

**LAPORAN PRAKTIKUM**  
**PERANCANGAN DAN PEMROGRAMAN WEB**

**MODUL 10 ( PHP)**



Oleh:

(Farhan Kurniawan)

(2311104073)

**PROGRAM STUDI S1 REKAYASA PERANGKAT LUNAK**  
**DIREKTORAT KAMPUS PURWOKERTO**  
**UNIVERSITAS TELKOM**  
**2025**

# **BAB I**

## **PENDAHULUAN**

### **A. Dasar Teori**

PHP (Hypertext Preprocessor) merupakan bahasa pemrograman server-side yang digunakan untuk mengembangkan aplikasi web yang bersifat dinamis. PHP dijalankan di sisi server sehingga kode program tidak terlihat oleh pengguna, melainkan hasil pengolahannya yang dikirimkan ke browser dalam bentuk halaman web. Bahasa pemrograman ini banyak digunakan karena bersifat open source, mudah dipelajari, serta memiliki kemampuan integrasi yang baik dengan berbagai sistem basis data. PHP memungkinkan pengembang untuk mengelola data, memproses form, serta membangun logika aplikasi web secara efisien.

### **B. Tujuan**

Tujuan dari praktikum ini adalah untuk memahami konsep dasar pemrograman web berbasis server-side dengan menggunakan PHP serta konsep pengelolaan basis data menggunakan MySQL. Melalui praktikum ini, mahasiswa diharapkan mampu mengetahui cara kerja PHP dalam memproses data dari pengguna, mengelola logika aplikasi, serta menampilkan informasi secara dinamis pada halaman web. Selain itu, praktikum ini bertujuan untuk melatih mahasiswa dalam menghubungkan aplikasi web dengan basis data sehingga data dapat dikelola secara terstruktur dan efisien.

## BAB II

## HASIL

### A. GUIDED (Praktikum Terbimbing)

form\_edit\_produk.php

```
<?php
include "koneksi.php";

$id = $_GET['id'];
$data = mysqli_fetch_assoc(mysqli_query($conn, "SELECT * FROM produk WHERE
    id=$id"));
?>
<!DOCTYPE html>
<html>
<head>
    <title>Edit Produk</title>
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
        rel="stylesheet">
</head>
<body class="container py-4">

<h2>Edit Produk</h2>

<form method="POST" action="proses_edit_produk.php">
    <input type="hidden" name="id" value="<?php echo $data['id']; ?>">

    <div class="mb-3">
        <label>Nama Produk</label>
        <input type="text" name="nama" class="form-control" value="<?php echo $data['nama'];
            ?>" required>
    </div>

    <div class="mb-3">
        <label>Harga</label>
        <input type="number" name="harga" class="form-control" value="<?php echo
            $data['harga']; ?>" required>
    </div>

    <div class="mb-3">
        <label>Stok</label>
        <input type="number" name="stok" class="form-control" value="<?php echo $data['stok'];
            ?>" required>
    </div>

    <div class="mb-3">
        <label>Kategori</label>
        <input type="text" name="kategori" class="form-control" value="<?php echo
            $data['kategori']; ?>">
```

```

</div>

<div class="mb-3">
  <label>Link Gambar</label>
  <input type="text" name="gambar" class="form-control" value="<?php echo
  $data['gambar']; ?>">
</div>

<button class="btn btn-primary">Update</button>
<a href="tampil_produk.php" class="btn btn-secondary">Batal</a>
</form>

</body>
</html>

```

#### form\_tambah\_produk.php

```

<!DOCTYPE html>
<html>
<head>
  <title>Tambah Produk</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
  rel="stylesheet">
</head>
<body class="container py-4">

<h2>Tambah Produk</h2>

<form action="proses_tambah_produk.php" method="POST">
  <div class="mb-3">
    <label>Nama Produk</label>
    <input type="text" name="nama" class="form-control" required>
  </div>

  <div class="mb-3">
    <label>Harga</label>
    <input type="number" name="harga" class="form-control" required>
  </div>

  <div class="mb-3">
    <label>Stok</label>
    <input type="number" name="stok" class="form-control" required>
  </div>

  <div class="mb-3">
    <label>Kategori</label>
    <input type="text" name="kategori" class="form-control">
  </div>

  <div class="mb-3">

```

```

        <label>Link Gambar</label>
        <input type="text" name="gambar" class="form-control">
    </div>

    <button type="submit" class="btn btn-success">Simpan</button>
    <a href="tampil_produk.php" class="btn btn-secondary">Kembali</a>
</form>

</body>
</html>

```

index.php

```

<!DOCTYPE html>
<html lang="id">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Toko Online - Home</title>

    <link
        href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;600;700&display=swap"
        rel="stylesheet">

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
        rel="stylesheet">

    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
        rel="stylesheet">

    <link rel="stylesheet" href="style.css">
</head>
<body>
    <nav class="navbar navbar-expand-lg navbar-dark">
        <div class="container">
            <a class="navbar-brand" href="index.html">Toko Online</a>
            <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
            target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
            navigation">
                <span class="navbar-toggler-icon"></span>
            </button>
            <div class="collapse navbar-collapse justify-content-end" id="navbarNav">
                <ul class="navbar-nav">
                    <li class="nav-item">
                        <a class="nav-link active" aria-current="page" href="index.html">Beranda</a>
                    </li>
                    <li class="nav-item">
                        <a class="nav-link" href="tampil_produk.php">Kelola Produk</a>
                    </li>
                    <li class="nav-item">
                        <a class="nav-link" href="product.html">Produk</a>
                    </li>
                </ul>
            </div>
        </div>
    </nav>

```

```

        </li>
        <li class="nav-item">
            <a class="nav-link" href="member.html">Member</a>
        </li>
        <li class="nav-item">
            <a class="nav-link" href="registration.html">Login</a>
        </li>
    </ul>
</div>
</div>
</nav>

<div class="container my-4">
    <div id="heroCarousel" class="carousel slide" data-bs-ride="carousel">
        <div class="carousel-indicators">
            <button type="button" data-bs-target="#heroCarousel" data-bs-slide-to="0"
class="active" aria-current="true" aria-label="Slide 1"></button>
            <button type="button" data-bs-target="#heroCarousel" data-bs-slide-to="1" aria-
label="Slide 2"></button>
            <button type="button" data-bs-target="#heroCarousel" data-bs-slide-to="2" aria-
label="Slide 3"></button>
        </div>
        <div class="carousel-inner">
            <div class="carousel-item active">
                
                <div class="carousel-caption d-none d-md-block">
                    <h1>HOODIE PREMIUM</h1>
                    <p>Koleksi Terbaru 2025</p>
                </div>
            </div>
            <div class="carousel-item">
                
                <div class="carousel-caption d-none d-md-block">
                    <h1>STYLE & COMFORT</h1>
                    <p>Desain Modern dan Nyaman</p>
                </div>
            </div>
            <div class="carousel-item">
                
                <div class="carousel-caption d-none d-md-block">
                    <h1>PROMO SPESIAL</h1>
                    <p>Diskon Up To 30%</p>
                </div>
            </div>
        </div>
        <button class="carousel-control-prev" type="button" data-bs-target="#heroCarousel"
data-bs-slide="prev">

```

```

        <span class="carousel-control-prev-icon" aria-hidden="true"></span>
        <span class="visually-hidden">Previous</span>
    </button>
    <button class="carousel-control-next" type="button" data-bs-target="#heroCarousel"
data-bs-slide="next">
        <span class="carousel-control-next-icon" aria-hidden="true"></span>
        <span class="visually-hidden">Next</span>
    </button>
</div>

<div class="row mt-4">
    <div class="col-lg-9">
        <div class="row g-4">
            <div class="col-md-6 col-lg-4">
                <div class="card product-card h-100">
                    
                    <div class="card-body d-flex flex-column">
                        <h5 class="product-name">Hoodie Premium Gray</h5>
                        <p class="product-price">Rp 275.000</p>
                        <p class="product-old-price">Rp 350.000</p>
                        <div class="mt-auto">
                            <button class="btn btn-primary-custom w-100">Beli Sekarang</button>
                        </div>
                    </div>
                </div>
            </div>
            <div class="col-md-6 col-lg-4">
                <div class="card product-card h-100">
                    
                    <div class="card-body d-flex flex-column">
                        <h5 class="product-name">Hoodie Premium Black</h5>
                        <p class="product-price">Rp 285.000</p>
                        <p class="product-old-price">Rp 380.000</p>
                        <div class="mt-auto">
                            <button class="btn btn-primary-custom w-100">Beli Sekarang</button>
                        </div>
                    </div>
                </div>
            </div>
            <div class="col-md-6 col-lg-4">
                <div class="card product-card h-100">
                    
                    <div class="card-body d-flex flex-column">

```

```

        <h5 class="product-name">Hoodie Lilac Casual</h5>
        <p class="product-price">Rp 265.000</p>
        <p class="product-old-price">Rp 340.000</p>
        <div class="mt-auto">
            <button class="btn btn-primary-custom w-100">Beli Sekarang</button>
        </div>
    </div>
</div>
</div>
<div class="col-md-6 col-lg-4">
    <div class="card product-card h-100">
        
        <div class="card-body d-flex flex-column">
            <h5 class="product-name">Hoodie Miracle</h5>
            <p class="product-price">Rp 270.000</p>
            <p class="product-old-price">Rp 360.000</p>
            <div class="mt-auto">
                <button class="btn btn-primary-custom w-100">Beli Sekarang</button>
            </div>
        </div>
    </div>
</div>
<div class="col-md-6 col-lg-4">
    <div class="card product-card h-100">
        
        <div class="card-body d-flex flex-column">
            <h5 class="product-name">T-shirt White Minimalist</h5>
            <p class="product-price">Rp 255.000</p>
            <p class="product-old-price">Rp 330.000</p>
            <div class="mt-auto">
                <button class="btn btn-primary-custom w-100">Beli Sekarang</button>
            </div>
        </div>
    </div>
</div>
<div class="col-md-6 col-lg-4">
    <div class="card product-card h-100">
        
        <div class="card-body d-flex flex-column">
            <h5 class="product-name">Hoodie Brown Casual</h5>
            <p class="product-price">Rp 280.000</p>
            <p class="product-old-price">Rp 370.000</p>
            <div class="mt-auto">

```



```

        <button class="btn btn-primary-custom w-100">Beli Sekarang</button>
    </div>
</div>
</div>
<div class="col-md-6 col-lg-4">
    <div class="card product-card h-100">
        
        <div class="card-body d-flex flex-column">
            <h5 class="product-name">Hoodie Tie-Dye Special</h5>
            <p class="product-price">Rp 260.000</p>
            <p class="product-old-price">Rp 345.000</p>
            <div class="mt-auto">
                <button class="btn btn-primary-custom w-100">Beli Sekarang</button>
            </div>
        </div>
    </div>
</div>
<div class="col-md-6 col-lg-4">
    <div class="card product-card h-100">
        
        <div class="card-body d-flex flex-column">
            <h5 class="product-name">Hoodie I'll See You</h5>
            <p class="product-price">Rp 270.000</p>
            <p class="product-old-price">Rp 355.000</p>
            <div class="mt-auto">
                <button class="btn btn-primary-custom w-100">Beli Sekarang</button>
            </div>
        </div>
    </div>
</div>
</div>
<div class="col-lg-3">
    <div class="sidebar-section">
        <h3>Rekomendasi</h3>
        <div class="recommendation-card">
            
            <h5 class="recommendation-name">Hoodie Premium Gray</h5>
            <p class="recommendation-price">Rp 350.000</p>
            <button class="btn btn-primary-custom w-100">Lihat Detail</button>
        </div>
    </div>

```

```

</div>

<div class="sidebar-section">
  <h3>Newsletter</h3>
  <p>Dapatkan penawaran spesial dengan berlangganan newsletter kami</p>
  <div class="input-group mb-3">
    <input type="email" class="form-control" placeholder="Email Anda" aria-label="Email Anda">
    <button class="btn btn-primary-custom" type="button">Subscribe</button>
  </div>
</div>
</div>
</div>
</div>
</div>

<footer>
  <div class="footer-section">
    <div class="container">
      <div class="row">
        <div class="col-md-4">
          <div class="footer-column">
            <h4>QUESTIONS</h4>
            <ul>
              <li><a href="#">Kontak Kami</a></li>
              <li><a href="#">Pertanyaan</a></li>
            </ul>
          </div>
        </div>
        <div class="col-md-4">
          <div class="footer-column">
            <h4>CATEGORIES</h4>
            <ul>
              <li><a href="#">Hoodie Collection</a></li>
              <li><a href="#">Fashion Terbaru</a></li>
            </ul>
          </div>
        </div>
        <div class="col-md-4">
          <div class="footer-column">
            <h4>FOLLOW US</h4>
            <ul>
              <li><a href="#"><i class="fab fa-facebook me-2"></i>Facebook</a></li>
              <li><a href="#"><i class="fab fa-instagram me-2"></i>Instagram</a></li>
            </ul>
          </div>
        </div>
      </div>
    </div>
  </div>
  <div class="copyright">

```

```

        <div class="container">
            © 2025 Create by Laparid
        </div>
    </div>
</footer>

<script
    src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>

```

#### koneksi.php

```

<?php
$host = "localhost";
$user = "root";
$pass = "";
$db = "toko_online";

$conn = mysqli_connect($host, $user, $pass, $db);

if (!$conn) {
    die("Koneksi gagal: " . mysqli_connect_error());
}

mysqli_set_charset($conn, "utf8");
?>

```

#### proses\_cari\_produk.php

```

<?php
function cariProduk($conn, $keyword) {
    $keyword = mysqli_real_escape_string($conn, $keyword);

    $query = "SELECT * FROM produk
        WHERE nama LIKE '%$keyword%'
        OR kategori LIKE '%$keyword%'
        ORDER BY id DESC";

    return mysqli_query($conn, $query);
}
?>

```

#### proses\_edit\_produk.php

```

<?php
include "koneksi.php";

$id = $_POST['id'];
$nama = $_POST['nama'];
$harga = $_POST['harga'];
$stok = $_POST['stok'];

```

```

$kategori = $_POST['kategori'];
$gambar = $_POST['gambar'];

$query = "UPDATE produk SET
        nama='$nama',
        harga='$harga',
        stok='$stok',
        kategori='$kategori',
        gambar='$gambar'
        WHERE id='$id'";

if (mysqli_query($conn, $query)) {
    echo "<script>alert('Produk berhasil diupdate!');
    window.location='tampil_produk.php';</script>";
} else {
    echo "<script>alert('Gagal update!');
    window.location='form_edit_produk.php?id=$id';</script>";
}
?>

```

#### proses\_hapus\_produk.php

```

<?php
include "koneksi.php";

$id = $_POST['id'];
$nama = $_POST['nama'];
$harga = $_POST['harga'];
$stok = $_POST['stok'];
$kategori = $_POST['kategori'];
$gambar = $_POST['gambar'];

$query = "UPDATE produk SET
        nama='$nama',
        harga='$harga',
        stok='$stok',
        kategori='$kategori',
        gambar='$gambar'
        WHERE id='$id'";

if (mysqli_query($conn, $query)) {
    echo "<script>alert('Produk berhasil diupdate!');
    window.location='tampil_produk.php';</script>";
} else {
    echo "<script>alert('Gagal update!');
    window.location='form_edit_produk.php?id=$id';</script>";
}
?>

```

#### proses\_tambah\_produk.php

```

<?php
include "koneksi.php";

$nama = $_POST['nama'];
$harga = $_POST['harga'];
$stok = $_POST['stok'];
$kategori = $_POST['kategori'];
$gambar = $_POST['gambar'];

$query = "INSERT INTO produk (nama, harga, stok, kategori, gambar)
VALUES ('$nama', '$harga', '$stok', '$kategori', '$gambar')";

if (mysqli_query($conn, $query)) {
    echo "<script>alert('Produk berhasil ditambahkan!');
    window.location='tampil_produk.php';</script>";
} else {
    echo "<script>alert('Gagal menambah produk!');
    window.location='form_tambah_produk.php';</script>";
}
?>

```

#### style.css

```

:root {
    --primary-color: #8B008B;
    --secondary-color: #9932CC;
    --light-bg: #E6E6FA;
    --dark-text: #333;
}

body {
    font-family: 'Poppins', sans-serif;
    background-color: #f0f2f5;
    color: var(--dark-text);
}

.navbar {
    background: linear-gradient(90deg, var(--primary-color), var(--secondary-color));
    box-shadow: 0 2px 10px rgba(0,0,0,0.1);
}

.navbar-brand {
    font-size: 28px;
    font-weight: 600;
    color: white !important;
    letter-spacing: 2px;
}

.navbar-nav .nav-link {
    color: white !important;
}

```

```
font-weight: 500;
margin: 0 10px;
transition: all 0.3s;
position: relative;
}

.navbar-nav .nav-link:hover {
  color: var(--light-bg) !important;
}

.navbar-nav .nav-link::after {
  content: "";
  position: absolute;
  width: 0;
  height: 2.5px;
  bottom: 0;
  left: 50%;
  background-color: var(--light-bg);
  transition: all 0.3s;
}

.navbar-nav .nav-link:hover::after {
  width: 100%;
  left: 0;
}

.navbar-nav .nav-link.active {
  color: var(--light-bg) !important;
}

.navbar-nav .nav-link.active::after {
  width: 100%;
  left: 0;
}

.carousel-item {
  height: 400px;
  position: relative;
}

.carousel-item img {
  object-fit: cover;
  height: 100%;
  width: 100%;
}

.carousel-caption {
  background: rgba(0,0,0,0.5);
  border-radius: 10px;
  padding: 20px;
```

```
}

.carousel-caption h1 {
  font-size: 3rem;
  font-weight: 700;
  margin-bottom: 10px;
  letter-spacing: 3px;
}

.carousel-caption p {
  font-size: 1.5rem;
  font-weight: 400;
}

.product-card {
  border: 1px solid var(--light-bg);
  border-radius: 8px;
  overflow: hidden;
  transition: transform 0.3s, box-shadow 0.3s;
}

.product-card:hover {
  transform: translateY(-5px);
  box-shadow: 0 5px 15px rgba(139,0,139,0.2);
}

.product-card img {
  height: 200px;
  object-fit: cover;
  width: 100%;
}

.product-name {
  font-weight: 600;
  color: var(--dark-text);
  font-size: 14px;
}

.product-price {
  color: var(--primary-color);
  font-weight: 600;
  font-size: 16px;
  margin-bottom: 0;
}

.product-old-price {
  color: #999;
  text-decoration: line-through;
  font-size: 12px;
}
```

```
.sidebar-section {
  background: var(--light-bg);
  border-radius: 8px;
  padding: 15px;
  margin-bottom: 20px;
}

.sidebar-section h3 {
  color: var(--primary-color);
  margin-bottom: 15px;
  font-size: 18px;
}

.recommendation-card {
  text-align: center;
}

.recommendation-card img {
  width: 100%;
  height: 280px;
  object-fit: cover;
  border-radius: 5px;
  margin-bottom: 10px;
}

.recommendation-name {
  font-weight: 600;
  color: var(--dark-text);
  font-size: 14px;
  margin-bottom: 5px;
}

.recommendation-price {
  color: var(--primary-color);
  font-weight: 600;
}

.footer-section {
  background: #f8f9fa;
  padding: 30px 20px;
  border-top: 1px solid var(--light-bg);
}

.footer-column h4 {
  color: var(--primary-color);
  margin-bottom: 15px;
  font-size: 16px;
}
```



```
.footer-column ul {
  list-style: none;
  padding: 0;
}

.footer-column ul li {
  margin-bottom: 8px;
}

.footer-column a {
  color: #666;
  text-decoration: none;
  font-size: 14px;
  transition: color 0.3s;
}

.footer-column a:hover {
  color: var(--primary-color);
}

.copyright {
  background: linear-gradient(90deg, var(--primary-color), var(--secondary-color));
  color: white;
  padding: 15px 0;
  text-align: center;
  font-size: 14px;
  font-weight: 500;
}

.btn-primary-custom {
  background: linear-gradient(90deg, var(--primary-color), var(--secondary-color));
  border: none;
  color: white;
  padding: 8px 15px;
  border-radius: 5px;
  font-weight: 500;
  transition: all 0.3s;
}

.btn-primary-custom:hover {
  transform: translateY(-2px);
  box-shadow: 0 5px 10px rgba(139,0,139,0.3);
  color: white;
}
```

## B. UNGUIDED

1. Input:  
cari.php

```
<?php
// File: cari.php
// Fungsi: Proses pencarian data produk

function cariProduk($conn, $keyword)
{
    // Amankan keyword dari SQL Injection
    $keyword = mysqli_real_escape_string($conn, $keyword);

    // Query pencarian
    $query = "SELECT * FROM produk
              WHERE nama_produk LIKE '%$keyword%'
              OR kategori LIKE '%$keyword%'
              ORDER BY id DESC";

    return mysqli_query($conn, $query);
}
?>
```

edit.php

```
<?php
include "koneksi.php";
$id = $_GET['id'];
$data = mysqli_fetch_assoc(mysqli_query($conn, "SELECT * FROM produk WHERE id=$id"));
?>

<form method="POST" action="proses_edit.php">
    <input type="hidden" name="id" value="<?= $data['id'] ?>">
    <input type="text" name="nama_produk" value="<?= $data['nama_produk'] ?>" class="form-control mb-2">
    <input type="number" name="harga" value="<?= $data['harga'] ?>" class="form-control mb-2">
    <input type="number" name="stok" value="<?= $data['stok'] ?>" class="form-control mb-2">
    <input type="text" name="kategori" value="<?= $data['kategori'] ?>" class="form-control mb-2">
    <button class="btn btn-primary">Update</button>
</form>
```

hapus.php

```
<?php
include "koneksi.php";
$id = $_GET['id'];
mysqli_query($conn, "DELETE FROM produk WHERE id=$id");
header("Location: index.php");
```

koneksi.php

```

<?php
$host = "localhost";
$user = "root";
$password = "";
$db = "produk";

$conn = mysqli_connect($host, $user, $password, $db);

if (!$conn) {
    die("Koneksi gagal: " . mysqli_connect_error());
}
?>

```

proses\_edit.php

```

<?php
include "koneksi.php";

$id = $_POST['id'];
$name = $_POST['nama_produk'];
$price = $_POST['harga'];
$stock = $_POST['stok'];
$category = $_POST['kategori'];

$query = "UPDATE produk SET
    nama_produk='$name',
    harga='$price',
    stok='$stock',
    kategori='$category'
    WHERE id=$id";

mysqli_query($conn, $query);
header("Location: index.php");

```

proses\_tambah.php

```

<?php
include "koneksi.php";

$name = $_POST['nama_produk'];
$price = $_POST['harga'];
$stock = $_POST['stok'];
$category = $_POST['kategori'];

$query = "INSERT INTO produk VALUES
('', '$name', '$price', '$stock', '$category', NOW())";

mysqli_query($conn, $query);
header("Location: index.php");

```

tambah.php

```

<!DOCTYPE html>
<html>
<head>
  <title>Tambah Produk</title>
  <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css">
</head>
<body class="container mt-4">

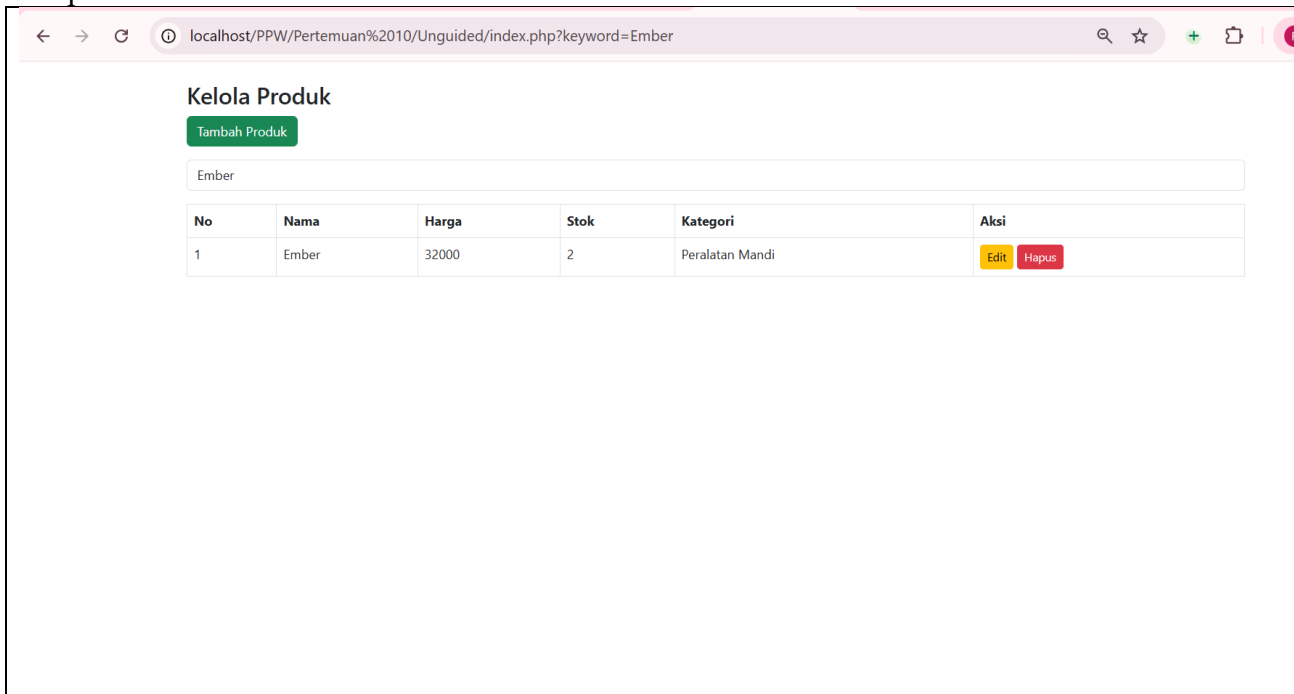
<h3>Tambah Produk</h3>

<form method="POST" action="proses_tambah.php">
  <input type="text" name="nama_produk" class="form-control mb-2" placeholder="Nama
Produk" required>
  <input type="number" name="harga" class="form-control mb-2" placeholder="Harga"
required>
  <input type="number" name="stok" class="form-control mb-2" placeholder="Stok" required>
  <input type="text" name="kategori" class="form-control mb-2" placeholder="Kategori">
  <button class="btn btn-primary">Simpan</button>
</form>

</body>
</html>

```

Output:



Tambah Produk

Nama Produk

Harga

Stok

Kategori

Simpan

## **BAB III**

### **PENUTUP**

#### **A. Kesimpulan**

Berdasarkan pembahasan tersebut, dapat disimpulkan bahwa JavaScript dan jQuery memiliki peran penting dalam pengembangan aplikasi web modern. JavaScript berfungsi sebagai bahasa pemrograman utama yang memungkinkan terciptanya halaman web yang interaktif, dinamis, dan responsif terhadap tindakan pengguna. Sementara itu, jQuery hadir sebagai pustaka pendukung yang menyederhanakan penggunaan JavaScript sehingga proses pengembangan menjadi lebih efisien dan terstruktur. Dengan memanfaatkan JavaScript dan jQuery secara tepat, pengembang dapat meningkatkan kualitas, kenyamanan, serta efektivitas aplikasi web yang dihasilkan.