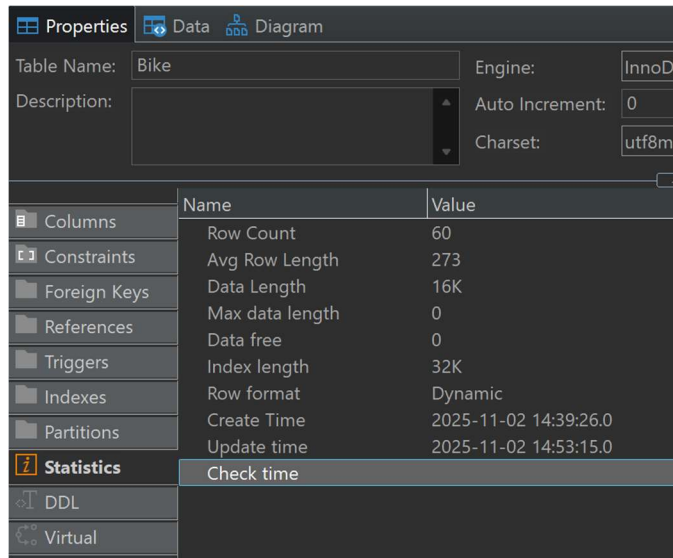


## Project Deliverable 5 – Table Data Populations

Group 3 - Sabereen Safa, Jordan Eberhart, James Eastwood

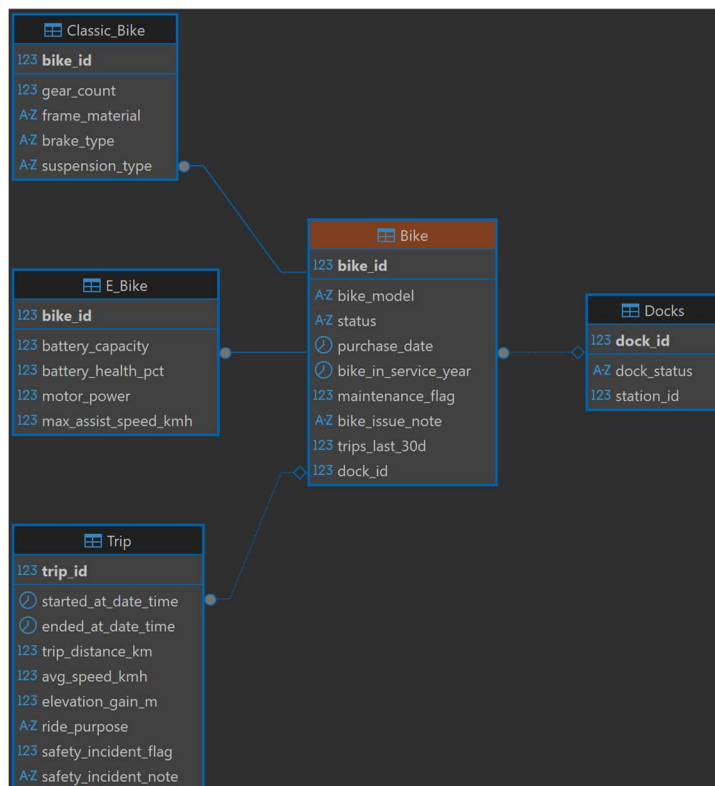
The work contained here is the work of Group 3 and Group 3 alone.



	Name	Value
Columns	Row Count	60
Constraints	Avg Row Length	273
Foreign Keys	Data Length	16K
References	Max data length	0
Triggers	Data free	0
Indexes	Index length	32K
Partitions	Row format	Dynamic
Statistics	Create Time	2025-11-02 14:39:26.0
	Update time	2025-11-02 14:53:15.0
	Check time	

Bike\_ID was synthesized using AI as a sequential number with the leading 32 standing for Classic Bike and the leading 52 standing for Electric Bike, then zeroes before the sequence starting at 1.

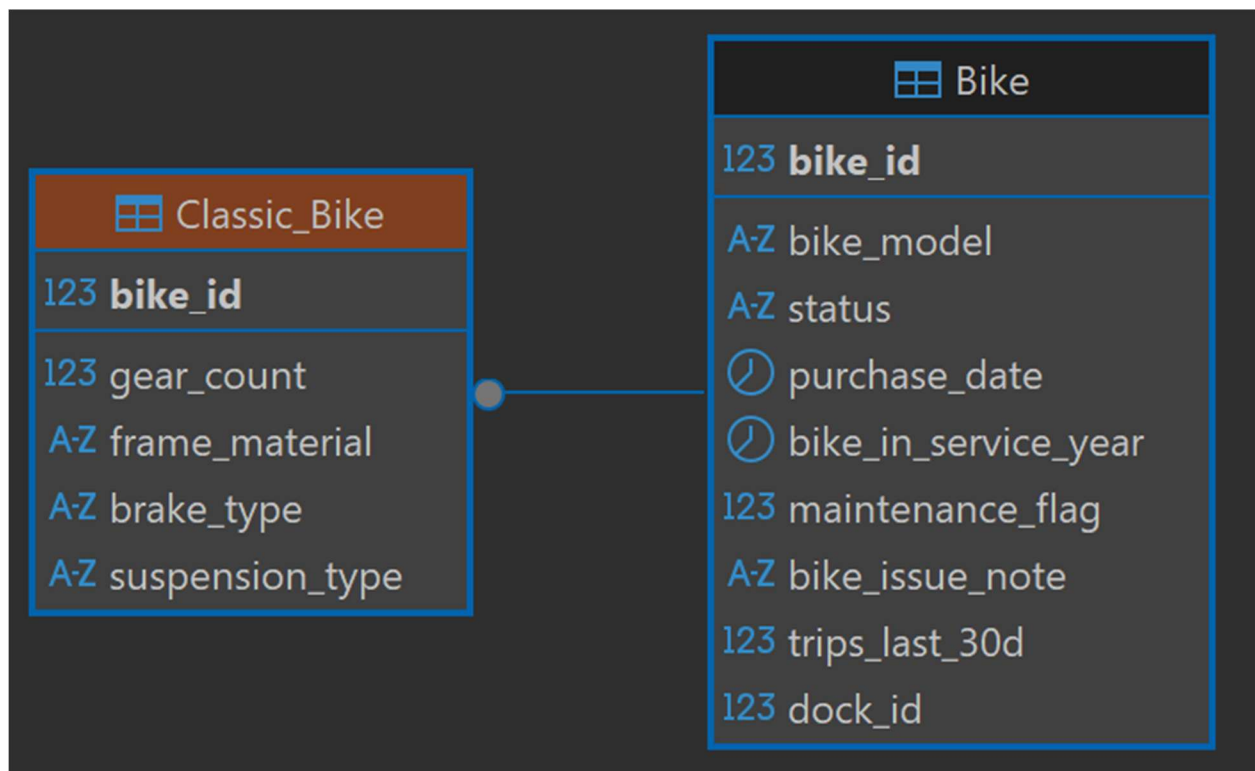
Purchase\_Date was synthesized data using AI based on the provided data of Bike\_In\_Service\_Year.



Properties	Data	Diagram
Table Name:	Classic_Bike	Engine:
Description:		Auto Increment:
	Description	Charset:
Columns	Name	Value
Constraints	Row Count	30
Foreign Keys	Avg Row Length	546
References	Data Length	16K
Triggers	Max data length	0
Indexes	Data free	0
Partitions	Index length	16K
Statistics	Row format	Dynamic
DDL	Create Time	2025-10-26 19:54:46.0
Virtual	Update time	2025-11-02 14:55:31.0
	Check time	

Gear\_count was synthesized using AI falling within the constraint of the 25 gear max.

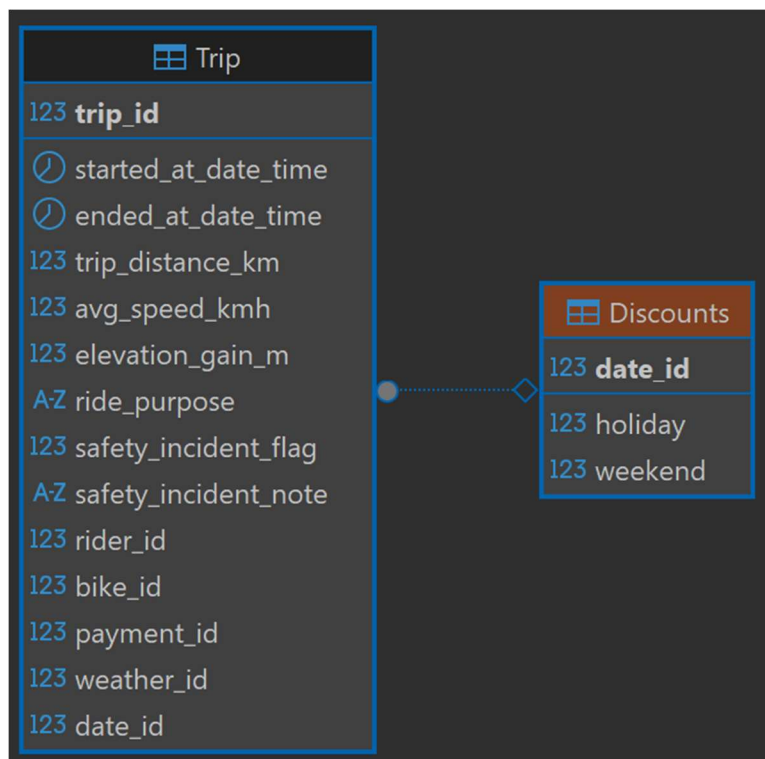
Frame\_material, brake\_type, suspension\_type, were also synthesized using AI and randomly assigned to bike\_ids.



Properties	Data	Diagram
Table Name:	Discounts	Engine: InnoDB
Description:		Auto Increment: 0
		Charset: utf8mb4
Columns	Name	Value
Constraints	Row Count	365
Foreign Keys	Avg Row Length	44
References	Data Length	16K
Triggers	Max data length	0
Indexes	Data free	0
Partitions	Index length	16K
Statistics	Row format	Dynamic
DDL	Create Time	2025-10-26 19:29:50.0
Virtual	Update time	2025-11-02 14:29:47.0
	Check time	

Date\_id was synthesized with 49193 standing for DISC because of the name of the Table “Discounts.” Then preceding zeroes and then a sequential number starting at 1 and ending at 366 (since 2024 was a Leap Year) were added.

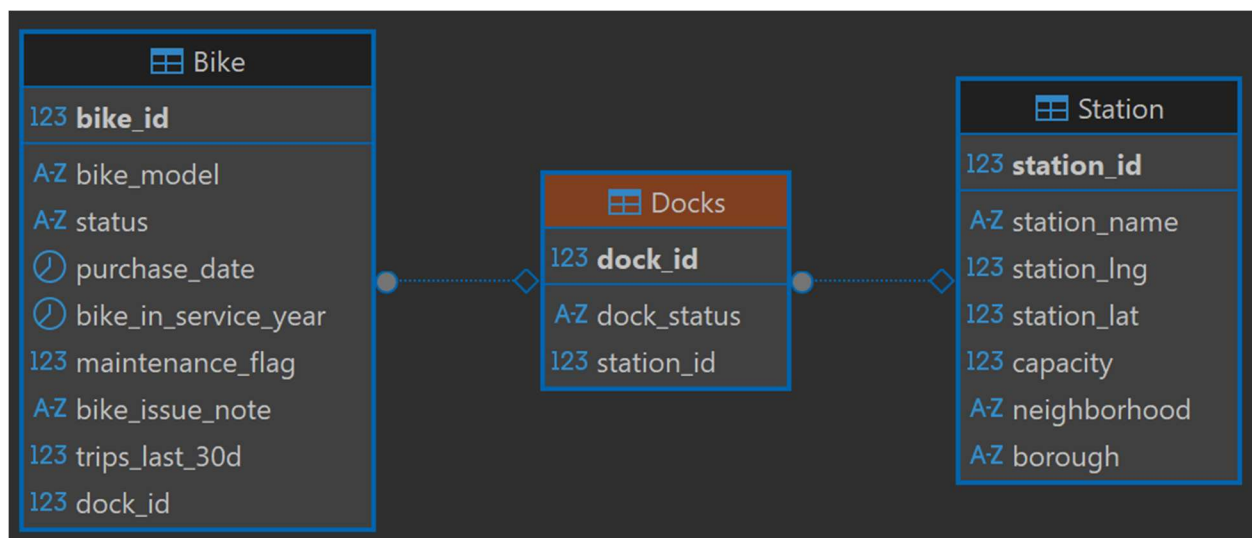
Holiday and Weekend are boolean variables which were synthesized based on whether they were holidays or weekends in the year of 2024.



Properties			Data	Diagram
Table Name:	Docks		Engine:	InnoDB
Description:			Auto Increment:	0
			Charset:	utf8mb4
	Name	Value		
Columns	Row Count	45		
Constraints	Avg Row Length	364		
Foreign Keys	Data Length	16K		
References	Max data length	0		
Triggers	Data free	0		
Indexes	Index length	32K		
Partitions	Row format	Dynamic		
Statistics	Create Time	2025-10-26 19:30:35.0		
DDL	Update time	2025-11-02 13:33:25.0		
Virtual	Check time			

Dock\_id was an AI synthesized sequential number with a leading 4 representing “D” for Dock and then zeroes to separate the actual dock\_id.

Dock\_status was randomly selected between “available,” “occupied,” or “out of service.”

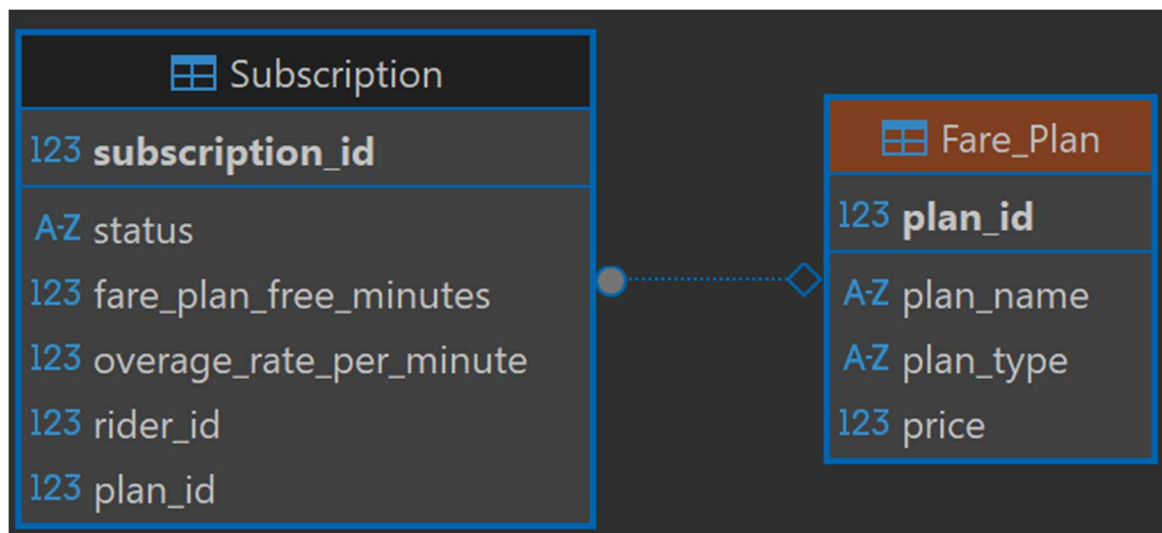




Properties Data Diagram		
Table Name: Fare_Plan		Engine: In
Description:		Auto Increment: 0
		Charset: ut
	Name	Value
Columns	Row Count	12
Constraints	Avg Row Length	1,365
Foreign Keys	Data Length	16K
References	Max data length	0
Triggers	Data free	0
Indexes	Index length	16K
Partitions	Row format	Dynamic
	Create Time	2025-10-26 20:01:34.0
	Update time	2025-11-02 13:40:18.0
Statistics	Check time	
DDL		
Virtual		

Plan\_id was an AI synthensized random number with a lead 616 for “F” and “P” for the Fare\_Plan table. Then there were separating zeroes and the sequential number of all of the plans, of which there are only 12 due to there not being any additional reasonable fare plan options.

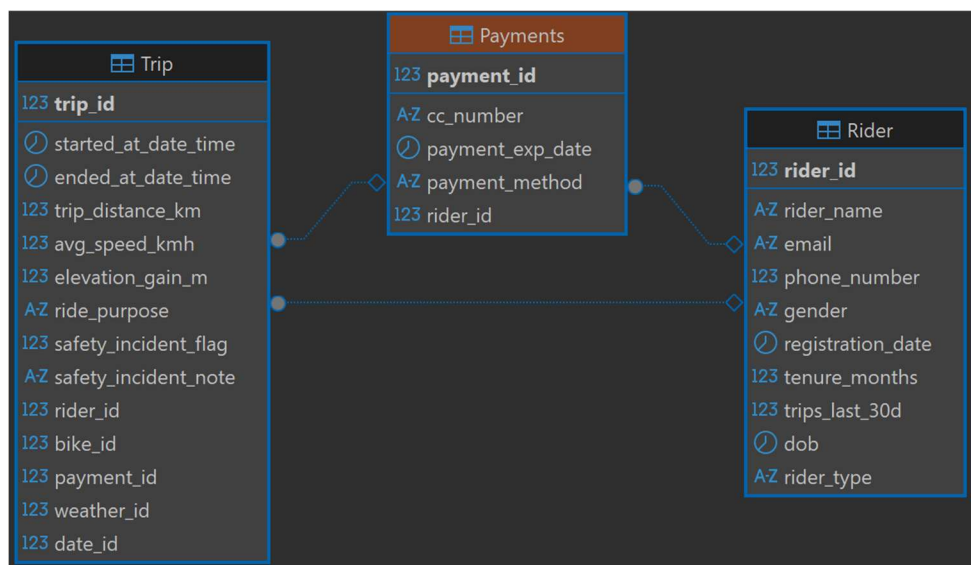
Plan\_name, plan\_type, and price were all AI generated and chosen as the best options to differentiate between fare plans with data that was reasonable and realistic.



Properties   Data   Diagram		
Table Name:	Payments	Engine: In
Description:		Auto Increment: 0
		Charset: u
	Name	Value
Columns	Row Count	60
Constraints	Avg Row Length	273
Foreign Keys	Data Length	16K
References	Max data length	0
Triggers	Data free	0
Indexes	Index length	32K
Partitions	Row format	Dynamic
Statistics	Create Time	2025-10-26 19:32:55.0
DDL	Update time	2025-11-02 20:19:54.0
Virtual	Check time	

Payment\_id was an AI synthesized, random number with a leading 16 for “P” for Payments, then a separator zero, and then the random number for a grand total of 10 digits.

CC\_number, payment\_exp\_date, and payment\_method were all AI synthesized numbers where the Visa, Mastercard, and Discover payment\_method have 16 digit CC\_numbers while American Express have 15 digits. Payment\_exp\_dates were generated to be 2 to 6 years into the future.





Properties	Data	Diagram
Table Name: Rider	Engine: Inn	
Description:	Auto Increment: 0	
	Charset: utf	
Columns	Name	Value
	Row Count	60
	Avg Row Length	273
	Data Length	16K
	Max data length	0
	Data free	0
	Index length	16K
	Row format	Dynamic
	Create Time	2025-10-26 20:06:46.0
	Update time	2025-11-02 16:41:31.0
	Check time	
DDL		
Virtual		

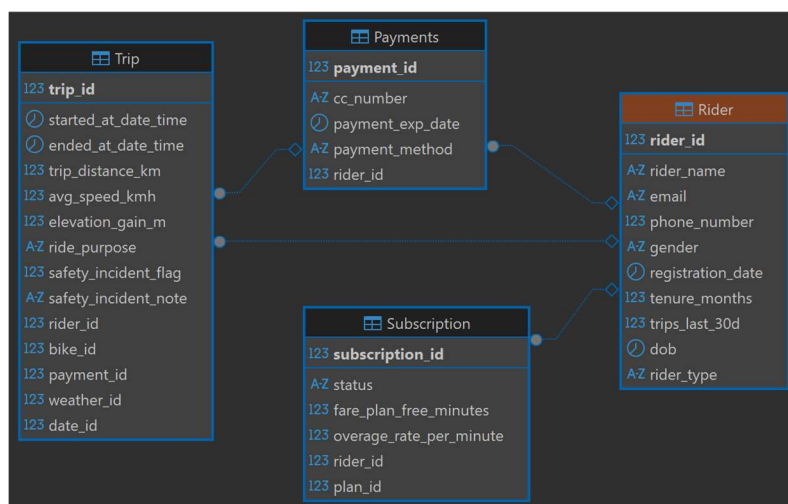
Rider\_id was an AI synthesized number with a leading 18 for “R” for Rider, then a separator zero, and then the random number for a grand total of 10 digits.

Rider\_name, email, phone\_number, and dob were all randomly generated by AI.

Gender was randomly chosen from “M,” “F,” “Other,” or “Prefer Not to Say,” with a bias put towards M and F if the name of the rider was a generally M or F name.

Registration\_date was based on tenure\_months which was a provided datapoint in the original dataset. If tenure\_months was 6, then the registration date would have been a randomly generated date in a 30 day window surrounding the ride date, 6 months in the past.

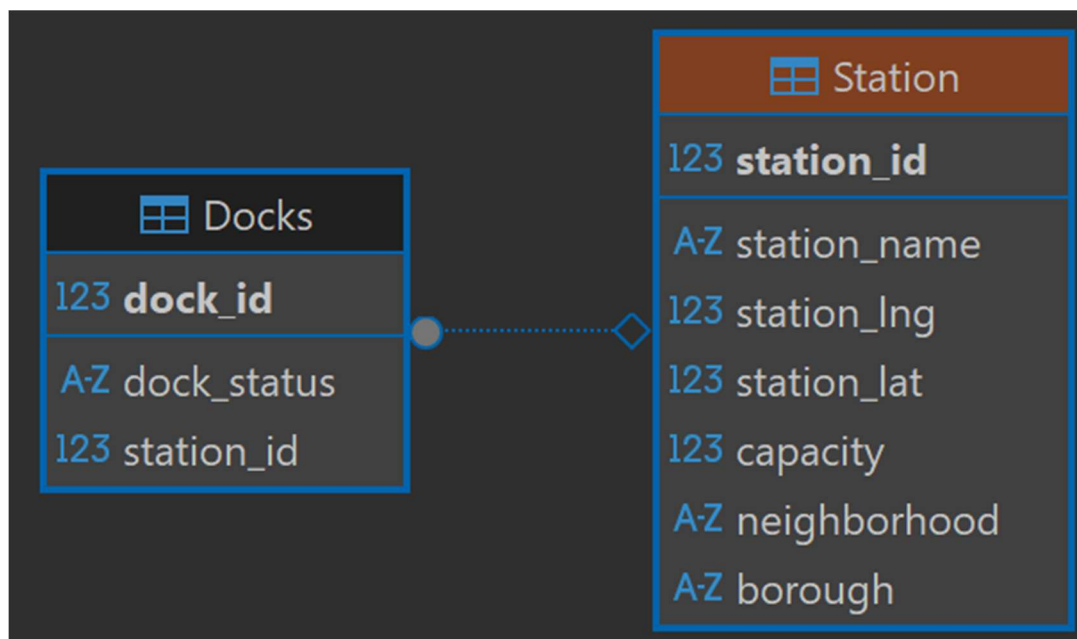
Tenure\_months and trips\_last\_30d were data that was all provided in the original dataset.





Properties Data Diagram		
Table Name:	Station	Engine:
Description:		Auto Increment:
		Charset:
	Name	Value
Columns	Row Count	9
Constraints	Avg Row Length	1,820
Foreign Keys	Data Length	16K
References	Max data length	0
Triggers	Data free	0
Indexes	Index length	16K
Partitions	Row format	Dynamic
	Create Time	2025-10-26 20:09:10.0
	Update time	2025-10-28 20:15:31.0
Statistics	Check time	
DDL		
Virtual		

Station\_id was an ID number provided in the original dataset, along with every other attribute and value. As the only table that needed no data generated, if we just left it alone, even though it only has 9 records, it made sense to leave it untouched.



Properties

Data

Diagram

Table Name:

Subscription

Engine:

InnoDB

Description:

Auto Increment:

0

Charset:

utf8mb4

Columns

Constraints

Foreign Keys

References

Triggers

Indexes

Partitions

Statistics

DDL

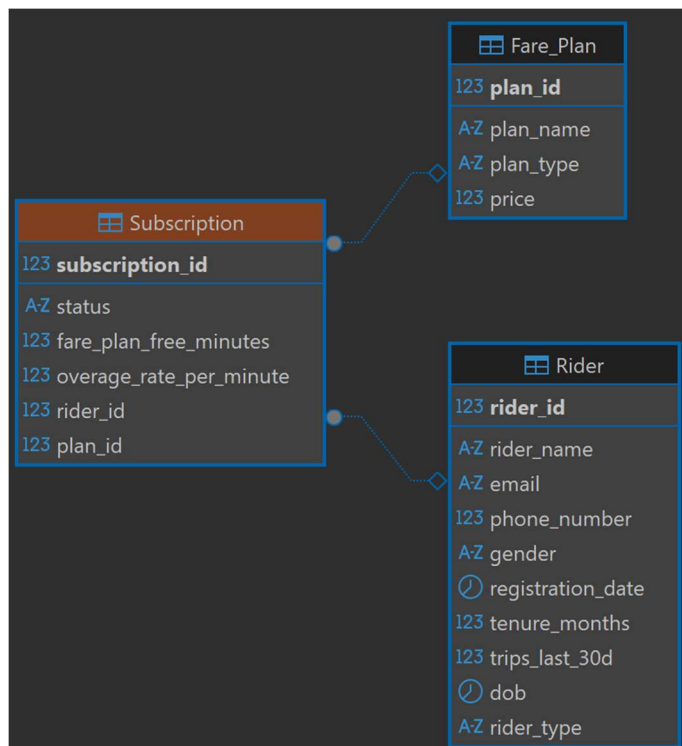
Virtual

Name	Value
Row Count	60
Avg Row Length	273
Data Length	16K
Max data length	0
Data free	0
Index length	48K
Row format	Dynamic
Create Time	2025-10-26 20:12:28.0
Update time	2025-11-02 17:01:25.0
Check time	

Subscription\_id was an AI synthesized, random number. The number is led by 5 digits 19212 for “S,” “U,” “B” for SUB in Subscription, then a separator zero, and then the random number for a total of 10 digits.

Fare\_plan\_free\_minutes, and overage\_rate\_per\_minute are actual data included in the original dataset.

Status was an AI randomly chosen selection between “active,” “cancelled,” and “paused.”



Properties		
Table Name:	Trip	Engine: Inn
Description:		Auto Increment: 0
		Charset: utf
Columns		
Name	Value	
Row Count	60	
Constraints		
Avg Row Length	273	
Data Length	16K	
Max data length	0	
References		
Data free	0	
Indexes		
Index length	96K	
Row format	Dynamic	
Create Time	2025-10-26 20:15:29.0	
Update time	2025-11-02 20:33:34.0	
Check time		
Statistics		
DDL		
Virtual		

Trip\_id was an AI synthesized sequential number with a leading 20 for “T” in Trip, and then a lot of separator zeroes, followed by the sequence starting at 1, with a grand total of 10 digits.

Every other column, aside from the Foreign Keys are data that was provided in the original dataset.



Properties	Data	Diagram
Table Name:	Weather	Engine:
Description:		Auto Increment:
		Charset:
Columns	Name	Value
Constraints	Row Count	60
Foreign Keys	Avg Row Length	273
References	Data Length	16K
Triggers	Max data length	0
Indexes	Data free	0
Partitions	Index length	16K
Statistics	Row format	Dynamic
DDL	Create Time	2025-11-03 08:18:39.0
Virtual	Update time	2025-11-03 08:19:05.0
	Check time	

Weather\_id is an AI synthesized number led by 2321 for “W,” and “U” because when we first generated the weather\_id data, we mistakenly generated a varchar identifier with a leading WU, which I then converted with 2321. Then there were separator zeroes and a sequential number starting at 1 for a grand total of 10 digits.

All other data in the table was provided by the original dataset.

