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CSM3023

WEB BASED APPLICATION DEVELOPMENT

DR FAIZAH BINTI APLOP

OMAR ISMAIL ABDJALEEL ALOMORY

LAB 8(MP2)

Creating MVC Database Web Application in JSP and Servlets – for Create, Read, Update, Delete

Creating the database.

```sql
CREATE DATABASE IF NOT EXISTS Company;
USE Company;

CREATE TABLE IF NOT EXISTS employees(
    id INT NOT NULL AUTO_INCREMENT,
    Name VARCHAR(60),
    Email VARCHAR(50),
    Position VARCHAR(15),
    PRIMARY KEY (id)

);
```

Requirements:

- Run index.jsp page.
- Click List All User button to show all records.
- Click Add User button to create new record.
- Click hyperlink Update to do edit/update an existing record.
- Click hyperlink Delete to do delete an existing record.

Run index.jsp page.

Application MVC system for Employee Management

- All Employee List
- Add a new Employee
- Edit Employee

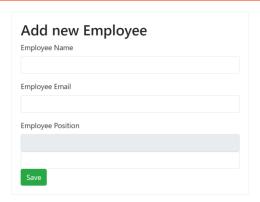**Click List All User button to show all records.**

Employee Management App   Employee

List of Employees

Add new Employee

ID	Name	Email	Position	Action	
7	Omar	Omar@something.com	Director	Edit	Delete
8	Gary Lim	gary@something.com	Director	Edit	Delete
9	Najmudin	Najm@something.com	Head of Dept	Edit	Delete

Click Add User button to create new record.

Add new Employee

Employee Name

Employee Email

Employee Position

Save

Add new Employee

Employee Name

Nur Hassan

Employee Email

NurHassan@gmail.com

Employee Position

Head of Dept ▼

Save

List of Employees

Add new Employee

ID	Name	Email	Position	Action
7	Omar	Omar@something.com	Director	Edit Delete
8	Gary Lim	gary@something.com	Director	Edit Delete
9	Najmudin	Najm@something.com	Head of Dept	Edit Delete
12	Nur Hassan	NurHassan@gmail.com	Head of Dept	Edit Delete

Click hyperlink Update to do edit/update an existing record.

Click hyperlink Delete to do delete an existing record.

List of Employees

Add new Employee

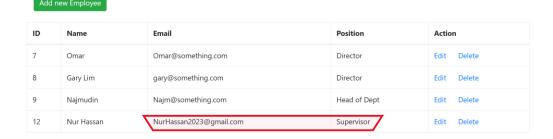| ID	Name	Email	Position	Action
7	Omar	Omar@something.com	Director	Edit Delete
8	Gary Lim	gary@something.com	Director	Edit Delete
9	Najmudin	Najm@something.com	Head of Dept	Edit Delete
12	Nur Hassan	NurHassan2023@gmail.com	Supervisor	Edit Delete

List of Employees

Add new Employee

ID	Name	Email	Position	Action
7	Omar	Omar@something.com	Director	Edit Delete
8	Gary Lim	gary@something.com	Director	Edit Delete
9	Najmudin	Najm@something.com	Head of Dept	Edit Delete

Lab exercise

The application should be able to handle these activities:

- View all data
- Add new data
- Edit/Update current data
- Delete the specific data

View all data:

List of Cars Prices System(*Lab Exercise*)

- All Car Prices
- Add a new Car
- Edit Car Information

| Car Management App | Car List |

List of Cars

Add new Car

Car ID	Brand	Model	Cylinders	Price	Action
1	Toyota	Corolla	4	RM25,000.00	Edit Delete
2	Honda	Civic	4	RM27,000.00	Edit Delete
3	Ford	Mustang	8	RM50,000.00	Edit Delete
4	Chevrolet	Camaro	6	RM45,000.00	Edit Delete
5	BMW	M3	6	RM60,000.00	Edit Delete
6	Mercedes-Benz	C-Class	4	RM55,000.00	Edit Delete
7	Audi	A4	4	RM52,000.00	Edit Delete

Add new data :

Car ID	Brand	Model	Cylinders	Price	Action
1	Toyota	Corolla	4	RM25,000.00	Edit Delete
2	Honda	Civic	4	RM27,000.00	Edit Delete
3	Ford	Mustang	8	RM50,000.00	Edit Delete
4	Chevrolet	Camaro	6	RM45,000.00	Edit Delete
5	BMW	M3	6	RM60,000.00	Edit Delete
6	Mercedes-Benz	C-Class	4	RM55,000.00	Edit Delete
7	Audi	A4	4	RM52,000.00	Edit Delete
8	Nissan	Altima	4	RM28,000.00	Edit Delete
9	Hyundai	Elantra	4	RM23,000.00	Edit Delete
10	Kia	Optima	4	RM25,000.00	Edit Delete
12	Toyota	Camry 2002	4	RM40,000.00	Edit Delete

Edit/Update current data:

Car ID	Brand	Model	Cylinders	Price	Action
1	Toyota	Corolla	4	RM25,000.00	Edit Delete
2	Honda	Civic	4	RM27,000.00	Edit Delete
3	Ford	Mustang	8	RM50,000.00	Edit Delete
4	Chevrolet	Camaro	6	RM45,000.00	Edit Delete
5	BMW	M3	6	RM60,000.00	Edit Delete
6	Mercedes-Benz	C-Class	4	RM55,000.00	Edit Delete
7	Audi	A4	4	RM52,000.00	Edit Delete
8	Nissan	Altima	4	RM28,000.00	Edit Delete
9	Hyundai	Elantra	4	RM23,000.00	Edit Delete
10	Kia	Optima	4	RM25,000.00	Edit Delete
12	Toyota	Camry 2002	4	RM40,000.00	Edit Delete

localhost:8080/Lab8/CarServlet?action=edit&id=12

Edit Car

Brand Name

Toyota

Car Model

Camry 2002

Car Cylinders

4

Price(MYR)

40000.0

Save

Edit Car

Brand Name

Toyota

Car Model

Camry 2002

Car Cylinders

4

4 Cylinders

Price(MYR)

45000.0

Save

Car ID	Brand	Model	Cylinders	Price	Action
1	Toyota	Corolla	4	RM25,000.00	Edit Delete
2	Honda	Civic	4	RM27,000.00	Edit Delete
3	Ford	Mustang	8	RM50,000.00	Edit Delete
4	Chevrolet	Camaro	6	RM45,000.00	Edit Delete
5	BMW	M3	6	RM60,000.00	Edit Delete
6	Mercedes-Benz	C-Class	4	RM55,000.00	Edit Delete
7	Audi	A4	4	RM52,000.00	Edit Delete
8	Nissan	Altima	4	RM28,000.00	Edit Delete
9	Hyundai	Elantra	4	RM23,000.00	Edit Delete
10	Kia	Optima	4	RM25,000.00	Edit Delete
12	Toyota	Camry 2002	4	RM45,000.00	Edit Delete

Delete the specific data:

Car ID	Brand	Model	Cylinders	Price	Action
1	Toyota	Corolla	4	RM25,000.00	Edit Delete
2	Honda	Civic	4	RM27,000.00	Edit Delete
3	Ford	Mustang	8	RM50,000.00	Edit Delete
4	Chevrolet	Camaro	6	RM45,000.00	Edit Delete
5	BMW	M3	6	RM60,000.00	Edit Delete
6	Mercedes-Benz	C-Class	4	RM55,000.00	Edit Delete
7	Audi	A4	4	RM52,000.00	Edit Delete
8	Nissan	Altima	4	RM28,000.00	Edit Delete
9	Hyundai	Elantra	4	RM23,000.00	Edit Delete
10	Kia	Optima	4	RM25,000.00	Edit Delete
12	Toyota	Camry 2002	4	RM45,000.00	Edit Delete

localhost:8080/Lab8/CarServlet?action=delete&id=12

Add new Car

Car ID	Brand	Model	Cylinders	Price	Action
1	Toyota	Corolla	4	RM25,000.00	Edit Delete
2	Honda	Civic	4	RM27,000.00	Edit Delete
3	Ford	Mustang	8	RM50,000.00	Edit Delete
4	Chevrolet	Camaro	6	RM45,000.00	Edit Delete
5	BMW	M3	6	RM60,000.00	Edit Delete
6	Mercedes-Benz	C-Class	4	RM55,000.00	Edit Delete
7	Audi	A4	4	RM52,000.00	Edit Delete
8	Nissan	Altima	4	RM28,000.00	Edit Delete
9	Hyundai	Elantra	4	RM23,000.00	Edit Delete
10	Kia	Optima	4	RM25,000.00	Edit Delete

localhost:8080/Lab8/CarServlet?action=delete&id=10

The additional links here can lead directly either to add new car or to display the car list instantly.

List of Cars Prices System(*Lab Exercise*)

- All Car Prices
- Add a new Car
- Edit Car Information

Add new Car link:

Car Management App   Car List

Add new Car
Brand Name

Car Model

Car Cylinders
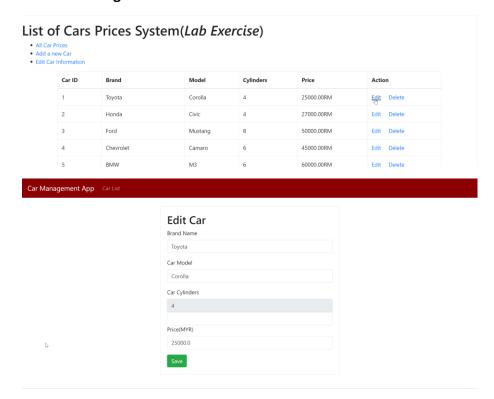
Price(MYR)

Save

Edit Car information link will display list of cars, then user can click edit or delete action:

List of Cars Prices System(*Lab Exercise*)

- All Car Prices
- Add a new Car
- Edit Car Information

Car ID	Brand	Model	Cylinders	Price	Action
1	Toyota	Corolla	4	25000.00RM	Edit Delete
2	Honda	Civic	4	27000.00RM	Edit Delete
3	Ford	Mustang	8	50000.00RM	Edit Delete
4	Chevrolet	Camaro	6	45000.00RM	Edit Delete
5	BMW	M3	6	60000.00RM	Edit Delete

localhost:8080/Lab8/index.jsp#

Clicking edit

List of Cars Prices System(*Lab Exercise*)

- All Car Prices
- Add a new Car
- Edit Car Information

Car ID	Brand	Model	Cylinders	Price	Action
1	Toyota	Corolla	4	25000.00RM	Edit Delete
2	Honda	Civic	4	27000.00RM	Edit Delete
3	Ford	Mustang	8	50000.00RM	Edit Delete
4	Chevrolet	Camaro	6	45000.00RM	Edit Delete
5	BMW	M3	6	60000.00RM	Edit Delete

Car Management App   Car List

Edit Car

Brand Name

Toyota

Car Model

Corolla

Car Cylinders

4

Price(MYR)

25000.0

Save

Delete

List of Cars Prices System(*Lab Exercise*)

- All Car Prices
- Add a new Car
- Edit Car Information

Car ID	Brand	Model	Cylinders	Price	Action
1	Toyota	Corolla	4	25000.00RM	Edit Delete
2	Honda	Civic	4	27000.00RM	Edit Delete
3	Ford	Mustang	8	50000.00RM	Edit Delete

List of Cars Prices System(*Lab Exercise*)

- All Car Prices
- Add a new Car
- Edit Car Information

Car ID	Brand	Model	Cylinders	Price	Action
2	Honda	Civic	4	27000.00RM	Edit Delete
3	Ford	Mustang	8	50000.00RM	Edit Delete
4	Chevrolet	Camaro	6	45000.00RM	Edit Delete

That's all, thank you very much.