

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-
kenU1KFdBIe4zVF0s0G1M5b4hcxpyD9F7jL+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.jsdelivrivr.net/npm/bootstrap@5.2.3/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
rbsA2VBKQhggwzxH7pPCaAqO46MgnOM80zW1RWuH61DGLwZJEdK2Kadq2F9CUG65"
crossorigin="anonymous">

    <!-- menambah css dari datatable bootstrapp -->
    <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.jsdelivrivr.net/npm/bootstrap@5.2.3/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
rbsA2VBKQhggwzxH7pPCaAqO46MgnOM80zW1RWuH61DGLwZJEdK2Kadq2F9CUG65"
crossorigin="anonymous">

    <!-- menambah css dari datatable bootstrapp -->
    <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=<?=$product['id'];?>"
class="btn btn-warning">Edit</a>
                            <button class="btn btn-danger"
onclick="deleteProduct(<?=$product['id'];?>)">Delete</button>
                        </td>
                    </tr>
                    <?php endforeach ?>
                </tbody>
            </table>
        </div>
    </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>
                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-
rbsA2VBKQhggwzxH7pPCaAqO46MgnOM80zW1RWuH61DGLWZJEdK2Kadq2F9CUG65"
crossorigin="anonymous">

    <!-- menambah css dari datatable bootstrapp -->
    <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>
    </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 an
  Bootstraps</title>
  <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
rbsA2VBKQhggwzxH7pPCaAq046MgnOM80zW1RWuH61DGLWZJEdK2Kadq2F9CUG65"
crossorigin="anonymous">

  <!-- menambah css dari datatable bootstrapp -->
  <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'];
$product = $productController ->showProduct($productId);

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

if ($_SERVER['REQUEST_METHOD']=='POST') {
    $productController->updateProduct($_POST, $product['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';
?>
```