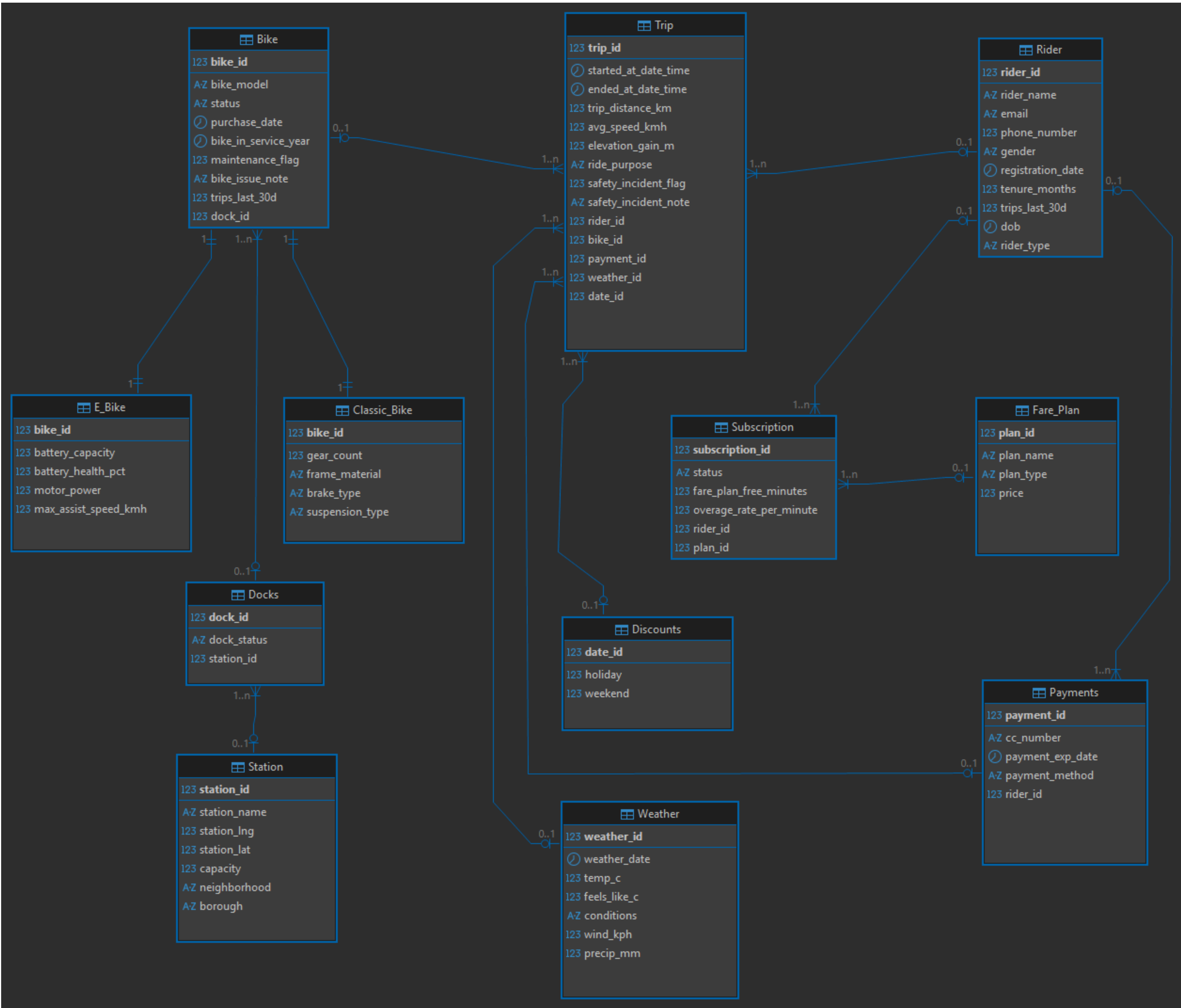# Group 3 - Project Deliverable 4

DBeaver ERD in MariaDB

Draw.io ERD

DBeaver ERD in MariaDB

Bike
- bike_id
- bike_model
- status
- purchase_date
- bike_in_service_year
- maintenance_flag
- bike_issue_note
- trips_last_30d
- dock_id

Trip
- trip_id
- started_at_date_time
- ended_at_date_time
- trip_distance_km
- avg_speed_kmh
- elevation_gain_m
- ride_purpose
- safety_incident_flag
- safety_incident_note
- rider_id
- bike_id
- payment_id
- weather_id
- date_id

Rider
- rider_id
- rider_name
- email
- phone_number
- gender
- registration_date
- tenure_months
- trips_last_30d
- dob
- rider_type

E_Bike
- bike_id
- battery_capacity
- battery_health_pct
- motor_power
- max_assist_speed_kmh

Classic_Bike
- bike_id
- gear_count
- frame_material
- brake_type
- suspension_type

Subscription
- subscription_id
- status
- fare_plan_free_minutes
- overage_rate_per_minute
- rider_id
- plan_id

Fare_Plan
- plan_id
- plan_name
- plan_type
- price

Docks
- dock_id
- dock_status
- station_id

Discounts
- date_id
- holiday
- weekend

Payments
- payment_id
- cc_number
- payment_exp_date
- payment_method
- rider_id

Station
- station_id
- station_name
- station_lng
- station_lat
- capacity
- neighborhood
- borough

Weather
- weather_id
- weather_date
- temp_c
- feels_like_c
- conditions
- wind_kph
- precip_mm

Draw.io ERD

Bike
- PK bike_id : INT
- bike_model (E, C) : ENUM('Classic 1', 'Classic 2', 'E-Bike')
- status : ENUM('AVAILABLE', 'OUT OF USE', 'IN USE')
- purchase_date : DATE
- bike_in_service_year : YEAR
- maintenance_flag : BOOLEAN
- bike_issue_note : VARCHAR(500)
- trips_last_30d : SMALLINT
- FK dock_id : INT

Trip
- PK trip_id : INT
- started_at_date_time : DATETIME
- ended_at_date_time : DATETIME
- trip_distance_km : DECIMAL(6,2)
- avg_speed_kmh : DECIMAL(5,2)
- elevation_gain_m : DECIMAL(6,1)
- ride_purpose : VARCHAR(50)
- safety_incident_flag : BOOLEAN
- safety_incident_note : VARCHAR(500)
- FK rider_id : INT
- FK bike_id : INT
- FK payment_id : INT
- FK weather_id : INT
- FK date_id : INT

Rider
- PK rider_id : INT
- rider_name : VARCHAR(100)
- email : VARCHAR(254)
- phone_number : BIGINT
- gender : ENUM('M','F','Other','Prefer not to say')
- registration_date : DATE
- tenure_months : SMALLINT
- trips_last_30d : SMALLINT
- dob : DATE
- rider_type : ENUM('member', 'casual')

E-Bike (E)
- PK/F bike_id : INT
- battery_capacity : SMALLINT
- battery_health_pct : DECIMAL(5,2)
- motor_power : SMALLINT
- max_assist_speed_kmh : DECIMAL(4,1)

Classic Bike (C)
- PK/F bike_id : INT
- gear_count : TINYINT
- frame_material : VARCHAR(30)
- brake_type : VARCHAR(30)
- suspension_type : VARCHAR(30)

Subscription
- PK subscription_id : INT
- status : ENUM ('active','paused','canceled')
- fare_plan_free_minutes : SMALLINT
- overage_rate_per_minute : DECIMAL(2,2)
- FK rider_id : INT
- FK plan_id : INT

Fare Plan
- PK plan_id : INT
- plan_name : VARCHAR(50)
- plan_type : VARCHAR(30)
- price : DECIMAL(8,2)

Docks
- PK dock_id : INT
- dock_status : ENUM('available','occupied','out of service')
- FK station_id

Discounts
- PK date_id : INT
- holiday : BOOLEAN
- weekend : BOOLEAN

Payments
- PK payment_id : INT
- cc_number : VARCHAR(20)
- payment_exp_date : DATE
- payment_method : VARCHAR(20)
- FK rider_id : INT

Station
- PK station_id : INT
- station_name : VARCHAR(100)
- station_lng : DECIMAL(9,6)
- station_lat : DECIMAL(9,6)
- capacity : SMALLINT
- neighborhood : VARCHAR(80)
- borough : VARCHAR(80)

Weather
- PK weather_id : INT
- weather_date : DATE
- temp_c : DECIMAL(2,1)
- feels_like_c : DECIMAL(2,1)
- conditions : VARCHAR(50)
- wind_kph : DECIMAL(3,1)
- precip_mm : DECIMAL(3,1)

Relationship labels: goes on, takes, has, contains, made of, made in, is used, holds, was, has