

Homework

Task (30 min)

You are mid/senior developer in a large long-term project A. During sprint planning there is the following user story:

As an external portal user

When I open the external portal and a widget from project A is displayed

Then I should see the position of a virtual car increasing each second

And I should see its fuel consumption

And I should see an alert if too much fuel consumed.

The PO (product owner, who is a sales consultant in another department) has mentioned that they will want to add more features to the widget and make it more customisable at some point in the future.

You agree for one of the junior developers to take the user story, who proceeds to write the code and demonstrate it to the PO. The PO is satisfied it functions as requested.

The developer then creates a *pull request* for code review:

```
1: import React, { useEffect, useState } from 'react';
2:
3: const css = {
4:   fontSize: "12px"
5: }
6:
7: function CarsFuel(props){
8:   return <h1 style={css}>Car's fuel consumed: {props.children}</h1>
9: }
10:
11: function Alert(props){
12:   const fuel = props.fuel;
13:   const [state, setState] = useState(0);
14:
15:   useEffect(() => {
16:     if (fuel > 1200){
17:       setState(1);
18:     }
19:   },[fuel]);
20:
21:   if (state){
22:     return <h2 style={{color:"red"}}>Alert</h2>;
23:   } else {
24:     return <h2>All is fine</h2>;
25:   }
26: }
27:
28: class App extends React.Component {
29:   constructor(props) {
30:     super(props);
31:
32:     // We declare the state
33:     this.state = {
34:       x: 1,
35:       f: 0
36:     }
37:   }
38:
39:   updateCoordinates() {
```

```

40:     setInterval(()=> {this.setState(prevState => ({x: prevState.x + 1, f: 1 + pr
    evState.f + prevState.x * 10}))), 1000)
41:   }
42:
43:   componentDidMount(){
44:     this.updateCoordinates();
45:   }
46:
47:   render() {
48:     var x1 = this.state.x;
49:     var fuel = this.state.f;
50:
51:     return (
52:       <div>
53:         <h1>Position - {x1}</h1>
54:         <CarsFuuel>{fuel}</CarsFuuel>
55:         <Alert fuel={fuel}/>
56:       </div>
57:     );
58:   }
59: }
60:
61: export default App;

```

To-do:

Provide code review comments in the following format:

- Line number;
- Comment.