

**Ridesharing App**

The development team of company X has received a new project. They must implement a ridesharing system, so the end users can book a trip using someone’s shared car. The end users will interact with the system via a mobile app. The mobile app will communicate with a back-end app using REST. The data will be stored in an SQL database.

Diagram

Description automatically generated

The first requirements for the back-end app are to provide endpoints that can facilitate:

* Adding a driver
* Updating a driver
* Getting the list of drivers by name or city

The following business rules need to be in place for each endpoint:

* Adding a driver: the request body and response body are mapped according to the table below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field name** | **Present on the request** | **Mandatory on request** | **Present on response** | **Other validations** |
| id | no | no | yes | PK, auto-generated on DB level |
| name | yes | yes | yes | String with max length of 100 |
| email | yes | yes | yes | String with max length of 100  Unique (you cannot add 2 drivers with the same email) |
| city | yes | yes | yes | String with max length of 100 |

* Updating a driver: driverId is in the path, the request body and response body are mapped according to the table below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field name** | **Present on the request** | **Mandatory on request** | **Present on response** | **Other validations** |
| id | yes | yes | yes | Cannot be updated |
| name | yes | yes | yes | String with max length of 100 |
| email | yes | yes | yes | String with max length of 100  Unique (you cannot add 2 drivers with the same email) |
| city | yes | yes | yes | String with max length of 100 |

* Getting the list of drivers by name or city: the name and / or city is provided in the url of the request. The response should contain all details for each driver.

Unit tests should be implemented for the service methods, with a coverage of at least 70% per line.

The type of the SQL DB is chosen by the development team.