

# React. Fall 2023

Lesson #1 Introduction

# oumdipu

Teams code

# Course general info

1. Office hours: Saturday 9:00-11:00 (Teams)
2. [b.dusek@kbtu.kz](mailto:b.dusek@kbtu.kz)
3. TSIS - web application, 15 points
4. TSIS - first defense: week 7, 8 points
5. TSIS - second defense: week 14, 7 points
6. Midterm - 10 points, Endterm - 10 points.

# TSIS info

1. Building a basic React application with mock/real server API
2. Complex logic, authorization, routing
3. Addition of advanced hook usage (custom hooks, effects)
4. Progressive Web Application

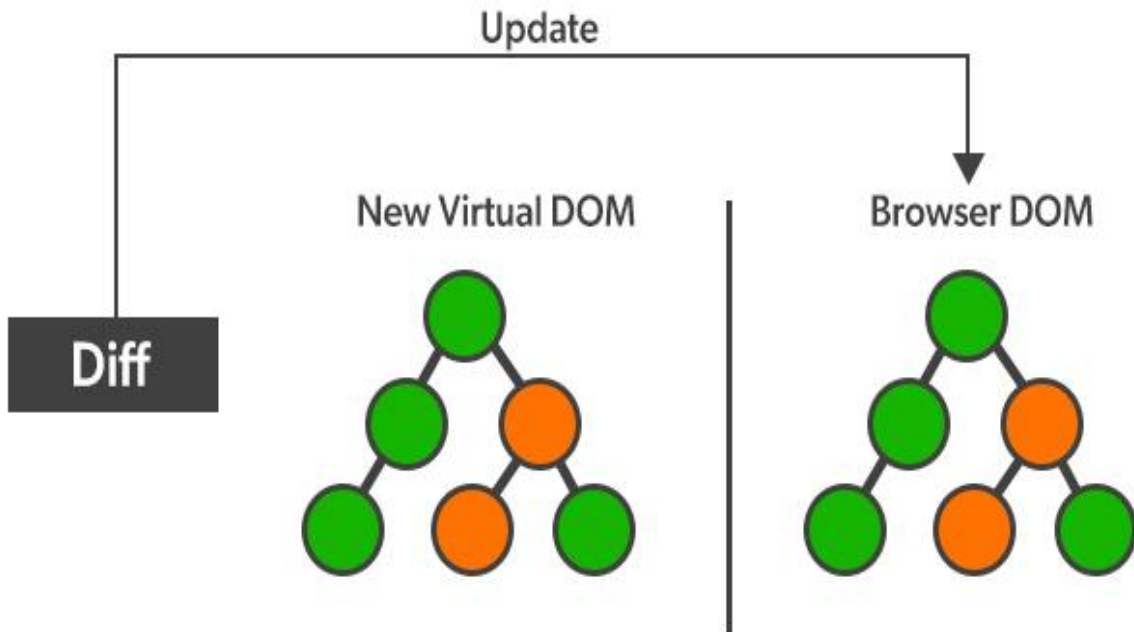
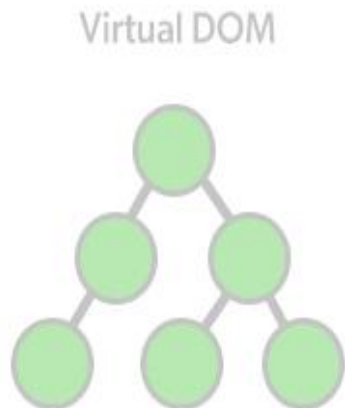
# React. Why?

1. Large communities of developers
2. Modern and highly popular solution
3. Easy to learn, easy to use
4. Components
5. React is a Library

# JS basics.

1. Types
2. Array/objects
3. Functions
4. Hoisting
5. Promises
6. Prototypes

# Reconciliation



# JSX. JavaScript XML

```
1  import * as React from "react";
2  import "./styles.css";
3
4  export default function App() {
5    return (
6      <>
7        <h1>This is a header</h1>
8        <h2>This is another header</h2>
9      </>
10   );
11 }
```



# Components.

1. We can divide our UI into reusable blocks
2. Technically, each block is just a JS function

```
import React from "react";
```

```
const Component = () => { // JS function = Component  
  return <h1>Hello!</h1> // JSX  
}
```

```
export default Component; // module export
```

# Components.

```
import React from "react";
import Component from "../Component.js";
import Component2 from "../Component2.js";

const MultipleComponents = () => { // JS function = Component
  return ( // JSX
    <div>
      <Component />
      <Component2 />
    </div>
  );
};

export default MultipleComponents; // module export
```

# UI libraries.

1. Ant Design
2. Material UI
3. Chakra
4. Onsen UI

# UI library. Ant Design

1. Установка:

```
TERMINAL
PS C:\> yarn add antd
```

2. Импорт:

```
import { Button } from "antd"; // importing components from Antd
```

3. Использование:

```
<div>
  <Button />
</div>
```

# UI library. Ant Design

```
import React from "react";
import { Button } from "antd"; // importing components from Antd

const AntdComponents = () => { // JS function = Component
  return ( // JSX
    <div>
      <Button />
    </div>
  );
};

export default AntdComponents; // module export
```

# Let's start. Create React application

1. Create React application
2. Install UI library
3. Create a simple logic