

DATABASE.PHP

```
<?php
class Database {
    private static $instance = null;
    private $connection;
    private $host = 'localhost';
    private $user = 'root';
    private $password = '';
    private $database = 'php_oop';

    private function __construct()
    {
        $this->connection = mysqli_connect
            ($this->host, $this->user,
             $this->password, $this->database);
        if (!$this->connection) {
            die("Connection failed:".mysqli_connect_error());
        }
    }

    public static function getInstance()
    {
        if (self::$instance == null) {
            self::$instance = new Database();
        }
        return self::$instance;
    }
    public function getConnection()
    {
        return $this->connection;
    }
}
```

Footer.php

```
<script src="https://code.jquery.com/jquery-3.7.1.js"></script>
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-kenU1KFdBIe4zVF0s0G1M5b4hcpxyD9F7jL+jjXkk+Q2h455rYXK/7HAuoJl+0I4"
crossorigin="anonymous"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/twitter-
bootstrap/5.3.0/js/bootstrap.bundle.min.js"></script>
<script src="https://cdn.datatables.net/2.2.2/js/dataTables.js"></script>
<script
src="https://cdn.datatables.net/2.2.2/js/dataTables.bootstrap5.js"></script>
<script>
```

```
        new DataTable('#products');
```

```
</script>
```

```
</body>
```

Header.php

```
<!doctype html>
<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Membuat Aplikasi Sederhana Menggunakan PHP OOP, Mysql an
Bootstraps</title>
    <link
        href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/css/bootstrap.min.css"
        rel="stylesheet" integrity="sha384-
rbsA2VBKQhggwzxH7pPCaAqO46MgnOM80zW1RWuH61DGLwZJEdK2Kadq2F9CUG65"
        crossorigin="anonymous">

    <!-- menambah css dari datatable bootstrap -->
    <link rel="stylesheet"
        href="https://cdn.datatables.net/2.2.2/css/dataTables.bootstrap5.css">
</head>

<body>
```

Index.php

```
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Membuat Aplikasi Sederhana Menggunakan PHP OOP, Mysql an
Bootstraps</title>
    <link
        href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/css/bootstrap.min.css"
        rel="stylesheet" integrity="sha384-
rbsA2VBKQhggwzxH7pPCaAqO46MgnOM80zW1RWuH61DGLwZJEdK2Kadq2F9CUG65"
        crossorigin="anonymous">

    <!-- menambah css dari datatable bootstrap -->
    <link rel="stylesheet"
        href="https://cdn.datatables.net/2.2.2/css/dataTables.bootstrap5.css">
</head>
<?php
require 'layout/header.php';
require_once 'app/ProductController.php';
```

```

$productController = new ProductController();
$products = $productController->getProducts();

?>
<div class="container mt-5">
    <h1>Latihan PHP OOP, Mysql dan Bootstraps</h1>
    <div class="card">
        <!-- menambah data card bootstrap -->
        <div class="card-header">
            <h5>Data Produk</h5>
        </div>
        <div class="card-body">
            <!-- menampilkan button tambah -->
            <a href="create-product.php" class="btn btn-primary">+ Create</a>
            <table id="products" class="table table-bordered table-striped"
style="width:100%">
                <thead>
                    <tr>
                        <th width="5%">No</th>
                        <th>Name</th>
                        <th>Price</th>
                        <th>Action</th>
                    </tr>
                </thead>
                <tbody>
                    <?php $no =1 ?>
                    <?php foreach ($products as $product) : ?>
                    <tr>
                        <td><?= $no++;?></td>
                        <td><?= $product['name'];?></td>
                        <td>Rp.<?= number_format($product['price'],0,
', ','.') ;?></td>
                        <td>
                            <a href="edit-product.php?id=<?=$product['id'];?>">
                                Edit
                            </a>
                            <button class="btn btn-danger"
onclick="deleteProduct(<?=$product['id'];?>)">Delete</button>
                        </td>
                    </tr>
                <?php endforeach ?>
                </tbody>
            </table>
        </div>
    </div>
    <!-- menambah fungsion baru untuk delete -->
<script>
    function deleteProduct(id) {
        if(confirm('are you sure want to deleteProduct?')){

```

```
        window.location.href = 'delete-product.php?id=' + id;
    }
}
</script>
<?php
require 'layout/footer.php';
?>
```

ProductController.php

```
<?php
require_once 'Database.php';
class ProductController
{
    private $db;
    public function __construct()
    {
        $this->db = Database::getInstance()->getConnection();
    }
    public function getProducts()
    {
        $result = mysqli_query($this->db, "Select * from products");
        $products = [];
        while ($product = mysqli_fetch_assoc($result)) {
            $products[] = $product;
        }
        return $products;
    }

    // update data
    public function updateProduct($data, $id)
    {
        // implementasi bug menggunakan this
        $name = $this->filter($data['name']);
        $price = $this->filter($data['price']);

        // mencegah sqlinjek atau hacking
        $sql = $this->db->prepare("UPDATE products SET name=? , price=? WHERE id=?");
        // melakukan manipulasi data dengan string dan integer
        $sql->bind_param("sii", $name, $price, $id);

        // membuat kondisi
        if ($sql->execute()) {
            if ($sql->affected_rows > 0) {
                echo "<script>\n";
                alert('Product Upload Success');
            }
        }
    }
}
```

```
        window.location.href='index.php';
        </script>";
    }else{
        echo "<script>
<script>alert('Failed to update product!' . $sql->error . '')
window.location.href='edit-product.php?id=".$id."'";
        </script>";
    }
}
}

// tambah data
public function createProduct($data)
{
    // implementasi bug menggunakan this
    $name = $this->filter($data['name']);
    $price = $this->filter($data['price']);

    // mencegah sqlinjek atau hak
    $sql = $this->db->prepare("INSERT INTO products (name, price)values(?, ?, ?)");
    // melakukan manipulasi data dengan string dan integer
    $sql->bind_param("si", $name, $price);

    // membuat kondisi
    if ($sql->execute()) {
        echo"<script>alert('Product created sucessfully!')
window.location.href='index.php';
</script>";
    } else {
        echo"<script>alert('Failed to create product!' . $sql->error . '')
window.location.href='create-product.php'; </script>";
    }
}

// membuat fungsion untuk delete
public function deleteProduct($id)
{
    $sql = $this->db->prepare("DELETE FROM products WHERE id=?");
    $sql->bind_param("i", $id);

    // membuat kondisi
    if ($sql->execute()) {
        echo"<script>alert('Product deleted sucessfully!')
window.location.href='index.php';
</script>";
    }else{
        echo"<script>alert('Failed to delete product!' . $sql->error . '')
window.location.href='index.php';
</script>";
    }
}
```

```

public function showProduct($id)
{
    $sql = $this->db->prepare("SELECT * FROM products WHERE id=?");
    $sql->bind_param("i", $id);
    $sql->execute();
    $result = $sql->get_result()->fetch_assoc();
    return $result;
}
// mencegah hack dan BUG
private function filter($input)
{
    return htmlspecialchars(strip_tags($input));
}

```

Create-product.php

```

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
        <title>Membuat Aplikasi Sederhana Menggunakan PHP OOP, Mysql an
Bootstraps</title>
        <link
    href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/css/bootstrap.min.css"
    rel="stylesheet" integrity="sha384-
rbsA2VBKQhggwzxH7pPCaAqO46Mgn0M80zW1RWuH61DGLwZJEdK2Kadq2F9CUG65"
crossorigin="anonymous">

        <!-- menambah css dari datatable bootstrap -->
        <link rel="stylesheet"
    href="https://cdn.datatables.net/2.2.2/css/dataTables.bootstrap5.css">
</head>
<?php
require 'layout/header.php';
require_once 'app/ProductController.php';
$productController = new ProductController();
if ($_SERVER['REQUEST_METHOD']=='POST') {
    $productController->createProduct($_POST);
}
?>
<div class="container mt-5">
    <h1>Latihan PHP OOP, Mysql dan Bootstraps</h1>
    <div class="card">
        <!-- menambah data card bootstrap -->
        <div class="card-header">
            <h5>Create Product</h5>
        </div>

```

```

<div class="card-body">
    <form action="" method="post" id="createProduct">
        <div class="mb-3">
            <label for="name" class="form-label">Name</label>
            <input type="name" class="form-control" name="name"
id="name" required>
        </div>
        <div class="mb-3">
            <label for="price" class="form-label">Price</label>
            <input type="number" class="form-control" name="price"
id="price" required min="0">
        </div>
    </form>
    <div class="float-end">
        <a href="index.php" class="btn btn-secondary">Back</a>
        <button type="submit" form="createProduct" class="btn btn-
primary" name="submit">Submit</button>
    </div>
</div>
<?php
require 'layout/footer.php';
?>

```

Delete-product.php

```

<?php
require_once 'app/ProductController.php';
$productController = new ProductController();
$productId = (int) $_GET['id'];
$getProduct = $productController ->showProduct($productId);

// membuat kondisi jika tidak ada id
// cek hecked <script>alert('HACKED')</script>
if (!$getProduct) {
    echo "Product tidak ditemukan: " . $productId;
    exit;
} else{
    $productController ->deleteProduct($getProduct['id']);
}

```

edit-product.php

```
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Membuat Aplikasi Sederhana Menggunakan PHP OOP, Mysql dan Bootstraps</title>
    <link
        href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/css/bootstrap.min.css"
        rel="stylesheet" integrity="sha384-rbsA2VBKQhgGzxH7pPCaAqO46MgnOM80zW1RWuH61DGLwZJEdK2Kadq2F9CUG65"
        crossorigin="anonymous">

        <!-- menambah css dari datatable bootstrap -->
        <link rel="stylesheet"
        href="https://cdn.datatables.net/2.2.2/css/dataTables.bootstrap5.css">
</head>
<?php
require 'layout/header.php';
require_once 'app/ProductController.php';
$productController = new ProductController();

$productId =(int) $_GET['id'];
$getProduct = $productController ->showProduct($productId);

// membuat kondisi jika tidak ada id
// cek hecked <script>alert('HACKED')</script>
if (!$getProduct) {
    echo "<script>
        alert('Product Not Found With ID:' . $productId . '')
        window.location.href='index.php';
    </script>";
    exit;
}

if ($_SERVER[ 'REQUEST_METHOD' ]=='POST' ) {
    $productController->updateProduct($_POST, $getProduct[ 'id' ]);
}
?>
<div class="container mt-5">
    <h1>Latihan PHP OOP, Mysql dan Bootstraps</h1>
    <div class="card">
        <!-- menambah data card bootstrap -->
        <div class="card-header">
            <h5>Edit Product</h5>
        </div>
        <div class="card-body">
            <form action="" method="post" id="createProduct">
                <div class="mb-3">
```

```
<label for="name" class="form-label">Name</label>
<input type="text" class="form-control" name="name"
id="name" value=<?= $getProduct ['name']; ?>" required>
</div>
<div class="mb-3">
    <label for="price" class="form-label">Price</label>
    <input type="number" class="form-control" name="price"
id="price" value=<?= $getProduct ['price']; ?>" required min="0">
</div>
</form>
<div class="float-end">
    <a href="index.php" class="btn btn-secondary">Back</a>
    <button type="submit" form="createProduct" class="btn btn-primary" name="submit">Edit</button>
</div>
</div>

</div>
<?php
require 'layout/footer.php';
?>
```