React Official Tutorial — Reference Guide

Project Setup

```
npx create-react-app my-app
cd my-app
npm start
```

Or with Vite (recommended):

```
npm create vite@latest my-app -- --template react-ts
```

Project Structure

```
src/
├── components/      # Reusable UI components
├── pages/           # Route-level components
├── hooks/           # Custom hooks
├── services/        # API calls
├── stores/          # State management
├── types/           # TypeScript types
├── App.tsx          # Root component
└── main.tsx         # Entry point
```

State Management Options

Library	Best For	Complexity
useState	Local component state	Low
useContext	Shared state (small apps)	Low
Zustand	Global state (medium apps)	Low
Redux	Complex global state	High

Routing with React Router

```
import { BrowserRouter, Routes, Route } from 'react-router-dom';
```

```
function App() {
  return (
    <BrowserRouter>
      <Routes>
        <Route path="/" element={<Home />} />
        <Route path="/about" element={<About />} />
        <Route path="/user/:id" element={<Profile />} />
      </Routes>
    </BrowserRouter>
  );
}
```

Key Takeaways

1. Vite is faster than Create React App for new projects.
2. Organize code by feature, not by type.
3. Zustand is a great lightweight alternative to Redux.
4. Use TypeScript for type safety in production apps.

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