

Lab: Hibernate Code First

This document defines the lab assignments for the ["Spring Data" course at Software University](#).

1. Vehicle Hierarchy

Your task is to **create a Vehicle hierarchy**.

Vehicle - Abstract Class

- Has an **Id** – **Long**
- Has a **Type** - **String**
- Has a **Model** - **String**
- Has a **Price** - **BigDecimal**
- Has a **fuelType** - **String**

Car

Extends from the **Vehicle** class

- Has **Seats** - **Integer**

Truck

Extends from the **Vehicle** class

- Has **loadCapacity** - **Double**

Bike

Extends from the **Vehicle** class

Plane

Extends from the **Vehicle** class

- Has **passengerCapacity** - **Integer**

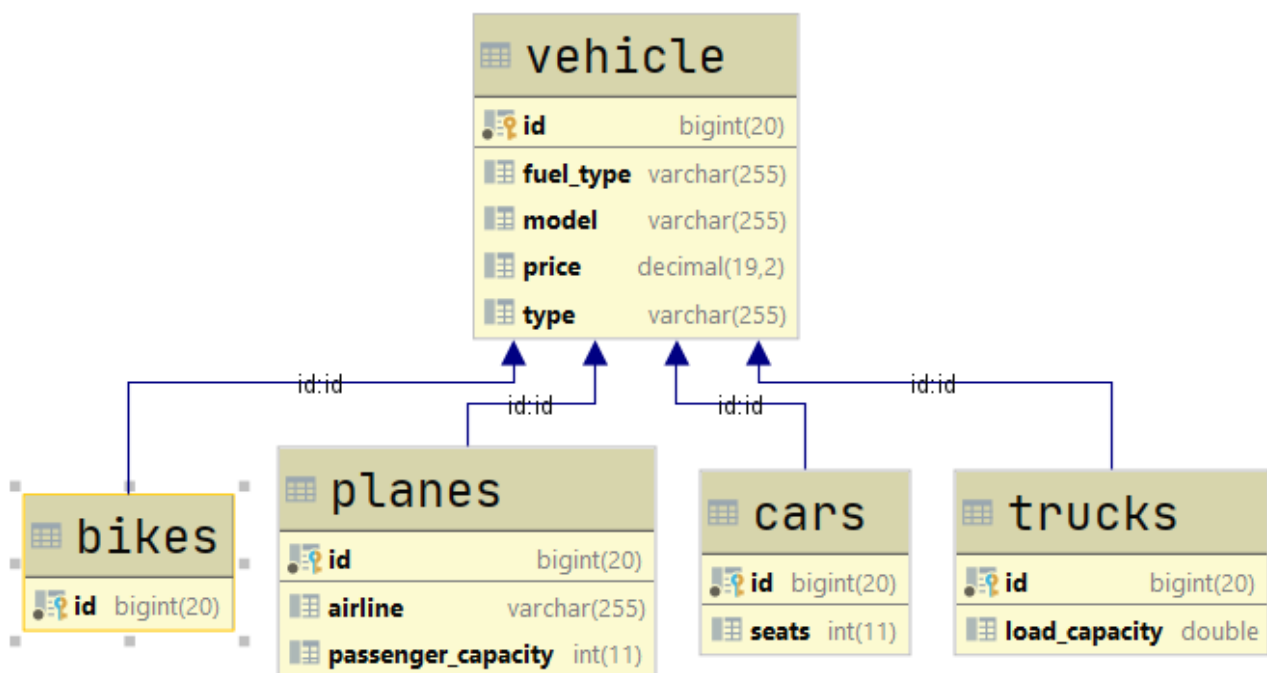
Use the appropriate **inheritance types** to reach **the diagrams** in the examples.











planes	
id	bigint(20)
fuel_type	varchar(255)
model	varchar(255)
price	decimal(19,2)
type	varchar(255)
airline	varchar(255)
passenger_capacity	int(11)

cars	
id	bigint(20)
fuel_type	varchar(255)
model	varchar(255)
price	decimal(19,2)
type	varchar(255)
seats	int(11)

trucks	
id	bigint(20)
fuel_type	varchar(255)
model	varchar(255)
price	decimal(19,2)
type	varchar(255)
load_capacity	double

bikes	
id	bigint(20)
fuel_type	varchar(255)
model	varchar(255)
price	decimal(19,2)
type	varchar(255)

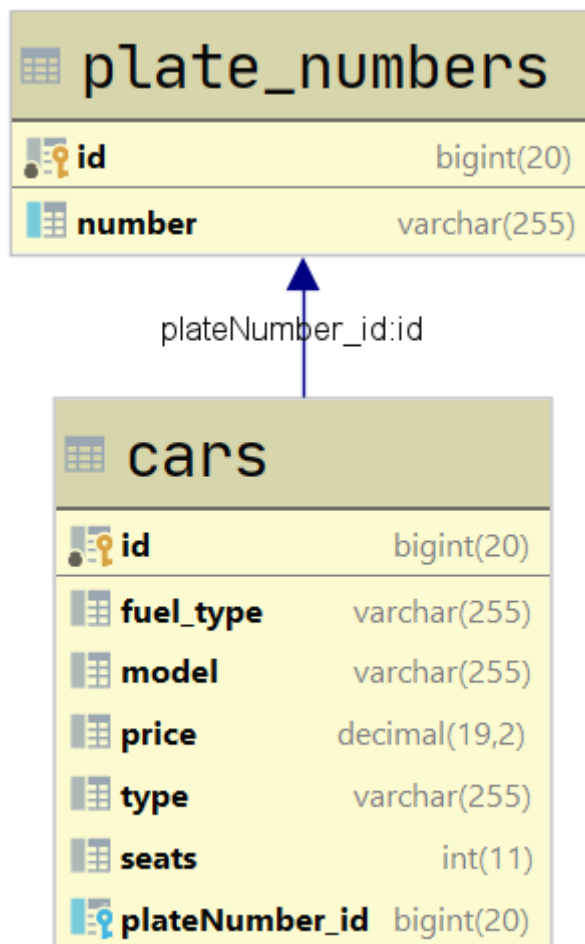


vehicle	
 id	bigint(20)
 DTYPE	varchar(31)
 fuel_type	varchar(255)
 model	varchar(255)
 price	decimal(19,2)
 type	varchar(255)
 airline	varchar(255)
 passenger_capacity	int(11)
 seats	int(11)
 load_capacity	double

2. Relations

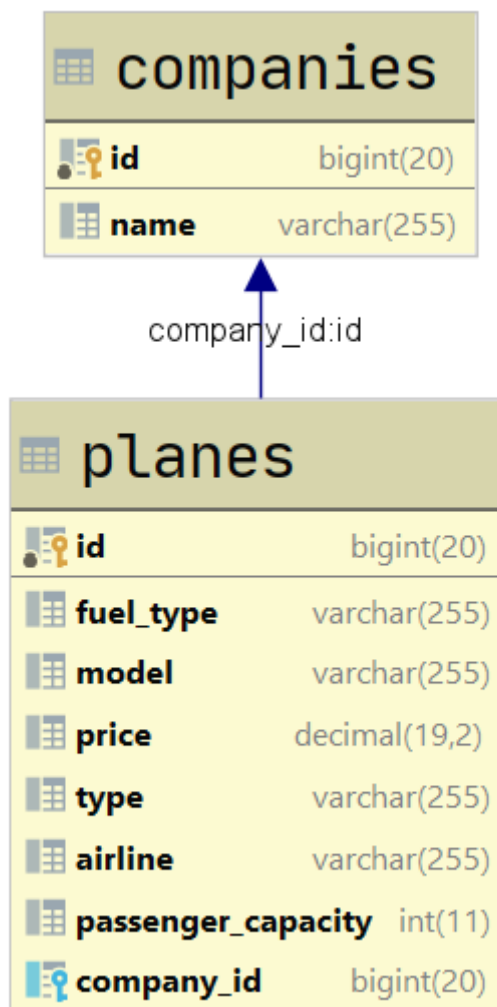
Plate_number

- Has an **id** - **BigInteger**
- Has a **number** - **String**
- Has a **one to one** relations with **Cars**



Companies

- Has an **id** - **BigInteger**
- Has a **name** - **String**
- Has a **one to many** relations with **Planes**



Drivers

- Has an **id** - **BigInteger**
- Has a **full_name** - **String**
- Has a **many to many** relations with **Cars**

