|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Name** | **Matrix No** | **Photo** |
| 1 | NURUL ANIS HAFIFZA BINTI AMRAN | B122410321 | A person wearing a black head scarf  AI-generated content may be incorrect. |
| 2 | NUR AIN HIDAYAH BINTI ABDUL RAHIM | B122410323 | A person wearing a head scarf  AI-generated content may be incorrect. |

##### 

##### **UNIVERSITI TEKNIKAL MALAYSIA MELAKA**

**FAKULTI TEKNOLOGI DAN KEJURUTERAAN ELEKTRONIK DAN KOMPUTER**

**BERR 2243**

**DATABASE & CLOUD SYSTEM**

**SEM 2 2024/2025**

**EXERCISE: WEEK 5**

**NUR AIN HIDAYAH BINTI ABDUL RAHIM ( B122410323 )**

1. **ERD Diagram:**

<https://drive.google.com/file/d/1OWL8NuBGLV7otm-wa2UznoRCFV_EOxVF/view?usp=sharing>

**2. Schema Definitions:**

List of collections, fields, and data types.

1. **User**

|  |
| --- |
|  \_id (ObjectId) – ID for each user   name (String) – user name   email (String, unique) – email   password (String) – users password   phoneNumber (String) – users phone number   role (String) – User role customer/driver/admin   createdAt (Date) – user register date |

1. **Ride**

|  |
| --- |
| * \_id (ObjectId) – Unique ID for each ride. * customerId (ObjectId → User) – ID of the user who made the booking. * driverId (ObjectId → User) – ID of the driver who accepted the booking. * pickupLocation (Object: { lat: Number, lng: Number }) – Starting location. * destination (Object: { lat: Number, lng: Number }) – Destination location. * status (String) – Ride status: "requested", "accepted", "in\_progress", "completed", "cancelled". * fare (Number) – Fare amount. * createdAt (Date) – Date and time the booking was made. |

1. **Vehicle**

|  |
| --- |
| * \_id (ObjectId) – Unique ID for each vehicle. * driverId (ObjectId → User) – ID of the driver who owns the vehicle. * plateNumber (String) – Vehicle plate number. * model (String) – Vehicle model. * color (String) – Vehicle color. * type (String) – Type of vehicle: "car", "motorcycle". * year (Number) – Vehicle manufacturing year. |

1. **Payment**

|  |
| --- |
| * \_id (ObjectId) – Unique ID for each payment. * rideId (ObjectId → Ride) – ID of the related ride. * amount (Number) – Payment amount. * paymentMethod (String) – Payment method: "credit\_card", "cash", "e-wallet". * paymentStatus (String) – Payment status: "pending", "completed", "failed". * paidAt (Date) – Payment date. |

1. **Rating**

|  |
| --- |
| * \_id (ObjectId) – Unique ID for each rating. * rideId (ObjectId → Ride) – ID of the ride being rated. * givenBy (ObjectId → User) – User who gave the rating. * givenTo (ObjectId → User) – User who received the rating. * score (Number) – Rating score (1 to 5). * comment (String) – Additional comments or feedback. * createdAt (Date) – Date the rating was given. |

**NURUL ANIS HAFIFZA BINTI AMRAN ( B122410321 )**

1. **ERD Diagram:**

[**https://lucid.app/lucidspark/68f30f4d-5024-40fd-a2cc-1eb1575d355e/edit?viewport\_loc=-809%2C-450%2C2846%2C1318%2C0\_0&invitationId=inv\_8d192388-80da-46ee-9bec-c09051438c43**](https://lucid.app/lucidspark/68f30f4d-5024-40fd-a2cc-1eb1575d355e/edit?viewport_loc=-809%2C-450%2C2846%2C1318%2C0_0&invitationId=inv_8d192388-80da-46ee-9bec-c09051438c43)

**2. Schema Definitions:**

List of collections, fields, and data types.

|  |  |
| --- | --- |
| **User (customer, driver, admin)** | |
| **Field** | **Data Types** |
| **\_id** | **ObjectId** |
| **name** | **String** |
| **email** | **String, unique** |
| **password** | **String** |
| **role** | **String: role “customer” , “driver” , “admin”** |
| **status** | **String: active, block** |

|  |  |
| --- | --- |
| **Rides** | |
| **Field** | **Data Types** |
| **\_id** | **ObjectId** |
| **customer\_id** | **ObjectId: customerId** |
| **driverIid** | **ObjectId: driverId** |
| **VehicleId** |  |
| **pickup** | **String** |
| **destination** | **String** |
| **dateTime** | **DateTime** |
| **fare** | **Number** |
| **status (request, accepted, rejected)** | **String: requested, accepted, rejected** |

|  |  |
| --- | --- |
| **Vehicles** | |
| **Field** | **Data Types** |
| **\_id** | **ObjectId** |
| **driverId** | **ObjectId: driverId** |
| **vehicleType** | **String** |
| **plateNumber** | **String** |
| **color** | **String** |
| **Status (available, unavailable)** | **String: available, unavailable** |