



Web Development: React

Orbital 2023 Mission Control

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Resources

Covered in Workshop

- Slides:  React Workshop 2023 (Part 1)  React Workshop 2023 (Part 2)
- Exercises (linked below)

Reading List

- Learn HTML in Y minutes: <https://learnxinyminutes.com/docs/html/>
- Learn CSS in Y minutes: <https://learnxinyminutes.com/docs/css/>
- Learn JavaScript in Y minutes: <https://learnxinyminutes.com/docs/javascript/>
- JavaScript, the React parts: <https://reacttraining.com/blog/javascript-the-react-parts/>
- (Optional) Official React Tutorial: <https://react.dev/learn/tutorial-tic-tac-toe>
- (Optional) Thinking in React: <https://react.dev/learn/thinking-in-react>
- (Optional) React Hooks: <https://react.dev/reference/react>

Further Exploration

- Redux: <https://redux.js.org/introduction/getting-started>
 - State management using a centralized store
- TypeScript: <https://www.typescriptlang.org/>
 - JavaScript, but with types
- ESLint: <https://eslint.org/>
 - This is called a “linter”, a static code analysis tool that flags problems
- Prettier: <https://prettier.io/>
 - This is a code formatter, try to set it to format-on-save on VSCode

Exercises

No.	Sandbox Link	Contents / Changes	Learning Objectives
0	https://codesandbox.io/s/orbital-react-2023-exercise-0-gux86g	Building initial skeleton	Refresher on HTML
1	https://codesandbox.io/s/orbital-react-2023-exercise-1-xy1foq	Add changing of name	Understand state in React and interaction between JavaScript and JSX
2	https://codesandbox.io/s/orbital-react-2023-exercise-2-k4r3k6	Break code up into multiple React components	Introduce component tree, code organization and using multiple files
3	https://codesandbox.io/s/orbital-react-2023-exercise-3-l3vtfz	Able to display tasks from state	Introduce prop passing and mapping of data to React elements
4	https://codesandbox.io/s/orbital-react-2023-exercise-4-mskufy	Able to add tasks	Introduce React events, spread operator, preventing browser default behavior
5	https://codesandbox.io/s/orbital-react-2023-exercise-5-f39flo	Show an empty state for name and tasks	Understand conditional rendering
6	https://codesandbox.io/s/orbital-react-2023-exercise-6-tqr6sv	Add ability to toggle task completion	Introduce passing of callbacks, destructuring and immutability
7	https://codesandbox.io/s/orbital-react-2023-exercise-7-de758o	Show number of incomplete tasks in the header	Introduce the idea of lifting state
8	https://codesandbox.io/s/orbital-react-2023-exercise-8-59x8wy	Make an API call to https://catfact.ninja/fact and display it in “Cat Fact of the Day”	Introduce integration with native JS features (fetch), making API calls, asynchronous programming with promises
9	https://codesandbox.io/s/orbital-react-2023-exercise-9-fvzgx9	Persist to localStorage	Introduce native browser APIs and serialization of JavaScript objects
10	https://codesandbox.io/s/orbital-react-2023-exercise-10-b6ziof	Deploy to Vercel	Introduce continuous delivery (CD)

11	https://codesandbox.io/s/orbital-react-2023-exercise-10-b6ziof	Use Material UI to style to-dos	Introduce third-party libraries, using complex custom components, reading documentation
12	https://codesandbox.io/s/orbital-react-2023-exercise-11-4fwtd	Authenticating with Supabase	Introduce external service, React effects and async network calls
13	https://codesandbox.io/s/orbital-react-2023-exercise-12-zhqcmi	CRUD for to-dos with Supabase	Further understanding into persisting changes to a database
14	https://codesandbox.io/s/orbital-react-2023-exercise-13-w069lm	Installing on local system, deploy to Vercel	Introduce continuous delivery (CD)