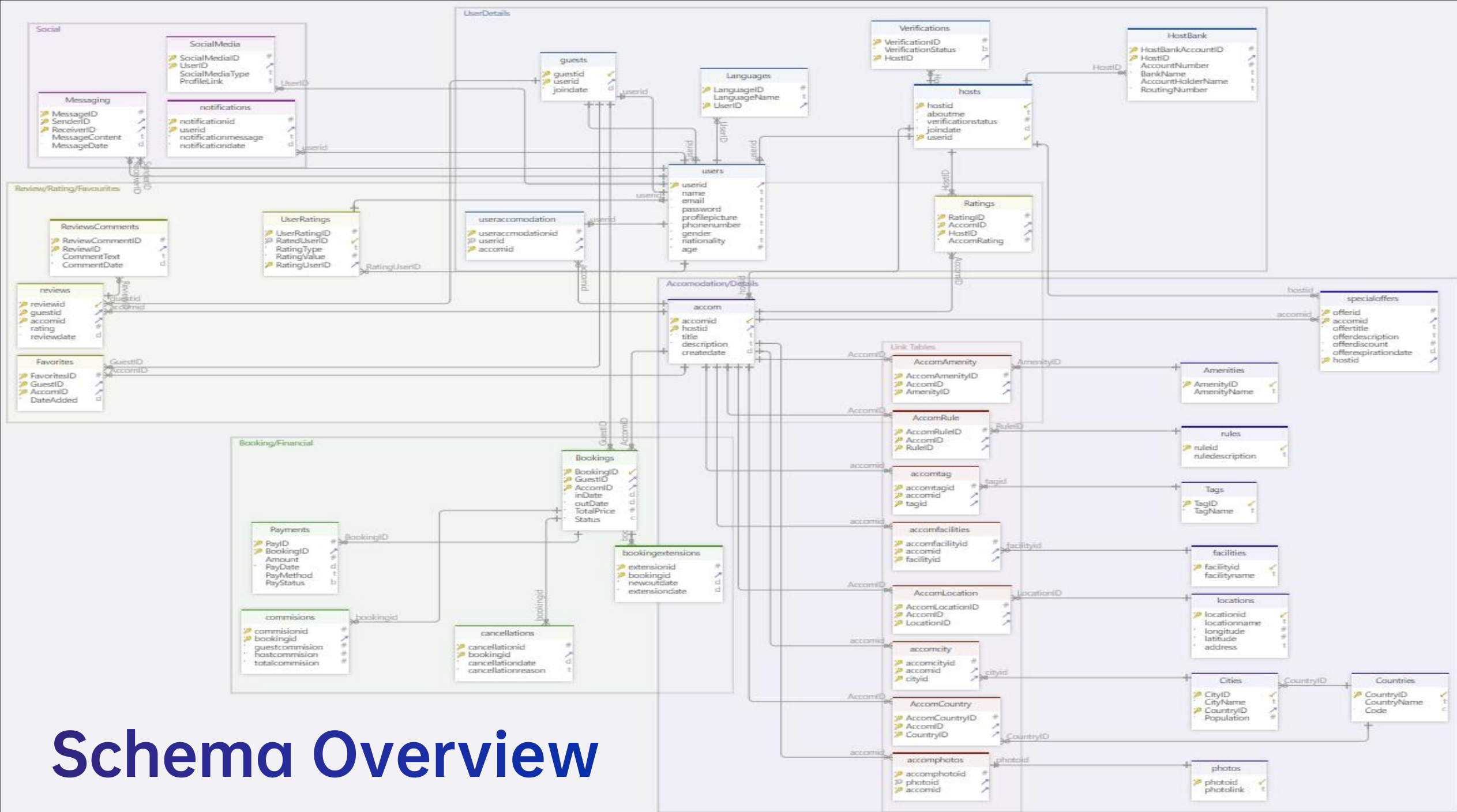
## Aggregation with Grouping and Date Functions:

```
-- Find the total earnings earned by the company from commissions, grouped by month.
SELECT YEAR(b.inDate) AS year, MONTH(b.inDate) AS month, SUM(c.totalcommission) AS total_earnings
FROM Bookings b
JOIN commissions c ON b.bookingid = c.bookingid
GROUP BY YEAR(b.inDate), MONTH(b.inDate)
ORDER BY year, month;
```

	123 year	123 month	123 total_earnings
1	2 023	8	385
2	2 023	9	517
3	2 023	10	462
4	2 023	11	480
5	2 023	12	580







# Schema Overview

# Conclusion

In conclusion, this project has been a rewarding journey of designing and implementing a robust database for the Booking and Accommodation System. With a focus on efficient data management, I've created a structured database using modern tools like DBSchema, DBeaver, and MySQL Server. By populating the database with mock data, I've showcased its capabilities. This foundational work will be pivotal in driving the system's success, enabling seamless user interactions and smooth operations.

