

React

Building and Styling UI

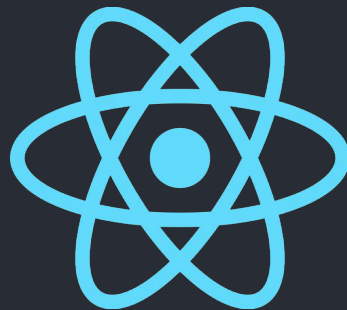
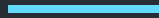


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Review



Review

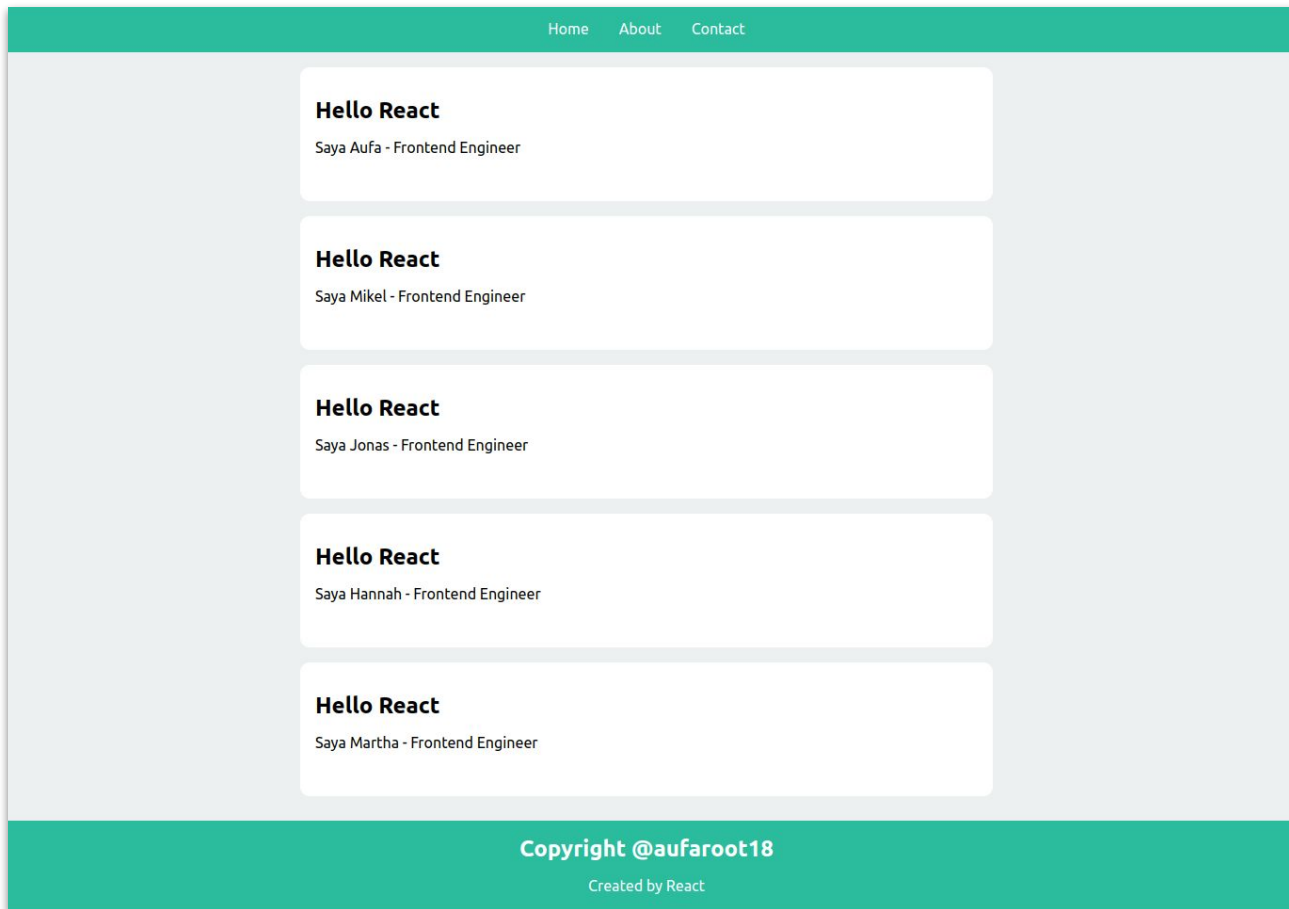
`<JSX />`

`<Navbar />`

Component

`<Hello name="aufa" />`

Props



<Header />

<Main />

<Hello />

<Hello />

<Footer />

Thinking in React

Thinking in React

- Start with a Mock/Design
- Break UI into Component
- Build Static Version
- Identify Minimal State
- Inverse Data Flow

Referensi: [React- Thinking in React](#).

Students Table

Search...

| Name | Major |
|-------|----------|
| Aufa | Frontend |
| Isfa | Android |
| Agung | Data |

<Container />

<h1></h1>

<SearchBar />

<StudentTable />

<StudentRow />

<StudentRow />

<StudentRow />

Styling



Styling

- Regular Stylesheet (CSS)
- [CSS Modules \(CSS\)](#)
- SASS (CSS Superpowers)
- [Styled Components \(CSS-in-JS\)](#)
- UI Framework (Component-base): Material UI, Ant Design, React Bootstrap,

Referensi: [Nothing](#).

CSS Modules

- Class(es) are scoped locally (encapsulation)
- CSS Modules is Regular CSS
- File name: `[name].module.css`
- Support: scoping css, avoid clash of class name, module.

Referensi: [CRA - Add CSS Modules](#).



Button.module.css

```
.primary {  
  color: blue;  
}
```

CSS Modules



Button.js

```
import styles from "../Button.module.css";  
  
function Button() {  
  return (  
    <button className={styles.primary}>  
      Button  
    </button>  
  )  
}
```

Button Component



HTML

```
<button class="Button_primary_ax7yz">  
  Button  
</button>
```

Result

Folder Structure

Folder Structure

React doesn't provide how to structure file & folder.

Common approaches:

- Grouping by feature or route
- Grouping by file type

Referensi: [React - File Structure](#).



Grouping by Feature

Login

Login.js

Login.css

Login.test.js

Profile

Profile.js

Profile.css

Profile.text.js



Grouping by File Type

components

Header.js

Main.js

Footer.js

pages

Home.js

Login.js

About.js

Folder Structure

| Folder | Description |
|------------|----------------------------------|
| components | Menyimpan berbagai components |
| pages | Menyimpan halaman-halaman |
| assets | Assets: gambar, svg, fonts, logo |
| utils | Utilities, constants, helpers |
| services | External resource |
| store | Global state: redux, context |

Mobile-First



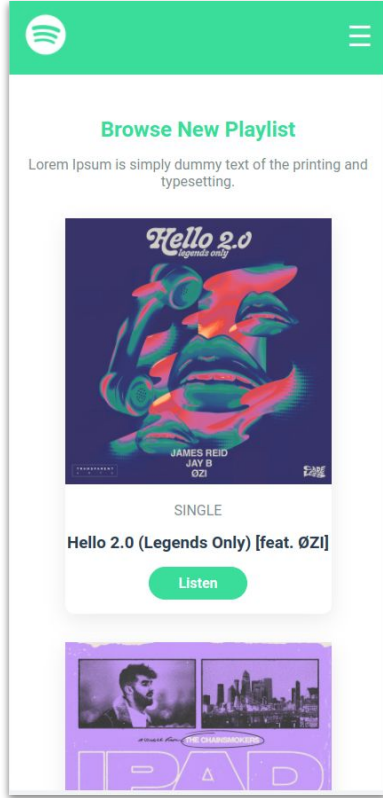
Mobile-First

- Responsive Web Design
- Mobile-First-Approach
- Using Media Query (CSS)

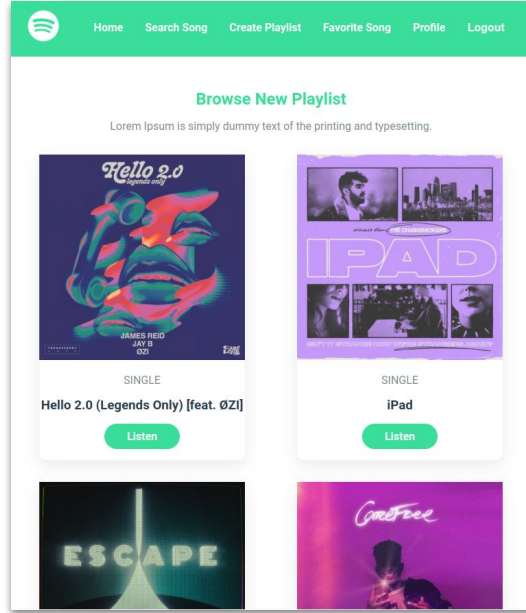
Referensi: [Nothing](#).

Breakpoint

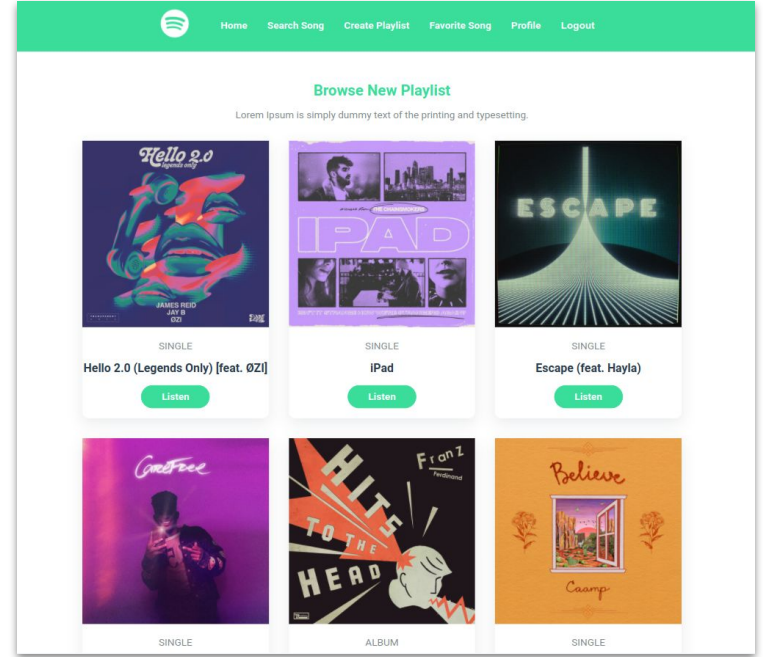
| Breakpoint | Dimension |
|----------------------------|------------------|
| small: phone | <758px (default) |
| medium: tablet | ≥768px |
| large: desktop, laptop, tv | ≥992px |



Small Device



Medium Device



Large Device

Setup

Design

- Register Figma: [Link](#).
- Duplicate Design: [Link](#)
- Feel free to change according to your needs
- Includes: Style Guide, Component, Pages

Referensi: [Figma Design](#).

Assets

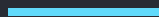
| Assets | Source |
|---------------|--------------------------------------|
| Image | <u>Picsum Photos</u> |
| Fonts | <u>Google Font</u> |
| Color Palette | <u>Coolors</u> |
| CSS | <u>Github</u> |

Reset CRA

- Remove styling in `index.css` file.
- Add CSS Reset in `index.css`.
- Delete `App.css` file.
- Remove all components in `App.js` Component.

Referensi: [CRA - Adding CSS Reset](#).

Movie App



Home Page

- Membuat halaman Home.
- Simpan di folder `src/pages/`.
- Page: `Home.js`.



Home.js

```
/**
 * Membuat Component Home.
 * Menampilkan Halaman Home.
 * Menampung Navbar, Main, dan Footer Component
 */
function Home() {
  return (
    <>
      <h1>Halaman Home</h1>
    </>
  );
}

export default Home;
```



App.js

```
// Import Halaman Home
import Home from "../pages/Home";

function App() {
  /**
   * Menampilkan Halaman Home.
   * Tag div bisa diganti dengan tag <>.
   * Tag <> adalah React fragment
   */
  return (
    <>
      <Home />
    </>
  );
}

export default App;
```

Navbar Component

- Membuat navigasi.
- Simpan di folder `src/components/Navbar/`.
- Component: `Navbar.js`.
- CSS: `Navbar.module.css`.



Navbar.js

```
/**
 * Import CSS Module Navbar.
 * Disimpan di object styles.
 */
import styles from "./Navbar.module.css";

function Navbar() {
  /**
   * Menggunakan styles yang sudah diimport.
   * Memanggilnya menggunakan expression.
   */
  return (
    <div className={styles.container}>
      <nav className={styles.navbar}>
        <div>
          <h1 className={styles.navbar__brand}>Movie App</h1>
        </div>
        <div>
          <ul className={styles.navbar__list}>
            <li className={styles.navbar__item}>Home</li>
            <li className={styles.navbar__item}>Add Movie</li>
            <li className={styles.navbar__item}>Popular</li>
            <li className={styles.navbar__item}>Now Playing</li>
            <li className={styles.navbar__item}>Top Rated</li>
          </ul>
        </div>
      </nav>
    </div>
  );
}

export default Navbar;
```

Navbar Component

Navbar.module.css

```
/* Small Screen */
.container {
  background-color: #4361ee;
  padding: 1rem;
  color: #fff;
}

.navbar {
  display: flex;
  flex-direction: column;
}

.navbar__brand {
  font-size: 2.4rem;
  margin-bottom: 1rem;
}

.navbar__list {
  display: flex;
  flex-direction: column;
  list-style: none;
}

.navbar__item {
  margin-bottom: 1rem;
}
```

Small Screen

Navbar.module.css

```
/* Medium Screen */
@media (min-width: 768px) {
  .navbar {
    flex-direction: row;
    justify-content: space-between;
    align-items: center;
  }

  .navbar__brand {
    margin-bottom: 0;
  }

  .navbar__list {
    flex-direction: row;
  }

  .navbar__item {
    margin: 0 1rem;
  }
}
```

Medium Screen

Navbar.module.css

```
/* Large Screen */
@media (min-width: 992px) {
  /*
   * Nothing TODO HERE.
   * We haven't styling Navbar.
   */
}
```

Large Screen

Footer Component

- Membuat footer website
- Simpan di folder `src/components/Footer/`.
- Component: `Footer.js`.
- CSS: `Footer.module.css`.



Footer.js

```
/**
 * Import CSS Module Footer.
 * Disimpan di object styles.
 */
import styles from './Footer.module.css';

function Footer() {
  /**
   * Menggunakan styles yang sudah diimport.
   * Memanggilnya menggunakan expression.
   */
  return (
    <div className={styles.container}>
      <footer className={styles.footer}>
        <h2 className={styles.footer__title}>Movie App</h2>
        <p className={styles.footer__author}>Created by aufaroot18</p>
      </footer>
    </div>
  );
}

export default Footer;
```

Footer Component



Footer.module.css

```
/* Small Screen */
.container {
  background-color: #4361ee;
  color: #fff;
  padding: 1rem;
  text-align: center;
}

.footer__title {
  margin-bottom: 1rem;
}

.footer__author {
  margin-bottom: 1rem;
}
```

Small Screen



Footer.module.css

```
/* Medium Screen */
@media (min-width: 768px) {
  /*
    * Nothing TODO here.
    * We dont change styling footer.
  */
}
```

Medium Screen



Footer.module.css

```
/* Large Screen */
@media (min-width: 992px) {
  /*
    * Nothing TODO here.
    * We dont change styling footer.
  */
}
```

Large Screen

Hero Component

- Membuat hero/header/banner/jumbotron website
- Simpan di folder `src/components/Hero/`.
- Component: `Hero.js`.
- CSS: `Hero.module.css`.



Hero.js

```
import styles from "./Hero.module.css";

function Hero() {
  return (
    <div className={styles.container}>
      <section className={styles.hero}>
        <div className={styles.hero__left}>
          <h2 className={styles.hero__title}>Spiderman</h2>
          <h3 className={styles.hero__genre}>
            Genre: Thriller, Drama, Romance
          </h3>
          <p className={styles.hero__description}>
            Lorem ipsum dolor, sit amet consectetur adipisicing elit. Aliquam
            cum accusamus quisquam earum velit ea nobis maiores exercitationem
            nam temporibus.
          </p>
          <button className={styles.hero__button}>Watch</button>
        </div>
        <div className="hero__right">
          
        </div>
      </section>
    </div>
  );
}

export default Hero;
```

Hero Component

Hero.module.css

```
/* Small Screen */  
.container {  
  margin: 1rem;  
}  
  
.hero {  
  display: flex;  
  flex-direction: column;  
  text-align: center;  
}  
  
.hero__left {  
  margin-bottom: 1rem;  
}  
  
.hero__title {  
  color: #4361ee;  
  margin-bottom: 1rem;  
  font-size: 2.44rem;  
}
```

Hero.module.css

```
.hero__genre {  
  color: #b5179e;  
  margin-bottom: 1rem;  
  font-size: 1.59rem;  
}  
  
.hero__description {  
  color: #64748b;  
  margin-bottom: 1rem;  
}  
  
.hero__button {  
  padding: 0.8rem 2rem;  
  border: none;  
  border-radius: 10px;  
  background-color: #4361ee;  
  color: #fff;  
}  
  
.hero__image {  
  max-width: 100%;  
  height: auto;  
  border-radius: 25px;  
}
```

Small Screen

```
Hero.module.css

/* Medium Screen */
@media (min-width: 768px) {
  /*
   * Nothing TODO Here.
   * We dont change style Hero.
   */
}
```

Medium Screen

```
Hero.module.css

/* Large Screen */
@media (min-width: 992px) {
  .container {
    max-width: 1200px;
    margin: 3rem auto;
  }

  .hero {
    margin: 0 1rem;
    flex-direction: row;
    justify-content: space-between;
    align-items: center;
    text-align: left;
  }

  .hero__left {
    flex-basis: 40%;
  }

  .hero__right {
    flex-basis: 60%;
  }
}
```

Large Screen

Movies Component

- Menampilkan daftar movies
- Simpan di folder `src/components/Movies/`.
- Component: `Movies.js`.
- CSS: `Movies.module.css`.



Movies.js

```
import styles from "../Movies.module.css";

function Movies() {
  return (
    <div className={styles.container}>
      <section className={styles.movies}>
        <h2 className={styles.movies__title}>Latest Movies</h2>
        <div className={styles.movies__container}>
          <div className={styles.movie}>
            
            <h3 className={styles.movie__title}>Movie Title</h3>
            <p className={styles.movie__date}>Date Title</p>
          </div>
          { /*
            * Duplicate 10 movies below
            */ }
        </div>
      </section>
    </div>
  );
}

export default Movies;
```

Movies Component

● ● ● Movies.module.css

```
/* Small Screen */  
.container {  
  margin: 1rem;  
}  
  
.movies {  
  margin: 5rem 0;  
  text-align: center;  
}  
  
.movies__title {  
  margin-bottom: 1rem;  
  font-size: 2.44rem;  
  color: #4361ee;  
}
```

● ● ● Movies.module.css

```
.movie__container {  
  display: flex;  
  flex-direction: column;  
}  
  
.movie {  
  margin-bottom: 1rem;  
}  
  
.movie__image {  
  border-radius: 25px;  
  max-width: 100%;  
  height: auto;  
  margin-bottom: 1rem;  
}  
  
.movie__title {  
  color: #4361ee;  
  font-size: 1.95rem;  
  margin-bottom: 0.5rem;  
}  
  
.movie__date {  
  color: #64748b;  
}
```

Small Screen

● ● ● Movies.module.css

```
/* Medium Screen */
@media (min-width: 768px) {
  .movie__container {
    flex-direction: row;
    flex-wrap: wrap;
    justify-content: center;
    align-items: center;
  }

  .movie {
    flex-basis: 50%;
  }
}
```

Medium Screen

● ● ● Movies.module.css

```
/* Large Screen */
@media (min-width: 992px) {
  .container {
    max-width: 1200px;
    margin: 3rem auto;
  }

  .movie {
    flex-basis: 25%;
    padding: 1rem;
  }
}
```

Large Screen



Home.js

```
// Import Footer, Hero, Movies, Navbar Component
import Footer from "../components/Footer/Footer";
import Hero from "../components/Hero/Hero";
import Movies from "../components/Movies/Movies";
import Navbar from "../components/Navbar/Navbar";

/**
 * Membuat Component Main.
 * Menampung Hero dan Movies
 */
function Main() {
  return (
    <main>
      <Hero />
      <Movies />
    </main>
  );
}

/**
 * Membuat Component Home.
 * Menampilkan Halaman Home.
 * Menampung Navbar, Main, dan Footer Component
 */
function Home() {
  return (
    <>
      <Navbar />
      <Main />
      <Footer />
    </>
  );
}

export default Home;
```

QnA

—

Take Away

Task

Description:

- Task boilerplate: [Link](#).
- Practice Component and CSS Module.

Assignment:

- Push code to Repository Github (use branch for task management).
- Task tidak perlu [dizip](#) dan folder [node_modules](#) tidak perlu diupload.
- Submit link repository to elena: [Link](#).

TODO

- Membuat Component untuk Menambahkan Movie (Form).
- Simpan di folder `src/components/AddMovieForm/`.
- Component: `AddMovieForm.js`
- CSS: `AddMovieForm.module.css`
- Design Component sesuai Figma atau Custom.
- Tampilkan Component di halaman Home (sesuai design).

Hint:

- HTML Form: [Devsaurus - Form](#)
- CSS Flexbox: [Devsaurus - Flexbox](#).

Attendance

—

Thanks

