

Front End Software Development

Web App Design w/React (weeks 13 - 18)

Week 04



Agenda

- Questions
- React Router
 - Changes: V5 -> V6
- React Bootstrap
- Final Project

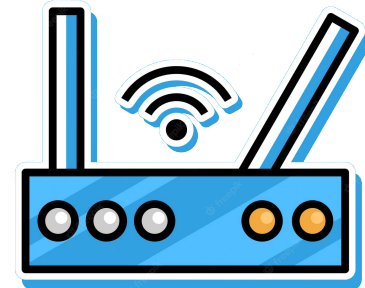


Questions



React Router

- SPA – Single Page Application
- Installation
 - `npm install react-router-dom`
- React v6 Changes
 - Routes replaces Switch
 - Nested Route



```
<Router>
  <div>
    <ul>
      <li><Link to="/">Home</Link></li>
      <li><Link to="/friends">Friends</Link></li>
      <li><Link to="/posts">Posts</Link></li>
    </ul>
  </div>
  <Routes>
    <Route path="/">
      <Route index element={ <Home /> } />
      <Route path="posts" element={ <Posts data={ posts } /> } />
      <Route path=":postId" element={ <Post data={ posts } /> } />
    </Route>
    <Route path="friends" element={ <Friends data={ friends } /> } />
  </Route>
</Routes>
</Router>
```

Nested Routes

React Router

(continued)

- More...
 - No longer need to use `useRouteMatch`.
 - Nested route assumes relative path.

```
function Posts(props) {  
  const { data } = props;  
  const { postId } = useParams();  
  
  const post = data.filter(p => p.id === parseInt(postId, 10))[0];  
  return(  
    <div>  
      <h2>Posts</h2>  
      <ul>  
        { data.map((post, index) => {  
          return(  
            <li key={ post.id }>  
              <Link to={ `${post.id}` }>{ post.title }</Link>  
            </li>  
          );  
        })}  
      </ul>  
      { post ? <Post data={ post } /> : <p>Select post</p> }  
    </div>  
  );  
}
```

Component Tree

```
<App>  
  <Posts>  
    <Post />  
  </Posts>  
</App>
```

Relative Path

React Bootstrap



- What is it?
 - Bootstrap components rewritten as React components.
 - Removed unneeded dependencies (*i.e.* jQuery)
 - <https://react-bootstrap.github.io/>
- Installation
 - `npm install react-bootstrap bootstrap`
 - Need CSS from bootstrap

```
import '../node_modules/bootstrap/dist/css/bootstrap.min.css'
```
- All Components vs. Needed Components
 - NO - `import { Button } from 'react-bootstrap'`
 - YES - `import Button from 'react-bootstrap/Button'`

Final Project

Using an online **API** of your choice create a React project of your choice.

*If no API is available, use an array for in-memory storage. **Note:** crudcrud.com is a popular choice.*

- **Requirements**

- Use React Router and have at least 3 pages
- Use React Bootstrap (or an alternative styling library)
- Allow for **ALL** CRUD operations (Create, Read, Update & Delete).
- **Must contain at least 10 components**





HANDS ON

Sample Project