

## Solution Architecture

### Architecture

This project is implemented through a Spring Boot Application using MVC. This is an application design pattern which is composed of three interconnected parts, such as Model (data), View (user interface) and Controller (processes that handle input). It is a good pattern for implementing our project because it works well with OOP, since different models, views and controllers can be treated as objects and be reused within out application.

1. Model

Data used by a program are settled in this layer. This can be anything; database, file, simple object etc.. In our case we are going to use a MySQL database.

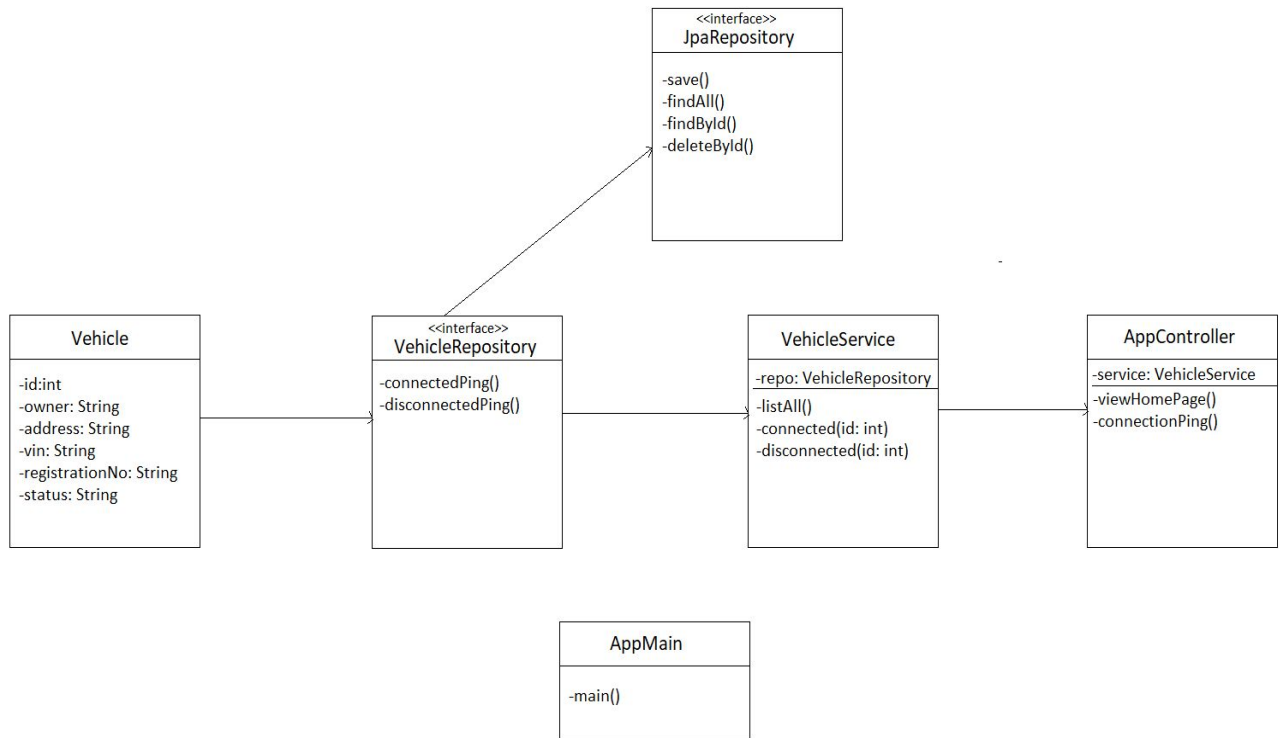
2. View

This layer stands for displaying objects within the application. It includes anything that the user can see. In our case, "index.html" and "new\_vehicle.html" are files that interact with the user.

3. Controller

It updates both models and views. Controller will accept any input from the user and performs the corresponding update. For example our controller will update the model by randomly changing the vehicles status. Also, it will modify the view by displaying the updated status in the database.

In the diagram below you will find how we can implement our project using MVC pattern:



## Technologies

The diagram below, shows technologies used for each layer which are used to implement our project.

