LAPORAN PRAKTIKUM
PERANCANGAN DAN PEMROGRAMAN WEB

MODUL 5
BOOTSTRAP

Oleh:

Dhiemas Tulus Ikhsan - 2311104046

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

BAB I

PENDAHULUAN

1.1 Dasar Teori

Bootstrap merupakan sebuah front-end framework gratis untuk pengembangan antarmuka web yang lebih cepat dan lebih mudah. Dikembangkan oleh Mark Otto dan Jacom Thornton di Twitter dan dirilis sebagai produk open source pada Agustus 2011 di GitHub. Bootstrap mencakup template desain berbasis HTML dan CSS untuk tipografi, form, button, navigasi, modal, image carousels dan masih banyak lagi, serta terdapat opsional plugin JavaScript. Selain itu, Bootstrap memiliki kemampuan untuk membuat desain responsif yang secara otomatis menyesuaikan diri agar terlihat baik di segala perangkat, mulai dari perangkat ponsel hingga desktop pc.

1.2 Tujuan

1. Mahasiswa mampu memahami konsep dan implementasi Bootstrap pada web.
2. Mahasiswa mengetahui jenis-jenis Bootstrap serta cara penggunaannya.

HASIL PRAKTIKUM

2.1 GUIDED (Praktikum Terbimbing)

-

2.2 UNGUIDED (Tugas Mandiri)

1. Design yang sudah dibuat di pertemuan sebelumnya. dibuat responsive menggunakan bootstrap.
   Jawaban:
   Source Code:
   - index.html

```html
<!DOCTYPE html>
<html lang="id">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width,
initial-scale=1.0" />
    <title>TWICE - STRATEGY (Bootstrap)</title>

    <!-- Bootstrap CSS -->
    <link

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

    <!-- Font Awesome -->
    <link
      rel="stylesheet"

href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.0
/css/all.min.css"
    />

    <!-- Google Fonts -->
    <link

href="https://fonts.googleapis.com/css2?family=Poppins:wght@300
;400;500;600;700&display=swap"
      rel="stylesheet"
    />

    <!-- Custom CSS - File Terpisah -->
    <link rel="stylesheet" href="style.css" />
  </head>
  <body>
    <!-- NAVBAR menggunakan Bootstrap Navbar Component -->
```

```html
    <nav class="navbar navbar-expand-lg navbar-light
navbar-custom sticky-top">
      <div class="container-fluid px-lg-5">
        <a class="navbar-brand" href="#">STRATEGY</a>

        <!-- Hamburger Menu untuk Mobile -->
        <button
          class="navbar-toggler"
          type="button"
          data-bs-toggle="collapse"
          data-bs-target="#navbarNav"
        >
          <span class="navbar-toggler-icon"></span>
        </button>

        <!-- Navigation Links -->
        <div
          class="collapse navbar-collapse justify-content-end"
          id="navbarNav"
        >
          <ul class="navbar-nav">
            <li class="nav-item">
              <a class="nav-link" href="#">Home</a>
            </li>
            <li class="nav-item">
              <a class="nav-link" href="#">Product</a>
            </li>
            <li class="nav-item">
              <a class="nav-link" href="#">Member</a>
            </li>
            <li class="nav-item">
              <a class="nav-link" href="#">Login</a>
            </li>
          </ul>
        </div>
      </div>
    </nav>

    <!-- CAROUSEL BANNER menggunakan Bootstrap Carousel
Component -->
    <div
      id="bannerCarousel"
      class="carousel slide carousel-banner"
      data-bs-ride="carousel"
    >
      <div class="carousel-indicators">
        <button
          type="button"
          data-bs-target="#bannerCarousel"
          data-bs-slide-to="0"
          class="active"
        ></button>
        <button
          type="button"
          data-bs-target="#bannerCarousel"
          data-bs-slide-to="1"
        ></button>
      </div>
```

```
      <div class="carousel-inner">
        <div class="carousel-item active">
          <img

src="https://pbs.twimg.com/media/Gu3KHqyWgAA0-H2?format=jpg&nam
e=large"
            class="d-block w-100"
            alt="Slide 1"
          />
        </div>
        <div class="carousel-item">
          <img

src="https://pbs.twimg.com/profile_banners/3129056526/175937400
5/1500x500"
            class="d-block w-100"
            alt="Slide 2"
          />
        </div>
      </div>

      <button
        class="carousel-control-prev"
        type="button"
        data-bs-target="#bannerCarousel"
        data-bs-slide="prev"
      >
        <span class="carousel-control-prev-icon"></span>
      </button>
      <button
        class="carousel-control-next"
        type="button"
        data-bs-target="#bannerCarousel"
        data-bs-slide="next"
      >
        <span class="carousel-control-next-icon"></span>
      </button>
    </div>

    <!-- RECOMMEND SECTION menggunakan Bootstrap Grid System
-->
    <section class="py-5 bg-white">
      <div class="container">
        <h2 class="section-title">✨ Recommended For You</h2>

        <!-- Bootstrap Row & Col untuk Responsive Grid -->
        <div class="row g-4">
          <div class="col-6 col-md-4 col-lg-3">
            <div class="recommend-card">
              <div class="img-container">
                <img

src="https://i.pinimg.com/736x/15/a0/a9/15a0a92bbd2685b36c37418
1197b7924.jpg"
                  alt="Varsity Modern Blouse"
                />
              </div>
              <p>Varsity Modern Blouse</p>
            </div>
```

```
                  </div>

                  <div class="col-6 col-md-4 col-lg-3">
                    <div class="recommend-card">
                      <div class="img-container">
                        <img
src="https://i.pinimg.com/736x/1b/b9/ba/1bb9ba367eb464d1008ad11
bd2c97cb2.jpg"
                          alt="Blue Outfit Set"
                        />
                      </div>
                      <p>Blue Outfit Set</p>
                    </div>
                  </div>

                  <div class="col-6 col-md-4 col-lg-3">
                    <div class="recommend-card">
                      <div class="img-container">
                        <img
src="https://i.pinimg.com/1200x/88/3a/6f/883a6fad60350e363ea59e
d445d45768.jpg"
                          alt="Traditional Black Silk Shawl"
                        />
                      </div>
                      <p>Traditional Black Silk Shawl</p>
                    </div>
                  </div>

                  <div class="col-6 col-md-4 col-lg-3">
                    <div class="recommend-card">
                      <div class="img-container">
                        <img
src="https://i.pinimg.com/736x/f3/f4/5c/f3f45c49d89e14dc3b5eb4c
ccce39141.jpg"
                          alt="Elegant Black Dress"
                        />
                      </div>
                      <p>Elegant Black Dress</p>
                    </div>
                  </div>
                </div>
              </div>
          </section>

          <!-- PRODUCT GALLERY menggunakan Bootstrap Grid System -->
          <section class="py-5 bg-white">
            <div class="container">
              <!-- Bootstrap Row dengan Gutter untuk spacing -->
              <div class="row g-4">
                <!-- Product 1 -->
                <div class="col-6 col-md-4 col-lg-3">
                  <div class="product-card">
                    <div class="img-container">
                      <img
```

```html
                src="https://i.pinimg.com/736x/12/a5/f5/12a5f5e897eb1a43b365c38
5db317b78.jpg"
                  alt="Purple Long Knit Cardigan"
                />
                <button class="fav-btn">♡</button>
              </div>
              <div class="product-info">
                <h3>Purple Long Knit Cardigan | Nayeon -
Twice</h3>
                <p class="product-price">US$36.90</p>
              </div>
            </div>
          </div>

          <!-- Product 2 -->
          <div class="col-6 col-md-4 col-lg-3">
            <div class="product-card">
              <div class="img-container">
                <img

src="https://i.pinimg.com/736x/7a/12/ee/7a12ee7b1ec269d42e08fc4
f42e4e615.jpg"
                  alt="Colorful Caterpillar Plushie"
                />
                <span class="badge badge-new">NEW</span>
                <button class="fav-btn">♡</button>
              </div>
              <div class="product-info">
                <h3>Colorful Caterpillar Plushie | Chaeyoung -
Twice</h3>
                <p class="product-price">US$36.90</p>
              </div>
            </div>
          </div>

          <!-- Product 3 -->
          <div class="col-6 col-md-4 col-lg-3">
            <div class="product-card">
              <div class="img-container">
                <img

src="https://i.pinimg.com/736x/29/5e/be/295ebe6d714a704c4b171a1
69375efcb.jpg"
                  alt="XGirl Black Tee"
                />
                <span class="badge badge-new">NEW</span>
                <button class="fav-btn">♡</button>
              </div>
              <div class="product-info">
                <h3>XGirl Black Tee | Tzuyu - Twice</h3>
                <p class="product-price">US$36.90</p>
              </div>
            </div>
          </div>

          <!-- Product 4 -->
          <div class="col-6 col-md-4 col-lg-3">
            <div class="product-card">
```

```html
                  <div class="img-container">
                    <img

src="https://i.pinimg.com/736x/53/c6/78/53c678a76b389ece294dcfd
ed9bbfc19.jpg"
                      alt="Shirt & Skirt Styling Dress"
                    />
                    <span class="badge badge-new">NEW</span>
                    <button class="fav-btn">♡</button>
                  </div>
                  <div class="product-info">
                    <h3>Shirt & Skirt Styling Dress | Momo -
Twice</h3>
                    <p class="product-price">US$36.90</p>
                  </div>
                </div>
              </div>

              <!-- Product 5 -->
              <div class="col-6 col-md-4 col-lg-3">
                <div class="product-card">
                  <div class="img-container">
                    <img

src="https://i.pinimg.com/736x/0d/06/04/0d0604a4b2c97b843f1a363
2a39ec5ae.jpg"
                      alt="Cat Star Patch Hoodie"
                    />
                    <span class="badge badge-new">NEW</span>
                    <button class="fav-btn">♡</button>
                  </div>
                  <div class="product-info">
                    <h3>Cat Star Patch Hoodie | Dahyun - Twice</h3>
                    <p class="product-price">US$36.90</p>
                  </div>
                </div>
              </div>

              <!-- Product 6 -->
              <div class="col-6 col-md-4 col-lg-3">
                <div class="product-card">
                  <div class="img-container">
                    <img

src="https://i.pinimg.com/736x/33/90/ef/3390ef83e1fb16e69443385
2903dfa90.jpg"
                      alt="Butterfly Navy Cardigan"
                    />
                    <span class="badge badge-new">NEW</span>
                    <button class="fav-btn">♡</button>
                  </div>
                  <div class="product-info">
                    <h3>Butterfly Navy Cardigan | Jeongyeon -
Twice</h3>
                    <p class="product-price">US$36.90</p>
                  </div>
                </div>
              </div>
```

```html
          <!-- Product 7 -->
          <div class="col-6 col-md-4 col-lg-3">
            <div class="product-card">
              <div class="img-container">
                <img
src="https://i.pinimg.com/736x/f6/6b/49/f66b493999e1159a02938f1
eda91ef74.jpg"
                  alt="Pink Star Patch Striped Shirt"
                />
                <span class="badge badge-new">NEW</span>
                <button class="fav-btn">♡</button>
              </div>
              <div class="product-info">
                <h3>Pink Star Patch Striped Shirt | Jihyo -
Twice</h3>
                <p class="product-price">US$36.90</p>
              </div>
            </div>
          </div>

          <!-- Product 8 -->
          <div class="col-6 col-md-4 col-lg-3">
            <div class="product-card">
              <div class="img-container">
                <img
src="https://i.pinimg.com/736x/ce/bc/6d/cebc6d17ee4a515d2180d06
d2d3ec4e7.jpg"
                  alt="Blue Star Patch Striped Jeans"
                />
                <span class="badge badge-new">NEW</span>
                <button class="fav-btn">♡</button>
              </div>
              <div class="product-info">
                <h3>Blue Star Patch Striped Jeans | Sana -
Twice</h3>
                <p class="product-price">US$36.90</p>
              </div>
            </div>
          </div>
        </div>
      </div>
    </section>

    <!-- FOOTER menggunakan Bootstrap Grid System -->
    <footer class="footer-custom">
      <div class="container">
        <div class="row g-4">
          <!-- Footer Logo Column -->
          <div class="col-12 col-md-4">
            <h3>STRATEGY</h3>
            <p>This is My Strategy, What is your Strategy?</p>
          </div>

          <!-- Quick Links Column -->
          <div class="col-12 col-md-4">
            <h4>Quick Links</h4>
            <ul class="list-unstyled">
```

```html
          <li><a href="#">Home</a></li>
          <li><a href="#">Products</a></li>
          <li><a href="#">About</a></li>
          <li><a href="#">Contact</a></li>
        </ul>
      </div>

      <!-- Social Media Column -->
      <div class="col-12 col-md-4">
        <h4>Follow Us</h4>
        <div class="social-icons">
          <a href="#"><i class="fa-brands
fa-instagram"></i></a>
          <a href="#"><i class="fa-brands
fa-tiktok"></i></a>
          <a href="#"><i class="fa-brands
fa-pinterest"></i></a>
          <a href="#"><i class="fa-brands
fa-x-twitter"></i></a>
        </div>
      </div>
    </div>

    <div class="footer-bottom">
      <p>© 2025 STRATEGY | All rights reserved.</p>
    </div>
  </div>
</footer>

<!-- Bootstrap JS Bundle -->
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/boots
trap.bundle.min.js"></script>
  </body>
</html>
```

- style.css

```css
/* ========== GLOBAL STYLES ========== */
body {
  font-family: "Poppins", sans-serif;
  background-color: #fafafa;
  color: #333;
}

/* ========== NAVBAR CUSTOM ========== */
.navbar-custom {
  background-color: #fff;
  border-bottom: 1px solid #eaeaea;
  padding: 1rem 0;
}

.navbar-brand {
  font-weight: 700;
  font-size: 1.4rem;
  color: #e75480 !important;
}

.nav-link {
  color: #555 !important;
  font-weight: 500;
  margin: 0 0.5rem;
  transition: color 0.3s;
}

.nav-link:hover {
  color: #e75480 !important;
}

/* ========== CAROUSEL BANNER ========== */
.carousel-banner {
  margin: 20px auto;
  max-width: calc(100% - 80px);
  border-radius: 10px;
  overflow: hidden;
}

.carousel-banner .carousel-item img {
  height: 546px;
  object-fit: contain;
  width: 100%;
}

/* ========== SECTION HEADERS ========== */
.section-title {
  font-size: 1.8rem;
  color: #e75480;
  text-align: center;
  margin-bottom: 2rem;
  font-weight: 600;
}

/* ========== RECOMMEND CARDS ========== */
.recommend-card {
  background: #fff;
  border-radius: 10px;
```

```css
  box-shadow: 0 2px 6px rgba(0, 0, 0, 0.05);
  overflow: hidden;
  transition: all 0.3s ease;
  margin-bottom: 1.5rem;
}

.recommend-card:hover {
  transform: translateY(-3px);
  box-shadow: 0 4px 15px rgba(0, 0, 0, 0.08);
}

.recommend-card .img-container {
  position: relative;
  width: 100%;
  aspect-ratio: 3/4;
  overflow: hidden;
}

.recommend-card img {
  width: 100%;
  height: 100%;
  object-fit: cover;
}

.recommend-card p {
  padding: 1rem;
  font-size: 1rem;
  font-weight: 500;
  color: #444;
  margin: 0;
  text-align: center;
}

/* ========== PRODUCT CARDS ========== */
.product-card {
  background: #fff;
  border-radius: 10px;
  box-shadow: 0 2px 6px rgba(0, 0, 0, 0.05);
  overflow: hidden;
  position: relative;
  transition: all 0.3s ease;
  margin-bottom: 2rem;
}

.product-card:hover {
  transform: translateY(-3px);
  box-shadow: 0 4px 15px rgba(0, 0, 0, 0.08);
}

.product-card .img-container {
  position: relative;
  width: 100%;
  aspect-ratio: 3/4;
  overflow: hidden;
}

.product-card img {
  width: 100%;
  height: 100%;
```

```css
  object-fit: cover;
}

/* Favorite Button */
.fav-btn {
  position: absolute;
  top: 10px;
  right: 10px;
  width: 36px;
  height: 36px;
  border: none;
  background: rgba(255, 255, 255, 0.9);
  color: #ff7eb9;
  font-size: 1.3rem;
  border-radius: 50%;
  cursor: pointer;
  box-shadow: 0 2px 6px rgba(0, 0, 0, 0.1);
  transition: all 0.25s ease;
  display: flex;
  align-items: center;
  justify-content: center;
}

.fav-btn:hover {
  background: #ff7eb9;
  color: #fff;
  transform: scale(1.05);
}

/* NEW Badge */
.badge-new {
  position: absolute;
  top: 10px;
  left: 10px;
  background: #06b6d4;
  color: #fff;
  font-size: 0.7rem;
  padding: 3px 7px;
  border-radius: 5px;
  font-weight: 600;
}

/* Product Info */
.product-info {
  padding: 1rem;
}

.product-info h3 {
  font-size: 0.95rem;
  font-weight: 600;
  color: #333;
  line-height: 1.4;
  margin-bottom: 0.4rem;
}

.product-price {
  color: #444;
  font-weight: 500;
  font-size: 0.9rem;
```
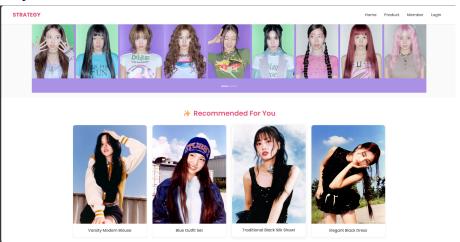
```css
}

/* ========== FOOTER ========== */
.footer-custom {
  background: #fff0f6;
  padding: 60px 0 20px;
  border-top: 2px solid #ffd6e7;
  margin-top: 3rem;
}

.footer-custom h3 {
  color: #ff7eb9;
  font-size: 1.6rem;
  margin-bottom: 10px;
}

.footer-custom h4 {
  color: #ff7eb9;
  margin-bottom: 12px;
  font-size: 1.1rem;
}

.footer-custom p,
.footer-custom a {
  color: #666;
  font-size: 0.95rem;
}

.footer-custom a {
  text-decoration: none;
  transition: color 0.3s;
}

.footer-custom a:hover {
  color: #ff7eb9;
}

.footer-custom .list-unstyled li {
  margin: 6px 0;
}

/* Social Icons */
.social-icons a {
  width: 36px;
  height: 36px;
  border-radius: 50%;
  background: #ffe0ec;
  display: inline-flex;
  align-items: center;
  justify-content: center;
  color: #ff7eb9;
  font-size: 1.1rem;
  margin-right: 12px;
  transition: all 0.3s ease;
  text-decoration: none;
}

.social-icons a:hover {
  background: #ff7eb9;
```

```css
  color: #fff;
  transform: scale(1.1);
}

.footer-bottom {
  margin-top: 40px;
  text-align: center;
  font-size: 0.9rem;
  color: #888;
}

/* ========== RESPONSIVE MEDIA QUERIES ========== */

/* Tablet dan Layar Sedang (768px and below) */
@media (max-width: 768px) {
  .carousel-banner {
    max-width: calc(100% - 30px);
    margin: 15px auto;
  }

  .carousel-banner .carousel-item img {
    height: 350px;
  }

  .section-title {
    font-size: 1.5rem;
  }

  .navbar-brand {
    font-size: 1.2rem;
  }
}

/* Mobile (576px and below) */
@media (max-width: 576px) {
  .carousel-banner {
    max-width: calc(100% - 20px);
  }

  .carousel-banner .carousel-item img {
    height: 220px;
  }

  .section-title {
    font-size: 1.3rem;
  }

  .navbar-brand {
    font-size: 1.1rem;
  }

  .fav-btn {
    width: 32px;
    height: 32px;
    font-size: 1.1rem;
  }

  .badge-new {
    font-size: 0.65rem;
```

```css
    padding: 2px 5px;
  }

  .product-info h3 {
    font-size: 0.85rem;
  }

  .product-price {
    font-size: 0.8rem;
  }

  .footer-custom {
    padding: 40px 0 15px;
  }

  .footer-custom h3 {
    font-size: 1.3rem;
  }

  .footer-custom h4 {
    font-size: 1rem;
  }

  .social-icons a {
    width: 32px;
    height: 32px;
    font-size: 1rem;
  }
}

/* Extra Small Mobile (375px and below) */
@media (max-width: 375px) {
  .carousel-banner .carousel-item img {
    height: 180px;
  }

  .section-title {
    font-size: 1.2rem;
  }

  .product-info {
    padding: 0.8rem;
  }

  .recommend-card p {
    font-size: 0.9rem;
    padding: 0.8rem;
  }
}
```

Output:

Penjelasan:

Setelah diperbarui menggunakan Bootstrap, halaman web ini kini menjadi jauh lebih responsif dan terstruktur dibanding versi sebelumnya yang masih menggunakan CSS manual.

Bootstrap membantu menyederhanakan pengaturan layout dengan sistem grid, membuat tampilan otomatis menyesuaikan di berbagai ukuran layar—mulai dari desktop, tablet, hingga ponsel.

Bagian seperti navbar, carousel/banner, card katalog produk, dan footer kini memanfaatkan komponen Bootstrap yang sudah siap pakai, sehingga tampilannya lebih rapi dan konsisten tanpa perlu banyak kode tambahan.

Selain itu, penggunaan class Bootstrap seperti container, row, col, dan card juga mempercepat proses styling dan membuat kode lebih efisien.

Secara keseluruhan, pembaruan ini meningkatkan tampilan visual, keteraturan struktur, dan responsivitas halaman, menjadikannya lebih modern dan mudah dikelola.

BAB III

PENUTUP

KESIMPULAN

Dari tugas mandiri ini, dapat disimpulkan bahwa penerapan Bootstrap sangat membantu dalam membuat tampilan web menjadi lebih rapi, responsif, dan menarik tanpa harus menulis banyak kode CSS manual. Pada sintaks yang dibuat, komponen seperti container, row, dan col digunakan untuk mengatur tata letak agar lebih terstruktur, sedangkan elemen seperti card, navbar, dan btn membantu membangun elemen antarmuka yang konsisten dan mudah dibaca. Dengan memanfaatkan sistem grid dan komponen bawaan Bootstrap, tampilan halaman menjadi lebih profesional dan dapat beradaptasi di berbagai ukuran layar. Melalui tugas ini, mahasiswa dapat memahami pentingnya framework CSS dalam pengembangan front-end modern serta penerapannya dalam pembuatan layout yang efisien.