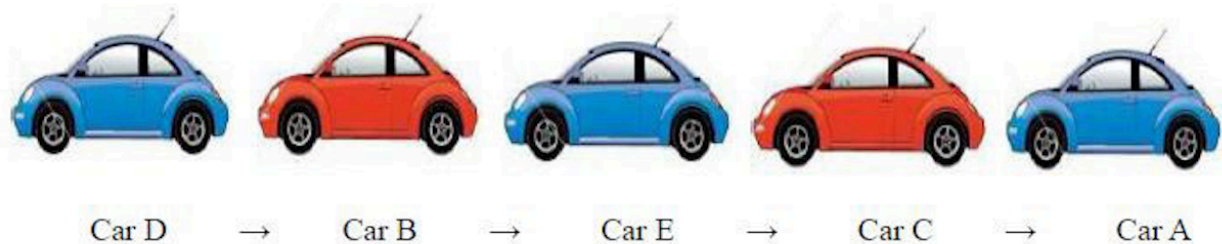


Problem

Design and develop a web page for storing and managing (CRUD) an ordered list of 1000 cars in a relational database.

Here is an example:



Constraints

The cars need to be queried by color and returned in order. For example, clicking on “show blue cars” should return Cars D,E, and A, in that specific order.

The cars need to be moved often. For example, Car C can be moved in front of Car B and Car D can be moved in front of Car A. **This needs to be implemented very efficiently, updating as few records as possible.**

Solution

Please provide the following:

- Schema for the database tables used, including indexes, if any.
- Code using either PHP or Python. Database can be Sqlite3 or MySQL.
- This is your chance to demonstrate your skills so using one or more of the following is highly encouraged (but not strictly required):
 - jQuery (or equivalent Javascript library)
 - HTML 5
 - Responsive Web Design
 - SASS
 - Twitter Bootstrap (or equivalent CSS framework)
 - Clean OOP coding style



- Test Driven Development
- Sensible code-level documentation
- Git
- MVC

Please zip/rar all source codes and database files and send to dev.team@valens-securities.com -- or better yet, create a Github repo then send us the URL.

In the email, please include comments regarding any assumptions or trade-offs you made.

Thank you.