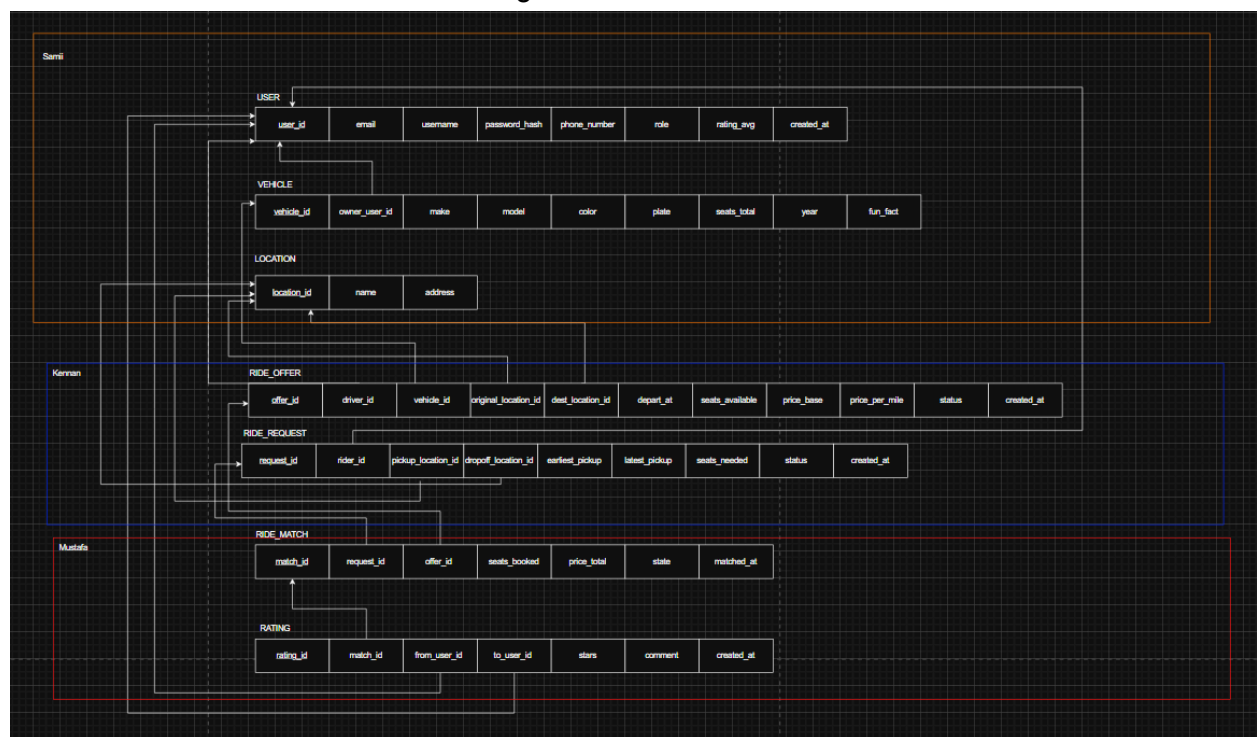


I, Samii Shabuse, have read this report and attest that the contents are true and correct.

I, Mustafa Bookwala, have read this report and attest that the contents are true and correct.

For the team's relational diagram, we all worked collaboratively on all parts of it, but my main contributions were mapping out the ride_offer and ride_request entities from the ER to the Relational diagram, while Samii and Mustafa took primary ownership of the other entities we had to map out. For the SQL DDL file, I helped write out their respective tables (ride_offer and ride_request) and defined the attributes necessary that we had mapped out in our ER and relational diagrams. Again, there was a lot of general collaboration involved in creating the SQL DDL file.

Contributions made to the relational diagram:



Contributions made to the SQL DDL file:

```

36  -- RIDE_OFFER Table for Ride Offers
37  CREATE TABLE "RIDE_OFFER" (
38      offer_id          INTEGER PRIMARY KEY,
39      driver_id         INTEGER NOT NULL,
40      vehicle_id        INTEGER NOT NULL,
41      original_location_id INTEGER NOT NULL,
42      dest_location_id  INTEGER NOT NULL,
43      depart_at         TEXT NOT NULL,
44      seats_available   INTEGER NOT NULL CHECK (seats_available >= 0),
45      price_base        NUMERIC(10,2) NOT NULL CHECK (price_base >= 0),
46      price_per_mile    NUMERIC(10,2) NOT NULL CHECK (price_per_mile >= 0),
47      status            TEXT NOT NULL CHECK (status IN ('open','closed','cancelled','full')),
48      created_at        TEXT NOT NULL DEFAULT (datetime('now')),
49      FOREIGN KEY (driver_id) REFERENCES "USER"(user_id),
50      FOREIGN KEY (vehicle_id) REFERENCES "VEHICLE"(vehicle_id),
51      FOREIGN KEY (original_location_id) REFERENCES "LOCATION"(location_id),
52      FOREIGN KEY (dest_location_id) REFERENCES "LOCATION"(location_id)
53  );
54
55  -- RIDE_REQUEST Table for Ride Requests
56  CREATE TABLE "RIDE_REQUEST" (
57      request_id        INTEGER PRIMARY KEY,
58      rider_id          INTEGER NOT NULL,
59      pickup_location_id INTEGER NOT NULL,
60      dropoff_location_id INTEGER NOT NULL,
61      earliest_pickup   TEXT NOT NULL,
62      latest_pickup     TEXT,
63      seats_needed       INTEGER NOT NULL CHECK (seats_needed >= 1),
64      status            TEXT NOT NULL CHECK (status IN ('open','matched','cancelled','expired')),
65      created_at        TEXT NOT NULL DEFAULT (datetime('now')),
66      FOREIGN KEY (rider_id) REFERENCES "USER"(user_id),
67      FOREIGN KEY (pickup_location_id) REFERENCES "LOCATION"(location_id),
68      FOREIGN KEY (dropoff_location_id) REFERENCES "LOCATION"(location_id),
69      CHECK (latest_pickup IS NULL OR latest_pickup >= earliest_pickup)
70  );

```