**DESIGN DOCUMENT**

**FOR**

**Book A Ride**

**BY GEEKS**

**(SARANG & NIKET)**

1. Class Diagram

Inherits

Has A

Captain

Ride

Location

Customer

Person (Abstract)

Iperson(Interface)

Ride Having selected Source, selected Destination, pickup location, Drop Location

Inherits

Has A

Classes and DataBase tables

class Person, Table Person

|  |  |  |  |
| --- | --- | --- | --- |
| Class Data Members | Class Data Types | DB Column Names | DB column Types |
| personId | Int | personId | NUMBER |
| firstName | String | firstName | VARCHAR2 |
| middleName | String | middleName | VARCHAR2 |
| lastName | String | lastName | VARCHAR2 |
| dateOfBirth | Date | dateOfBirth | DATE |
| gender | char | gender | VARCHAR2 |
|  |  |  |  |

class Captain, Table Captain

|  |  |  |  |
| --- | --- | --- | --- |
| Class Data Members | Class Data Types | DB Column Names | DB column Types |
| captainId | Int | captainId | NUMBER |
| rating | Float | rating | NUMBER |
| currentLocation | Location | currentLocationId(foreign key) | NUMBER |
| lastUpatedDateTime | Date | lastUpatedDateTime | TimeStamp |
| locationHistory | List< CaptainsLocation > |  |  |
| carType | Int | carType(foreign key) | NUMBER |
|  |  | personId (foreign key) | NUMBER |

Class Customer, Table Customer

|  |  |  |  |
| --- | --- | --- | --- |
| Class Data Members | Class Data Types | DB Column Names | DB column Types |
| customerId | Int | customerId | NUMBER |
| rating | Float | rating | NUMBER |
| currentLocation | Location | currentLocationId(foreign key) | NUMBER |
| lastUpatedDateTime | Date | lastUpatedDateTime | TimeStamp |
|  |  | personId (foreign key) | NUMBER |
|  |  |  |  |

Class Ride , Table Ride

|  |  |  |  |
| --- | --- | --- | --- |
| Class Data Members | Class Data Types | DB Column Names | DB column Types |
| customerId | int | customerId (foreign key) | NUMBER |
| captainId | int | captainId (foreign key) | NUMBER |
| expectedStartLocation | Location | expectedStartLocationId(foreign key) | NUMBER |
| expectedEndLocation | Location | expectedEndLocationId(foreign key) | NUMBER |
| actualStartLocation | Location | actualStartLocationId(foreign key) | NUMBER |
| actualEndLocation | Location | actualEndLocationId(foreign key) | NUMBER |
| customerRating | Float | customerRating | NUMBER |
| captainRating | Float | captainRating | NUMBER |
| ETA | int | ETA | NUMBER |
| rideStatus | int | rideStatus | NUMBER |
| requestTime | Date | requestTime | TIMESTAMP |
| actualArrivalTime | Date | actualArrivalTime | TIMESTAMP |
| completionTime | Date | completionTime | TIMESTAMP |
| fare | Float | fare | NUMBER |
| currency | String | currency | VARCHAR2 |

Class Location , Table Location

|  |  |  |  |
| --- | --- | --- | --- |
| Class Data Members | Class Data Types | DB Column Names | DB column Types |
| locationId | int | locationId | NUMBER |
| Longitude | Double | longitude | NUMBER |
| Latitude | Double | latitude | NUMBER |

Class CaptainsLocation, table CaptainsLocation

|  |  |  |  |
| --- | --- | --- | --- |
| Class Data Members | Class Data Types | DB Column Names | DB column Types |
| locationId | int | locationId(foreign key) | NUMBER |
| captainId | int | captainId (foreign key) | NUMBER |
| requestTime | Date | requestTime | TIMESTAMP |

Class CarType, table CarType

|  |  |  |  |
| --- | --- | --- | --- |
| Class Data Members | Class Data Types | DB Column Names | DB column Types |
| carTypeId | int | carTypeId | NUMBER |
| carType | String | carType | VARCHAR2 |