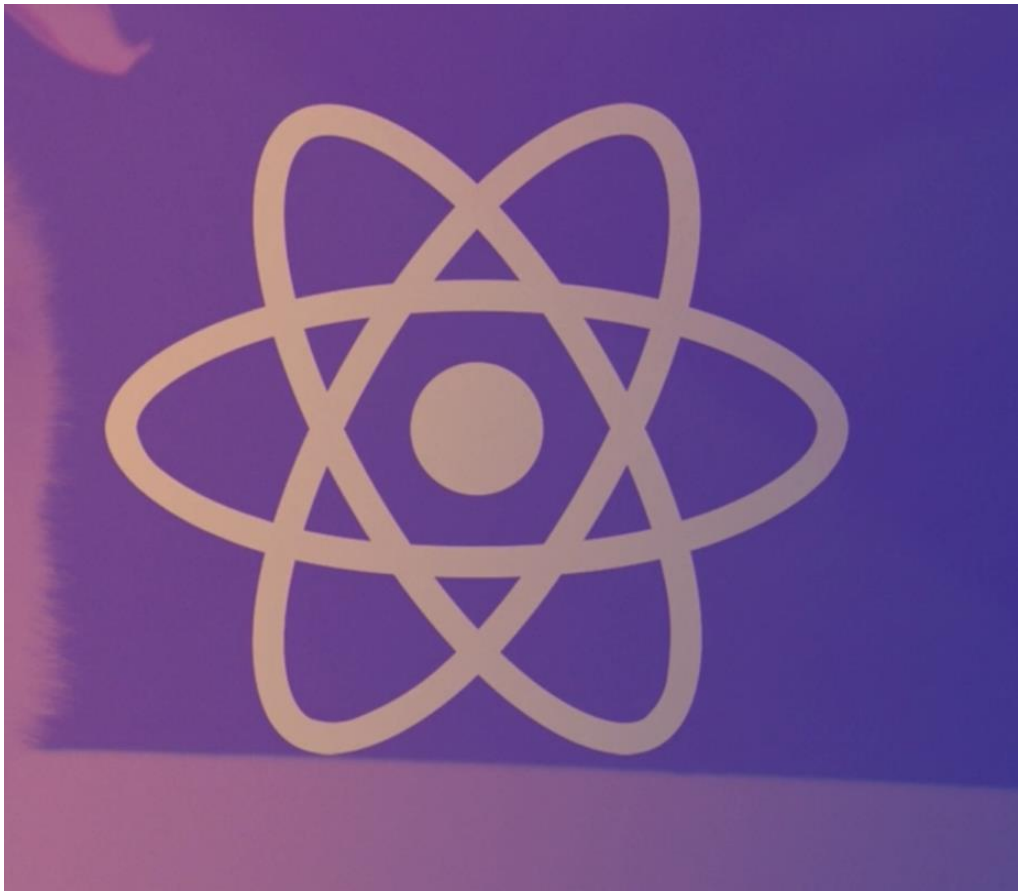

React For The Rest Of Us (2021)

by Brad Schiff

Learn React JS to create Single Page Applications (SPA) using modern practices like Context, Reducer, Suspense and more

https://www.udemy.com/course/react-for-the-rest-of-us/

Theory code example

[placeholder to enter some parameters]

Real code example

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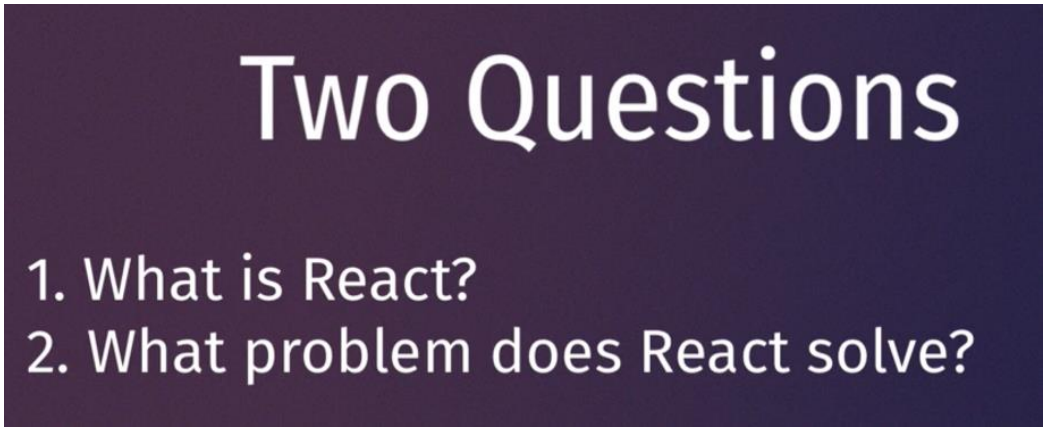
```
const useState = React.useState
const MyApp = () => {
  const initialArray = [{ name: "Meowsalot", species: "cat", age: "5", id: 123456789 }]
  const [allPets, setAllPets] = useState(initialArray)
  const AddPet = props => {
    const [name, setName] = useState('')
    const [species, setSpecies] = useState('')
    const [age, setAge] = useState('')
    const handleSubmit = e => {
    e.preventDefault()
    if(name === '' || species === '' || age === ''){
    setName('')
    setSpecies('')
    setAge('')
    } else {
    props.set(prev => prev.concat({name, species, age, id: Date.now()}))
    setName('')
    setSpecies('')
    setAge('')
    }
    }
    return <form onSubmit={handleSubmit}>
      <fieldset>
        <legend>Add New Pet</legend>
        <input  value={name} onChange={e => setName(e.target.value)} placeholder="Name" />
        <input  value={species} onChange={e => setSpecies(e.target.value)} placeholder="species" />
        <input  value={age} onChange={e => setAge(e.target.value)} placeholder="age in years" />
        <button onClick={handleSubmit}>Add Pet</button>
      </fieldset>
    </form>}

  const ShowAll = props => {
    return <> <div>ALL THE PETS:</div>
      {props.all.map(el => <li>{el.name} is a {el.species} and it is {el.age} years old!</li>)} </>}
  return <> <AddPet set={setAllPets}/> <ShowAll all={allPets}/></>}
ReactDOM.render(<MyApp />, document.querySelector("#app"))
```

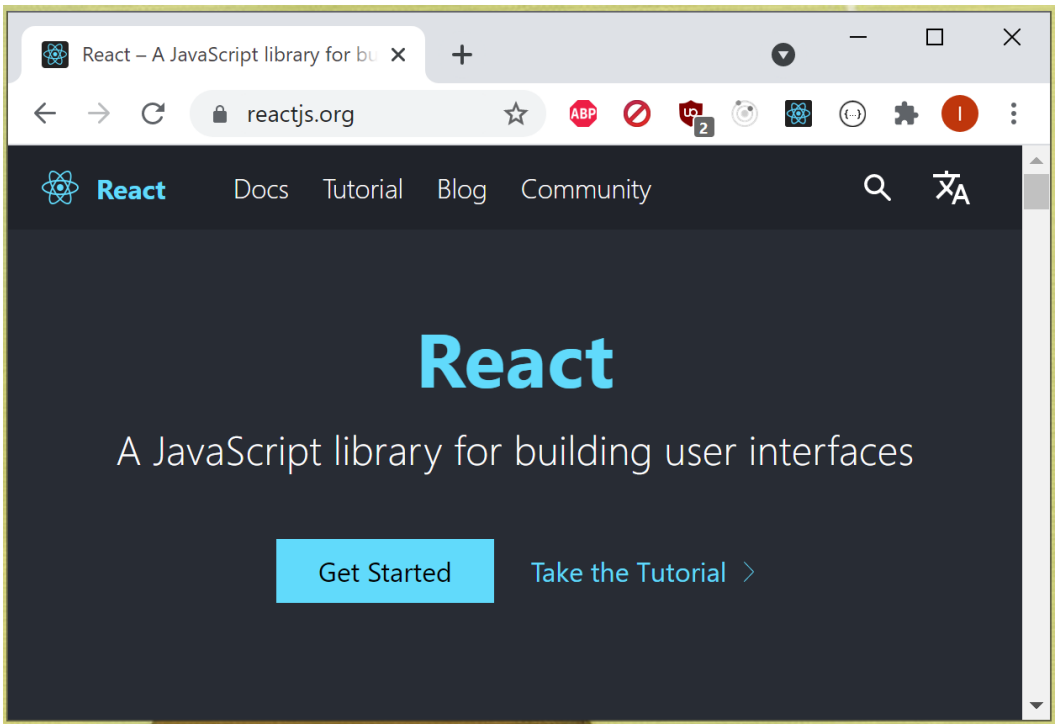
.....13

1 Intro

1.1 Two main questions about REACT



1.1.1 What is REACT?



1.1.2 What problems does REACT solve?

1.2 Playground with codepen.io

I have created a simple HTML document with only 1 element (div) - *** ***

Now I will try to change a content of this HTML page with JS (React)

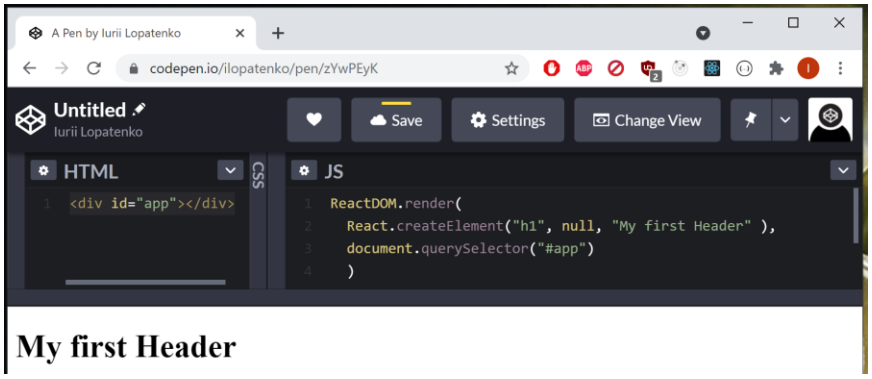
ReactDOM.render(**[content to render]** , **[place to render]**)

To create **[place to render]** I am going to use **document.querySelector("[element]"))**

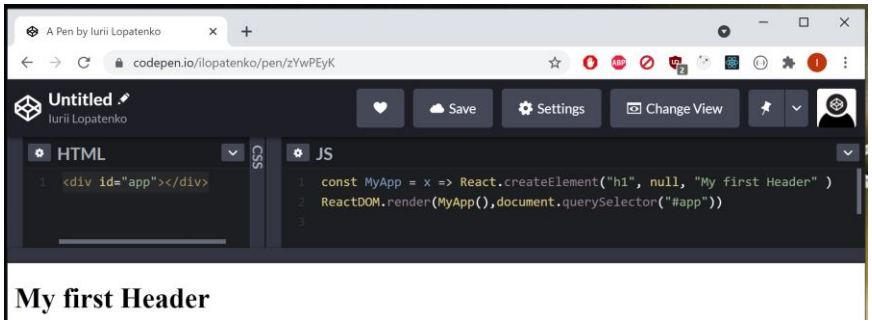
document.querySelector("app"))

To create **[content to render]** I am going to use **React.createElement([set a type] , [set a properties] , [set a content/children])**

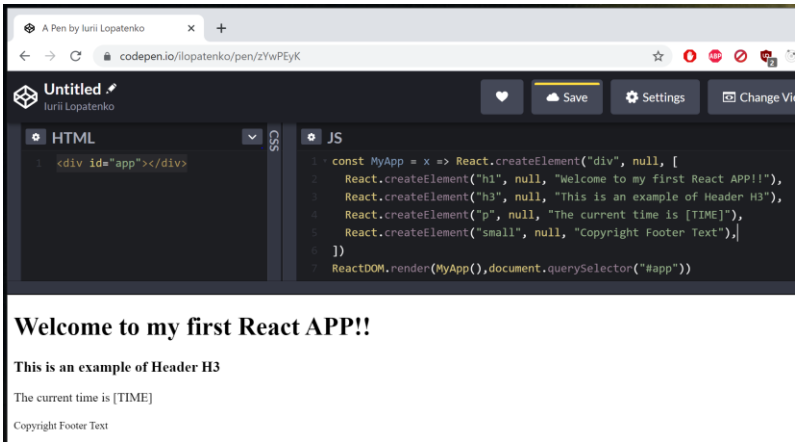
React.createElement("h1" , null , "My first Header")



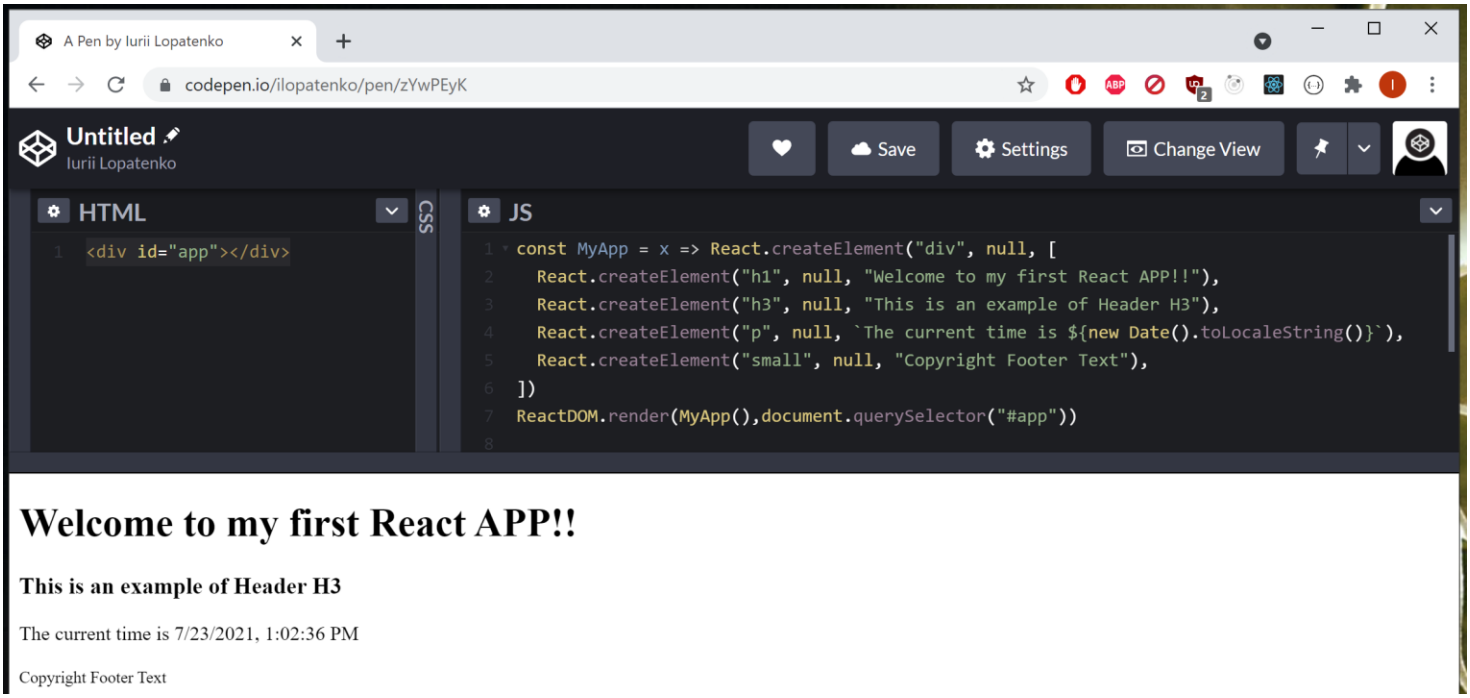
Create a MODULE MyApp (this Module will create a new HTML element (h1 with some text) and return it)



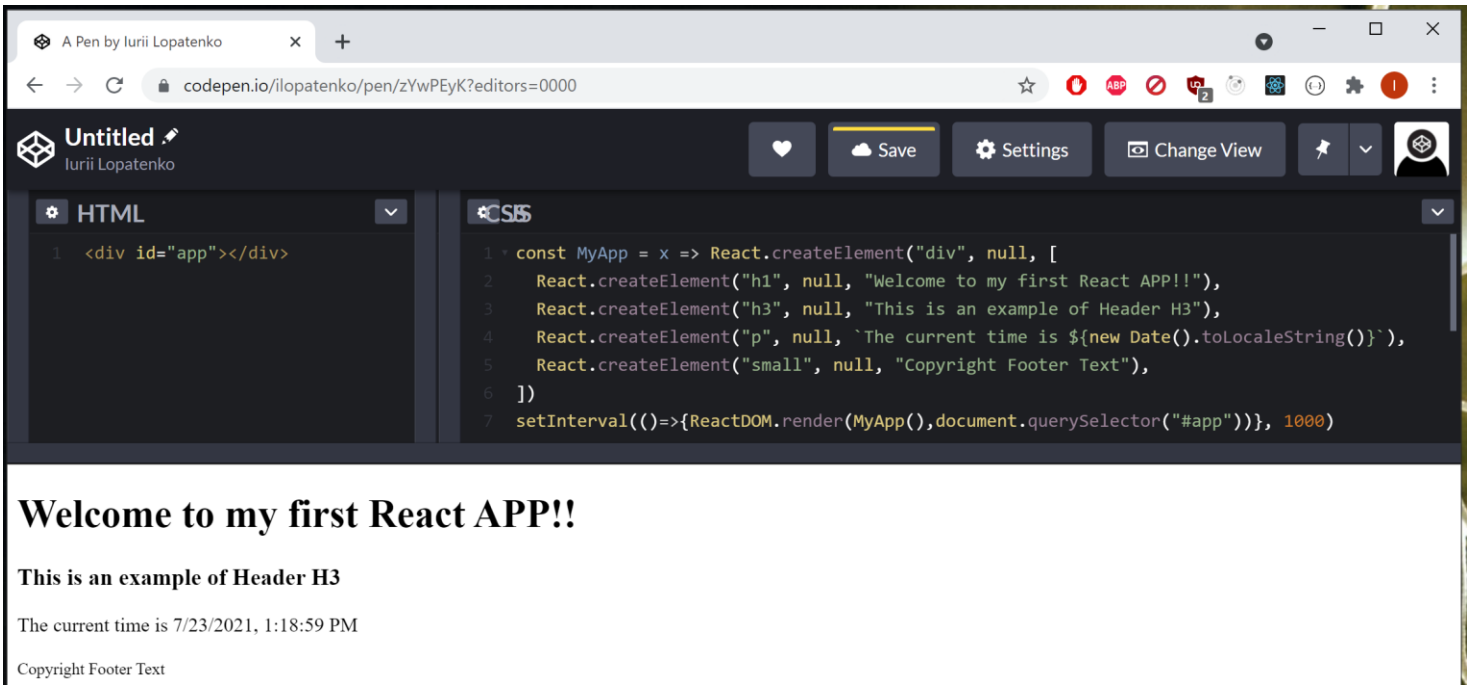
Use **[set of children]** to create few elements inside a root element (div):



Pass a Date object to a HTML page (now date is not able to change on a page)



Implement auto page refresh. **setInterval(() => { [MainComponent] } , [interval])**



1.3 JSX (BABEL JS preprocessor)

Rewrite my app with using JSX syntax:

Welcome to my first React APP!!

This is an example of Header H3

The current time is 7/23/2021, 1:48:45 PM

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JSX also can work with CSS:

Welcome to my first React APP!!

This is an example of Header H3

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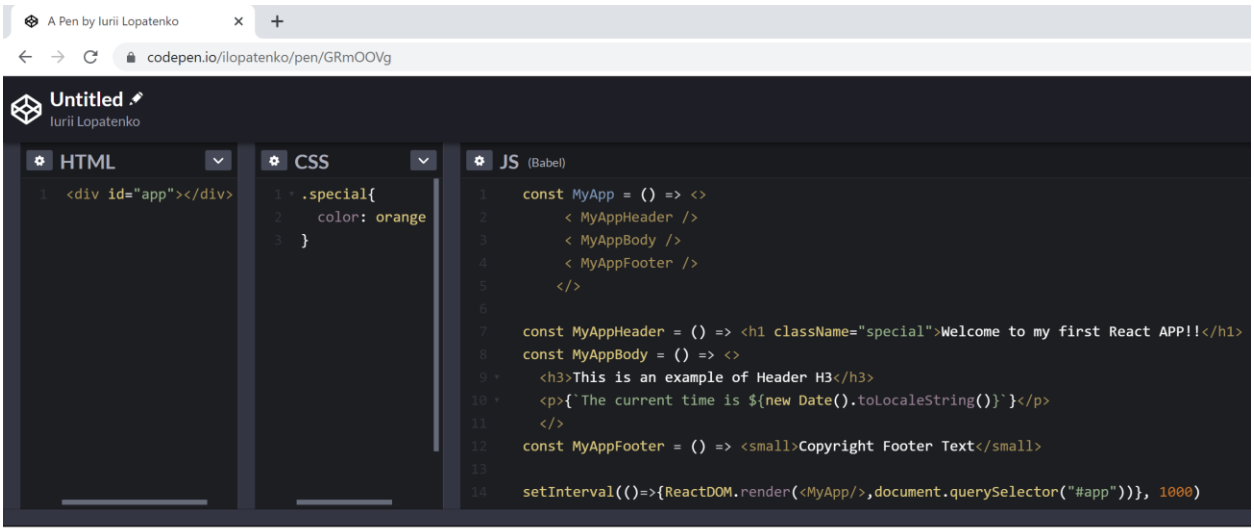
https://codepen.io/ilopatenko/pen/zYwPEyK

1.4 Nested Components in React

One of the most important concept in React – split out all the code into a small separate logical pieces and reuse them many times wherever we want.



Welcome to my first React APP!!

This is an example of Header H3

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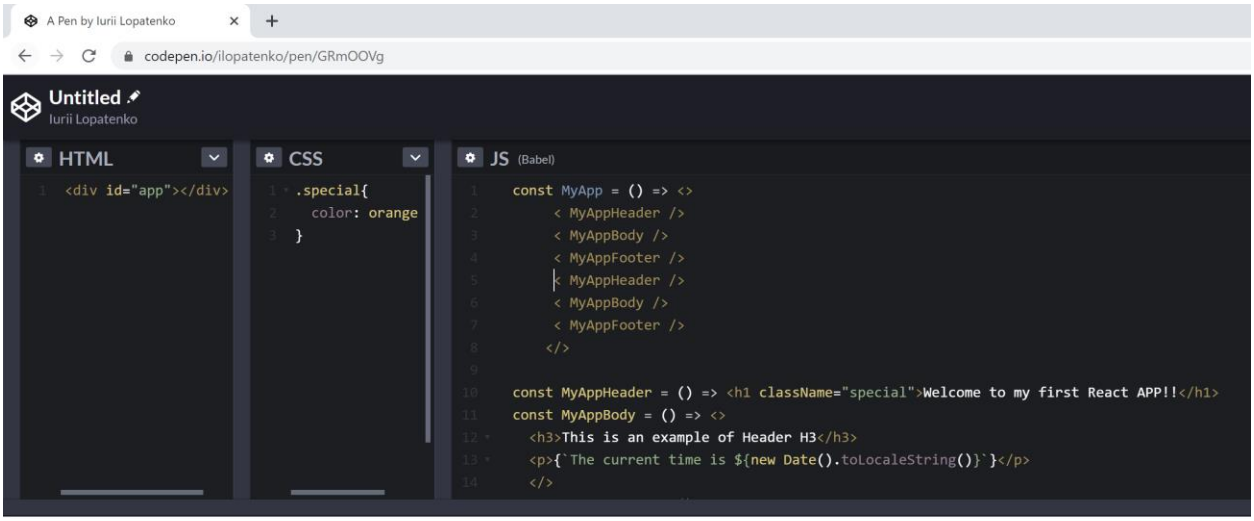

Welcome to my first React APP!!

This is an example of Header H3

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Welcome to my first React APP!!

This is an example of Header H3

The current time is 7/23/2021, 2:15:17 PM

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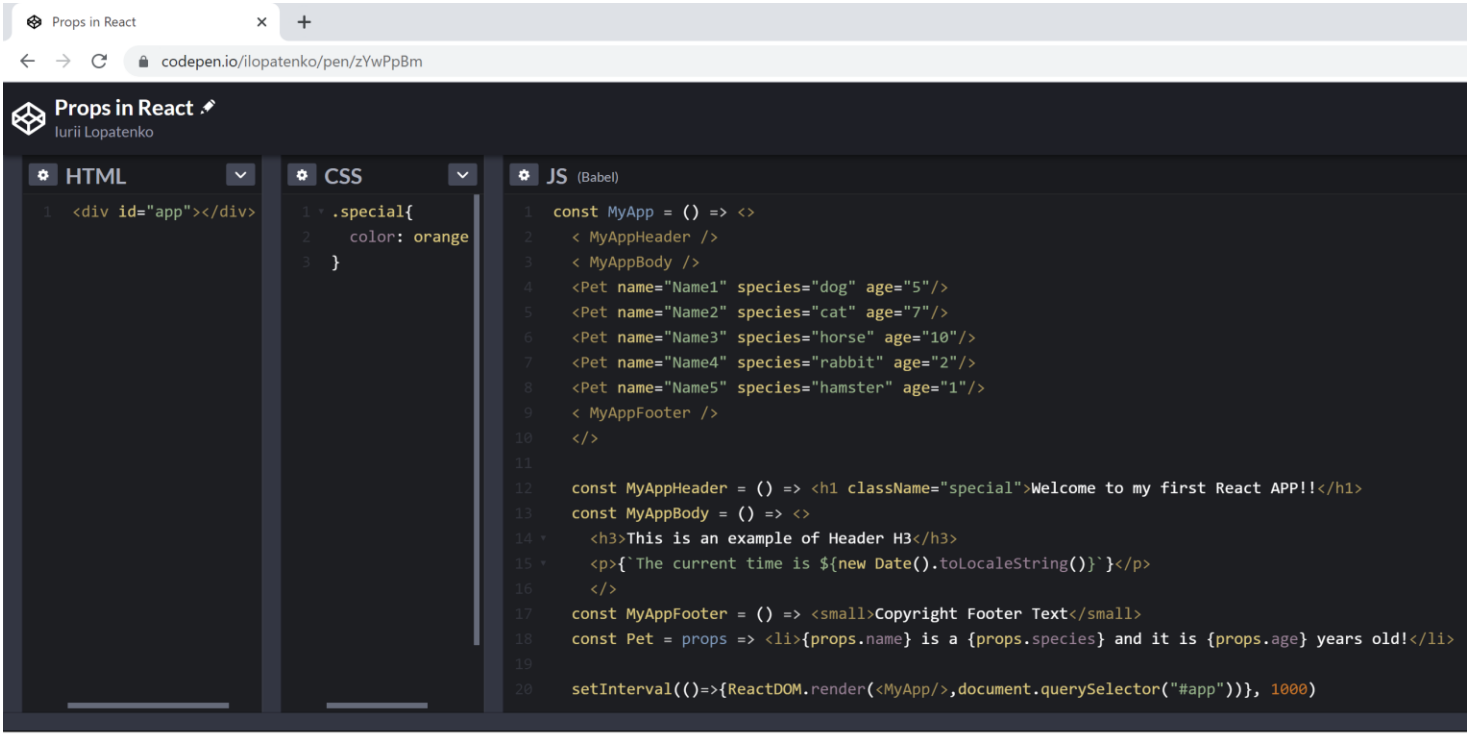
1.5 Properties (Props) in React

Props allow us to send data to Components.



Welcome to my first React APP!!

This is an example of Header H3

The current time is 7/23/2021, 2:38:05 PM

- Name1 is a dog and it is 5 years old!
- Name2 is a cat and it is 7 years old!
- Name3 is a horse and it is 10 years old!
- Name4 is a rabbit and it is 2 years old!
- Name5 is a hamster and it is 1 years old!

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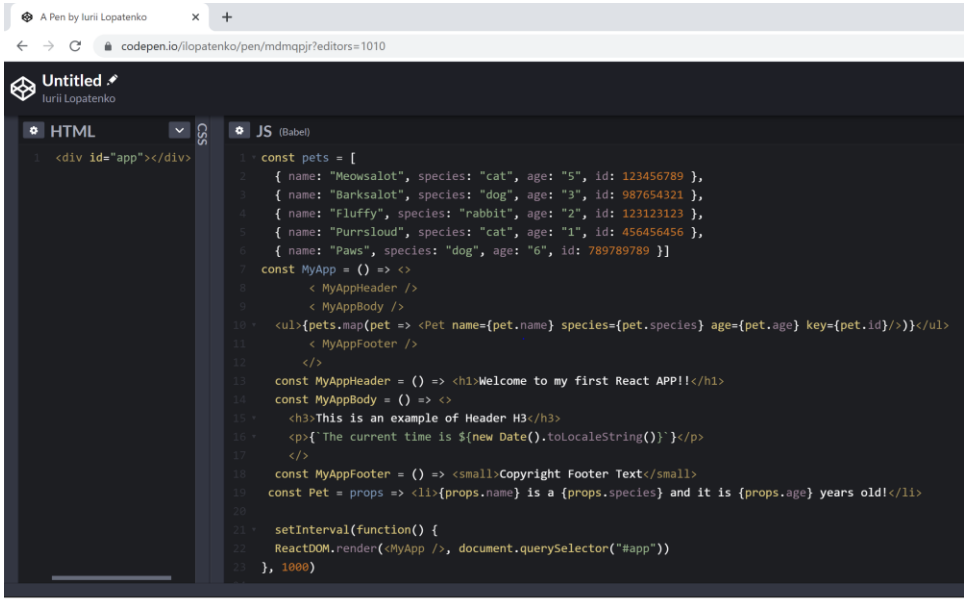
1.6 Looping through an array in JSX



Welcome to my first React APP!!

This is an example of Header H3

The current time is 7/23/2021, 3:22:46 PM

- Meowsalot is a cat and it is 5 years old!
- Barksalot is a dog and it is 3 years old!
- Fluffy is a rabbit and it is 2 years old!
- Purrsloud is a cat and it is 1 years old!
- Paws is a dog and it is 6 years old!

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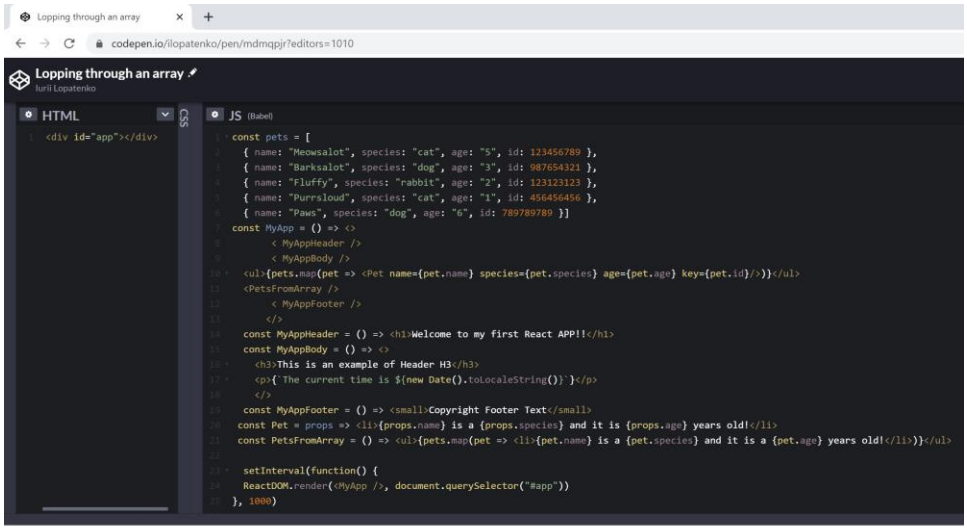


Welcome to my first React APP!!

This is an example of Header H3

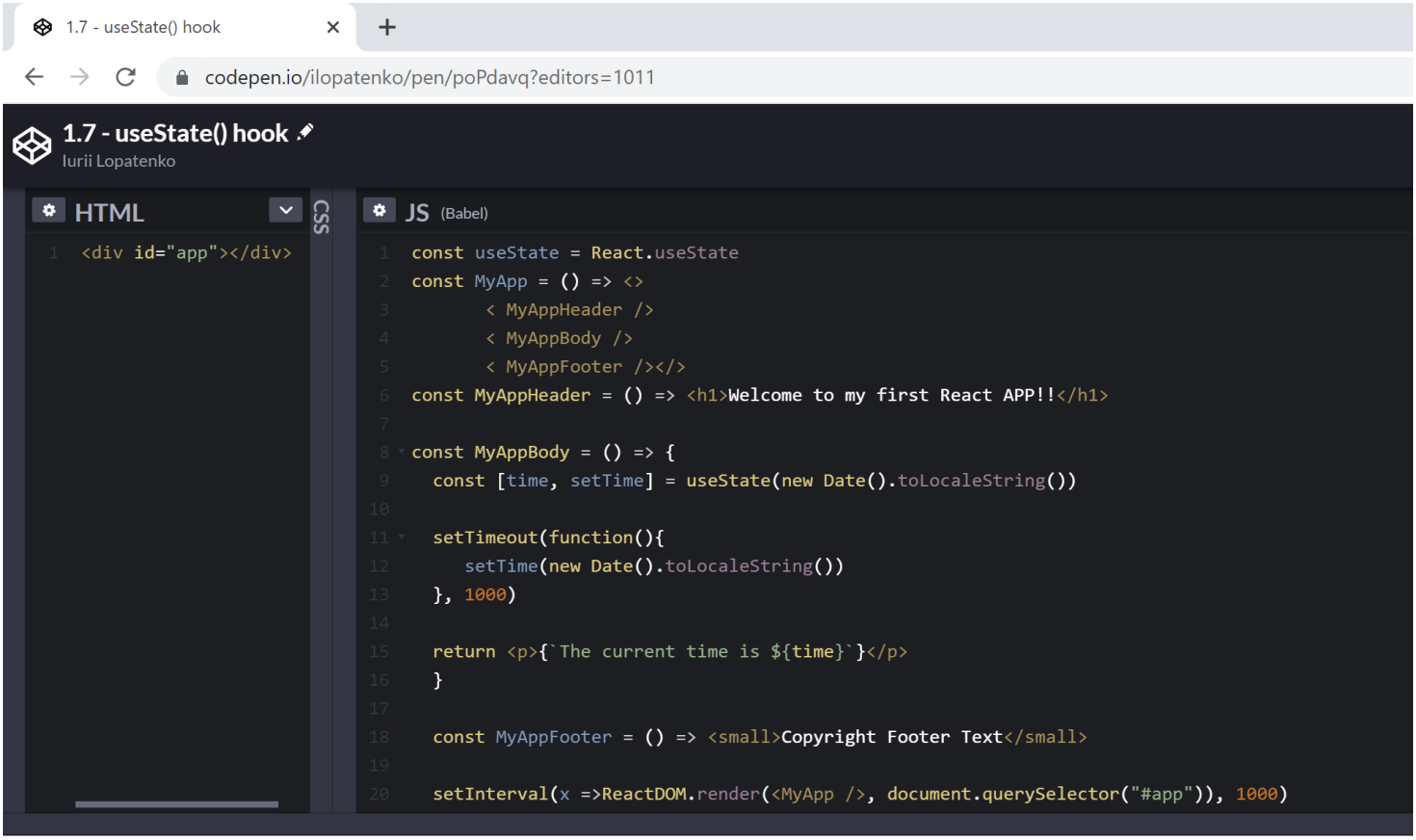
The current time is 7/23/2021, 3:31:35 PM

- Meowsalot is a cat and it is 5 years old!
- Barksalot is a dog and it is 3 years old!
- Fluffy is a rabbit and it is 2 years old!
- Purrsloud is a cat and it is 1 years old!
- Paws is a dog and it is 6 years old!

- Meowsalot is a cat and it is a 5 years old!
- Barksalot is a dog and it is a 3 years old!
- Fluffy is a rabbit and it is a 2 years old!
- Purrsloud is a cat and it is a 1 years old!
- Paws is a dog and it is a 6 years old!

https://codepen.io/ilopatenko/pen/mdmqpjr

1.7 STATE in React (useState() hook)



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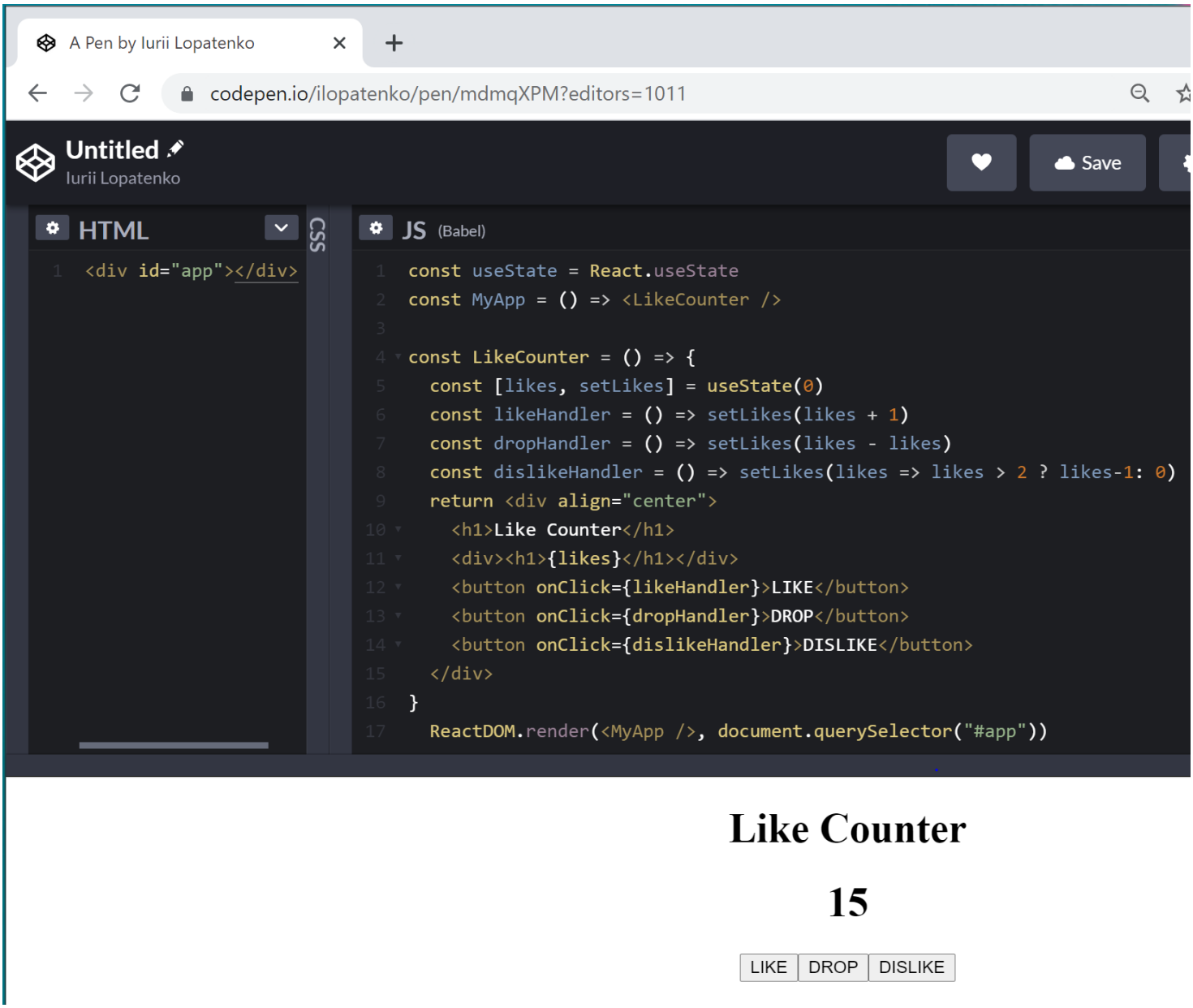
1.8 Like counter (onClick event and onClickHandler)



https://codepen.io/ilopatenko/pen/mdmqXPM

1.9 Working with Forms

```
const useState = React.useState
const MyApp = () => {
  const initialArray = [{ name: "Meowsalot", species: "cat", age: "5", id: 123456789 }]
  const [allPets, setAllPets] = useState(initialArray)
  const AddPet = props => {
    const [name, setName] = useState('')
    const [species, setSpecies] = useState('')
    const [age, setAge] = useState('')
    const handleSubmit = e => {
    e.preventDefault()
    if(name === '' || species === '' || age === ''){
    setName('')
    setSpecies('')
    setAge('')
    } else {
    props.set(prev => prev.concat({name, species, age, id: Date.now()}))
    setName('')
    setSpecies('')
    setAge('')
    }
    }
    return <form onSubmit={handleSubmit}>
      <fieldset>
        <legend>Add New Pet</legend>
        <input  value={name} onChange={e => setName(e.target.value)} placeholder="Name" />
        <input  value={species} onChange={e => setSpecies(e.target.value)} placeholder="species" />
        <input  value={age} onChange={e => setAge(e.target.value)} placeholder="age in years" />
        <button onClick={handleSubmit}>Add Pet</button>
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    </form>}

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  return <> <AddPet set={setAllPets}/> <ShowAll all={allPets}/></>}
ReactDOM.render(<MyApp />, document.querySelector("#app"))
```

https://codepen.io/ilopatenko/pen/jOmaxOm

e.preventDefault did not work correctly. I have implemented temporarily decision with checking.