Zurich University
of Applied Sciences

School of
Engineering

# 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
- 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
Install React using *Create React App* as described here:
https://reactjs.org/docs/create-a-new-react-app.html

You need to have *Node* >= 14 and *npm* >= 5.6 on your machine.

Steps:

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

Make some changes to the application, e.g., change the text *Welcome to React* to some other text and add other HTML elements (button, …) to the page.

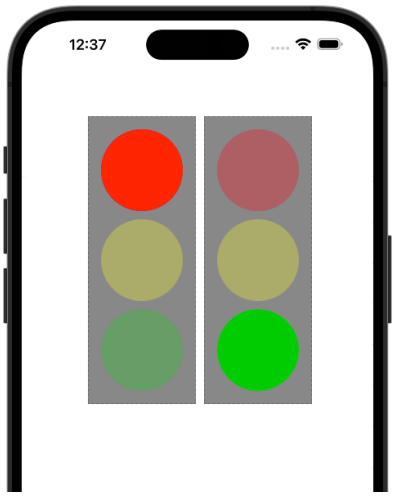
Also, try some alternatives – online or minimal HTML template – described here:
https://reactjs.org/docs/getting-started.html#try-react
https://reactjs.org/docs/add-react-to-a-website.html

3
Develop a small React app simulating traffic lights:

Start with a *Light* component, e.g.,

```
const Light = ({ color, active }) => (
  <div
    className="light"
    style={{ backgroundColor: color, opacity: active ? 1 : 0.3 }} />
)
```

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 *TrafficLight*s controlled by timers or by clicking on the component.