

## **P02 Mobile Project, React**

1

By now, you should have chosen a service for your MOBA2 project app. Reminder: one goal of this course is to develop the app in two different technologies:

- React Native (based on Expo)
- iOS native (XCode and SwiftUI)

Add a short description of your project to the course Wiki:

- Service to be used
- Team members
- Link to the API description
- Other important information if available

2

Start a new React project. There are various ways to do this. The React development teams recommends using a framework like Next.js or Remix: <a href="https://react.dev/learn/start-a-new-react-project">https://react.dev/learn/start-a-new-react-project</a>

As an alternative, Vite can be used to quickly set up a React installation: <a href="https://vitejs.dev">https://vitejs.dev</a>

We recommend Vite for this assignment: <a href="https://vitejs.dev/guide/">https://vitejs.dev/guide/</a>

Steps with yarn:

```
yarn create vite my-react-app --template react
cd my-react-app
yarn
yarn dev
```

Make some changes to the home page, e.g., change the welcome text and add other HTML elements (button, ...) to the page.

Also, try some alternatives – online or minimal HTML template – described here: <a href="https://react.dev/learn/installation#try-react">https://react.dev/learn/installation#try-react</a>
<a href="https://stackblitz.com/edit/vitejs-vite-lerneb?file=index.html&terminal=dev">https://stackblitz.com/edit/vitejs-vite-lerneb?file=index.html&terminal=dev</a>



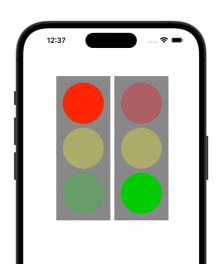
3 Develop a small React app simulating traffic lights:

Start with a Light component, e.g.,

Styles can be added to a component as inline styles, like *backgroundColor* or *opacity* in the code shown above. A separate stylesheet rule can be used for additional styling:

```
.light {
  width: ...;
  height: ...;
  border-radius: 50%;
  margin: ...;
}
```

Now, use the *Light* components to build a *TrafficLight* component consisting of three *Light*s.



Add some logic, e.g., a *nextStep()* method, to the *TrafficLight* component that switches the *TrafficLight* to the next state.

The final App should contain two *TrafficLights* controlled by timers or by clicking on the component.