# Database Schema:

User (**user\_id**, name, subscription\_type, date\_created)

Subscription (**sub\_id**, user\_id, payment\_interval, payment\_cost, status, end\_date, purchase\_date)

Activities (**actv\_id**, user\_id, actv\_name, actv\_type, avg\_speed, duration, heartrate, upload\_date)

# ER Diagram:

A diagram of a user flow

Description automatically generated

# SQL Script Commands:

DROP DATABASE IF EXISTS dash;

CREATE DATABASE IF NOT EXISTS dash;

USE dash;

SHOW TABLES;

-- Create User table if it does not exist

CREATE TABLE IF NOT EXISTS Users (

user\_id INT PRIMARY KEY,

name VARCHAR(255),

subscription\_type VARCHAR(255),

date\_created DATE

);

-- Insert data into Users table

INSERT INTO Users (user\_id, name, subscription\_type, date\_created)

VALUES

(1, 'Jairus Martinez', 'free', '2016-09-13'),

(2, 'Haley Runyan', 'free', '2023-12-21'),

(3, 'Lionel Sanders', 'premium', '2011-4-21');

-- Create Subscription table if it does not exist

CREATE TABLE IF NOT EXISTS Subscriptions (

sub\_id INT PRIMARY KEY,

user\_id INT,

payment\_interval VARCHAR(255),

payment\_cost INT,

status VARCHAR(255),

end\_date DATE NULL,

purchase\_date DATE NULL,

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

);

-- Insert data into Subscriptions table

INSERT INTO Subscriptions (sub\_id, user\_id, payment\_interval, payment\_cost, status, end\_date, purchase\_date)

VALUES

(2, 3, 'monthly', 20, 'active', NULL, '2015-01-21');

-- Create Activities table if it does not exist

CREATE TABLE IF NOT EXISTS Activities (

actv\_id INT PRIMARY KEY,

user\_id INT,

actv\_name VARCHAR(255),

actv\_type VARCHAR(255),

avg\_speed INT,

duration INT,

heartrate INT,

upload\_date DATE, -- Added missing comma here

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

);

-- Insert data into Activities table for user\_id = 1

INSERT INTO Activities (actv\_id, user\_id, actv\_name, actv\_type, avg\_speed, duration, heartrate, upload\_date)

VALUES

(1, 1, 'Morning Run', 'Running', 8, 45, 150, '2024-01-25'),

(2, 1, 'Afternoon Cycling', 'Cycling', 20, 60, 120, '2024-01-26'),

(3, 1, 'Evening Hike', 'Hiking', 5, 120, 110, '2024-01-27'),

(4, 1, 'Indoor Workout', 'Gym', 10, 30, 130, '2024-01-28'),

(5, 1, 'Swimming Session', 'Swimming', 2, 60, 140, '2024-01-29');

-- Insert data into Activities table for user\_id = 2

INSERT INTO Activities (actv\_id, user\_id, actv\_name, actv\_type, avg\_speed, duration, heartrate, upload\_date)

VALUES

(6, 2, 'Cycling to Work', 'Cycling', 15, 30, 125, '2024-01-25'),

(7, 2, 'Yoga Session', 'Yoga', NULL, 45, NULL, '2024-01-26'),

(8, 2, 'Afternoon Walk', 'Walking', 4, 60, 105, '2024-01-27'),

(9, 2, 'Basketball Game', 'Sports', 12, 90, 140, '2024-01-28'),

(10, 2, 'Gym Training', 'Gym', 8, 45, 130, '2024-01-29');

-- Insert data into Activities table for user\_id = 3

INSERT INTO Activities (actv\_id, user\_id, actv\_name, actv\_type, avg\_speed, duration, heartrate, upload\_date)

VALUES

(11, 3, 'Morning Jog', 'Running', 7, 40, 155, '2024-01-25'),

(12, 3, 'Climbing Adventure', 'Climbing', 3, 180, 100, '2024-01-26'),

(13, 3, 'Bike Ride in Park', 'Cycling', 18, 60, 120, '2024-01-27'),

(14, 3, 'Cardio Workout', 'Gym', 9, 30, 135, '2024-01-28'),

(15, 3, 'Swimming Practice', 'Swimming', 3, 90, 145, '2024-01-29');

SHOW TABLES;

SELECT 'running describe Users' AS '';

DESCRIBE Users;

SELECT 'running describe Subscriptions' AS '';

DESCRIBE Subscriptions;

SELECT 'running describe Activities' AS '';

DESCRIBE Activities;

SELECT 'running select \* from Users' AS '';

SELECT \* FROM Users;

SELECT 'running select \* from Subscriptions' AS '';

SELECT \* FROM Subscriptions;

SELECT 'running select \* FROM Users U, Subscriptions S WHERE U.user\_id = S.user\_id' AS '';

SELECT \* FROM Users U, Subscriptions S WHERE U.user\_id = S.user\_id;

SELECT 'running select \* from Users U, Activities A where U.user\_id = A.user\_id' AS '';

SELECT \* FROM Users U, Activities A WHERE U.user\_id = A.user\_id;

# Terminal Output From SQL Script:

Last login: Thu Jan 25 20:35:48 on ttys076

You have new mail.

(base) jairusmartinez@Jairuss-MacBook-Pro week3 % mysql -u root -p

Enter password:

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 17

Server version: 8.0.33 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> source martinez\_jairus\_03.sql

Query OK, 3 rows affected (0.03 sec)

Query OK, 1 row affected (0.00 sec)

Database changed

Empty set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 3 rows affected (0.00 sec)

Records: 3 Duplicates: 0 Warnings: 0

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 5 rows affected (0.00 sec)

Records: 5 Duplicates: 0 Warnings: 0

Query OK, 0 rows affected (0.00 sec)

Query OK, 5 rows affected (0.00 sec)

Records: 5 Duplicates: 0 Warnings: 0

Query OK, 0 rows affected (0.00 sec)

Query OK, 5 rows affected (0.00 sec)

Records: 5 Duplicates: 0 Warnings: 0

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| Tables\_in\_dash |

+----------------+

| Activities |

| Subscriptions |

| Users |

+----------------+

3 rows in set (0.00 sec)

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| |

+------------------------+

| running describe Users |

+------------------------+

1 row in set (0.00 sec)

+-------------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------------+--------------+------+-----+---------+-------+

| user\_id | int | NO | PRI | NULL | |

| name | varchar(255) | YES | | NULL | |

| subscription\_type | varchar(255) | YES | | NULL | |

| date\_created | date | YES | | NULL | |

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4 rows in set (0.00 sec)

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+--------------------------------+

| running describe Subscriptions |

+--------------------------------+

1 row in set (0.00 sec)

+------------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+------------------+--------------+------+-----+---------+-------+

| sub\_id | int | NO | PRI | NULL | |

| user\_id | int | YES | MUL | NULL | |

| payment\_interval | varchar(255) | YES | | NULL | |

| payment\_cost | int | YES | | NULL | |

| status | varchar(255) | YES | | NULL | |

| end\_date | date | YES | | NULL | |

| purchase\_date | date | YES | | NULL | |

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7 rows in set (0.00 sec)

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| |

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| running describe Activities |

+-----------------------------+

1 row in set (0.00 sec)

+-------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+--------------+------+-----+---------+-------+

| actv\_id | int | NO | PRI | NULL | |

| user\_id | int | YES | MUL | NULL | |

| actv\_name | varchar(255) | YES | | NULL | |

| actv\_type | varchar(255) | YES | | NULL | |

| avg\_speed | int | YES | | NULL | |

| duration | int | YES | | NULL | |

| heartrate | int | YES | | NULL | |

| upload\_date | date | YES | | NULL | |

+-------------+--------------+------+-----+---------+-------+

8 rows in set (0.00 sec)

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| |

+-----------------------------+

| running select \* from Users |

+-----------------------------+

1 row in set (0.00 sec)

+---------+-----------------+-------------------+--------------+

| user\_id | name | subscription\_type | date\_created |

+---------+-----------------+-------------------+--------------+

| 1 | Jairus Martinez | free | 2016-09-13 |

| 2 | Haley Runyan | free | 2023-12-21 |

| 3 | Lionel Sanders | premium | 2011-04-21 |

+---------+-----------------+-------------------+--------------+

3 rows in set (0.00 sec)

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| |

+-------------------------------------+

| running select \* from Subscriptions |

+-------------------------------------+

1 row in set (0.00 sec)

+--------+---------+------------------+--------------+--------+----------+---------------+

| sub\_id | user\_id | payment\_interval | payment\_cost | status | end\_date | purchase\_date |

+--------+---------+------------------+--------------+--------+----------+---------------+

| 2 | 3 | monthly | 20 | active | NULL | 2015-01-21 |

+--------+---------+------------------+--------------+--------+----------+---------------+

1 row in set (0.00 sec)

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| |

+----------------------------------------------------------------------------+

| running select \* FROM Users U, Subscriptions S WHERE U.user\_id = S.user\_id |

+----------------------------------------------------------------------------+

1 row in set (0.00 sec)

+---------+----------------+-------------------+--------------+--------+---------+------------------+--------------+--------+----------+---------------+

| user\_id | name | subscription\_type | date\_created | sub\_id | user\_id | payment\_interval | payment\_cost | status | end\_date | purchase\_date |

+---------+----------------+-------------------+--------------+--------+---------+------------------+--------------+--------+----------+---------------+

| 3 | Lionel Sanders | premium | 2011-04-21 | 2 | 3 | monthly | 20 | active | NULL | 2015-01-21 |

+---------+----------------+-------------------+--------------+--------+---------+------------------+--------------+--------+----------+---------------+

1 row in set (0.00 sec)

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| |

+-------------------------------------------------------------------------+

| running select \* from Users U, Activities A where U.user\_id = A.user\_id |

+-------------------------------------------------------------------------+

1 row in set (0.00 sec)

+---------+-----------------+-------------------+--------------+---------+---------+--------------------+-----------+-----------+----------+-----------+-------------+

| user\_id | name | subscription\_type | date\_created | actv\_id | user\_id | actv\_name | actv\_type | avg\_speed | duration | heartrate | upload\_date |

+---------+-----------------+-------------------+--------------+---------+---------+--------------------+-----------+-----------+----------+-----------+-------------+

| 1 | Jairus Martinez | free | 2016-09-13 | 1 | 1 | Morning Run | Running | 8 | 45 | 150 | 2024-01-25 |

| 1 | Jairus Martinez | free | 2016-09-13 | 2 | 1 | Afternoon Cycling | Cycling | 20 | 60 | 120 | 2024-01-26 |

| 1 | Jairus Martinez | free | 2016-09-13 | 3 | 1 | Evening Hike | Hiking | 5 | 120 | 110 | 2024-01-27 |

| 1 | Jairus Martinez | free | 2016-09-13 | 4 | 1 | Indoor Workout | Gym | 10 | 30 | 130 | 2024-01-28 |

| 1 | Jairus Martinez | free | 2016-09-13 | 5 | 1 | Swimming Session | Swimming | 2 | 60 | 140 | 2024-01-29 |

| 2 | Haley Runyan | free | 2023-12-21 | 6 | 2 | Cycling to Work | Cycling | 15 | 30 | 125 | 2024-01-25 |

| 2 | Haley Runyan | free | 2023-12-21 | 7 | 2 | Yoga Session | Yoga | NULL | 45 | NULL | 2024-01-26 |

| 2 | Haley Runyan | free | 2023-12-21 | 8 | 2 | Afternoon Walk | Walking | 4 | 60 | 105 | 2024-01-27 |

| 2 | Haley Runyan | free | 2023-12-21 | 9 | 2 | Basketball Game | Sports | 12 | 90 | 140 | 2024-01-28 |

| 2 | Haley Runyan | free | 2023-12-21 | 10 | 2 | Gym Training | Gym | 8 | 45 | 130 | 2024-01-29 |

| 3 | Lionel Sanders | premium | 2011-04-21 | 11 | 3 | Morning Jog | Running | 7 | 40 | 155 | 2024-01-25 |

| 3 | Lionel Sanders | premium | 2011-04-21 | 12 | 3 | Climbing Adventure | Climbing | 3 | 180 | 100 | 2024-01-26 |

| 3 | Lionel Sanders | premium | 2011-04-21 | 13 | 3 | Bike Ride in Park | Cycling | 18 | 60 | 120 | 2024-01-27 |

| 3 | Lionel Sanders | premium | 2011-04-21 | 14 | 3 | Cardio Workout | Gym | 9 | 30 | 135 | 2024-01-28 |

| 3 | Lionel Sanders | premium | 2011-04-21 | 15 | 3 | Swimming Practice | Swimming | 3 | 90 | 145 | 2024-01-29 |

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15 rows in set (0.00 sec)

mysql>