|  |  |
| --- | --- |
| Open source library | С открытым исходным кодом |
| To create | создать |
| To maintain | Поддерживать |
| Tool to render | Инструмент для отображения |
| Syntax extension | Расширение синтаксиса |
| Readable, readability | Читаемое |
| Valid / invalid | Допустимый / недопустимый |
| To compile / to transpile | Скомпилировать в |
| Nested | Вложенный |
| Return a single element | Возвратить одинокий элемент |
| Parent element | Родительский элемент |
| To wrap | Обернуть |
| Siblings | Родственные брат и сестра |
| Parent wrapper element | Родительский элемент - обёртка |
| To compile into | Скомпилировать в |

React is an **Open Source library** **created** and **maintained** by Facebook. It's a great **tool to render** the User Interface (UI) of modern web applications.

React uses a **syntax extension** of JavaScript called JSX that allows you to write HTML directly within JavaScript. This has several benefits. It lets you use the full programmatic power of JavaScript within HTML, and helps to keep your code **readable**. For the most part, JSX is similar to the HTML, however there are a few key differences.

For instance, because JSX is a syntax extension of JavaScript, you can actually write JavaScript directly within JSX. To do this, you simply include the code you want to be treated as JavaScript within curly braces: { 'this is treated as JavaScript code' }.

However, because JSX is not **valid** JavaScript, JSX code must be **compiled** into JavaScript. The transpile Babel is a popular tool for this process.

One important thing to know about **nested** JSX is that it must **return a single element**.

This one **parent element** will **wrap** all of the other levels of nested elements.

For instance, several JSX elements written as **siblings** with no **parent wrapper element** will not transpile.

Here's an example:

**Valid JSX:**

<div>

<p>Paragraph One</p>

<p>Paragraph Two</p>

<p>Paragraph Three</p>

</div>

**Invalid JSX:**

<p>Paragraph One</p>

<p>Paragraph Two</p>

<p>Paragraph Three</p>

JSX is a syntax that gets **compiled into** valid JavaScript. Sometimes, for **readability**, you might need to add comments to your code. Like most programming languages, JSX has its own way to do this.

To put comments inside JSX, you use the syntax {/\* \*/}**to wrap** around the comment text.

|  |  |
| --- | --- |
| Compile to valid JavaScript code | Компилировать в валидный JavaScript |
| To create software | Создать ПО / разработать (2) приложение |
| To maintain code | Поддерживать код |
| Tool to render | Инструмент для отображения |
| Syntax extension | Синтаксическое расширение |
| Compile JavaScript code into machine code | Компилировать JS в машинный код |
| Maintain old versions | Поддерживать старые версии |
| Transpile ES6 to ES9 | Транспилировать ES6 в ES9 |
| Return Function | Вернуть функцию |
| Maintain JSON-format | Поддерживать json-формат |
| To wrap a function | Обернуть функцию |
| Tool to fixing | Инструмент для исправления |
| Return data | Вернуть данные |
| Readable code | Читаемый код |
| Nested elements | Вложенные элементы |
| Return object | Вернуть объект |
| Wrap for object | Обертка для объекта |
| Parent element | Родительский элемент |
| Invalid data | Невалидные данные |
| Wrap siblings elements | Обернуть элементы одного уровня |

**Connect the right definition:**

1. to put a piece of information, text, etc. inside another, or at a lower level in a system
2. [true](https://dictionary.cambridge.org/dictionary/english/true) or [reasonable](https://dictionary.cambridge.org/dictionary/english/reasonable)
3. the quality of being [easy](https://dictionary.cambridge.org/dictionary/english/easy) and [enjoyable](https://dictionary.cambridge.org/dictionary/english/enjoyable) to [read](https://dictionary.cambridge.org/dictionary/english/read)
4. brother or sister
5. to change one programming language into another
6. to update the version of programming language to the most recent.
7. to make something [exist](https://dictionary.cambridge.org/dictionary/english/exist), to form something.
8. to [keep](https://dictionary.cambridge.org/dictionary/english/keep) something in good [condition](https://dictionary.cambridge.org/dictionary/english/condition), to [keep](https://dictionary.cambridge.org/dictionary/english/keep) in [existence](https://dictionary.cambridge.org/dictionary/english/existence)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Create  7 | Transpile  5 | Valid  2 | Sibling  4 | Nest  1 | Compile  6 | Maintain  8 | Readability  3 |

**Answer the following questions:**

1. What is React?

React is a library from Facebook to making work with JavaScript and HTML easier due to JSX

2. Who created React?

Facebook’s developers

3. What does React do?

Help sus to create UI of modern single page applications

4. What is JSX?

Its syntaxis extension which uses like HTML replacement

5. Can we write JS directly within JSX? With the help of curly braces

Yes, we can, but we need to nest our Js code into curly braces

6. Can a browser interpret JSX?

No, browser doesn’t understand JSX syntaxis, but Babble compile it to normal for browser JS

7. What is Babel?

Its JavaScript compiler

8. What should you remember about nested JSX?

We need to wrap nested JSX within parent element

9. What syntax should you use to put comments inside JSX?

{/\*There are your comments \*/}

**Translate into English**

1. Реакт – это библиотека с открытым исходным кодом, созданная и поддерживаемая Фейсбуком.

React – its library with open source code, created and maintained by Facebook.

1. Реакт – это отличный инструмент для отрисовки пользовательского интерфейса современных веб-приложений.

React – it’s a good tool to render UI modern web applications.

1. JSX позволяет вам писать html код прямо внутри JavaScript. Для этого помести свой код между фигурными скобками.

JSX syntaxis allows you write html code directly within JavaScript. For that nest your code into curly braces

1. JSX компилируется в JavaScript с помощью транспилятора Babel.

JSX compiling to JavaScript through the Babel transpiler

1. Вложенные JSX элементы должны быть обернуты в один родительский элемент.

Nested JSX elements must be wrapped to single parent element

1. Несколько JSX элементов, прописанных как одноуровневые элементы, без родительской обертки не будут транспилированы.

A few JSX elements written as siblings elements without parent wrapper didn’t be transpile.

1. Babel транспелирует JavaScript следующего поколения в старый JavaScript.

Babel transpiled modern JavaScript to old JavaScript