

React js interview question

1. What is react js?

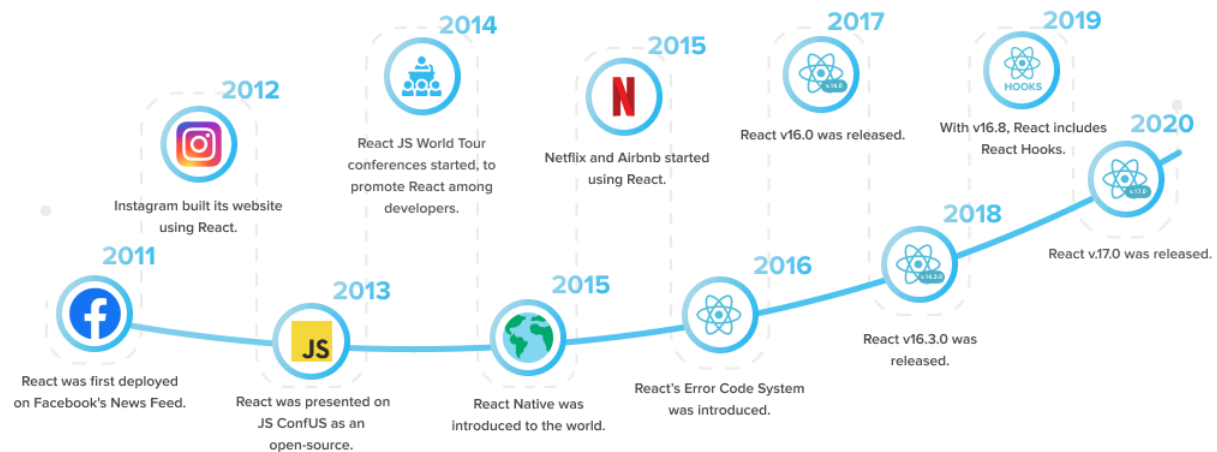
React is a JavaScript library created by Facebook

React is a User Interface (UI) library

React is a tool for building UI components

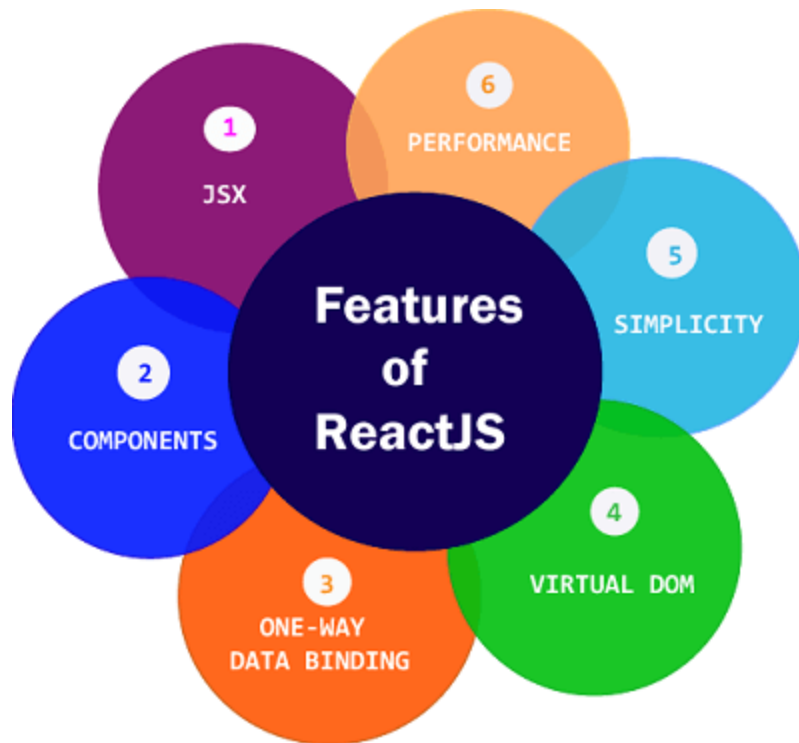
2. History of react js.

HISTORY BEHIND REACT



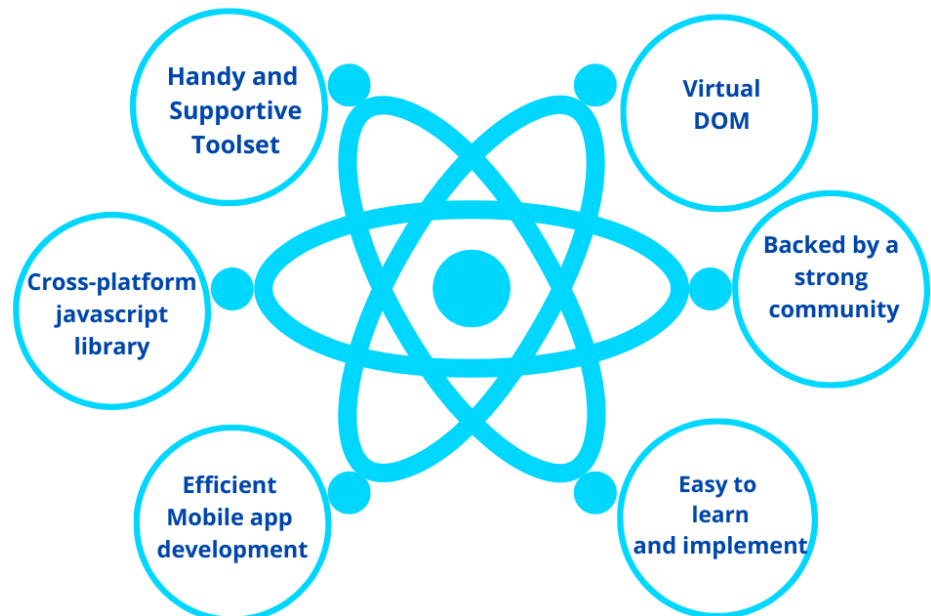
Source: own graph

3. Features of react js.



4. Advantages of react js.

Benefits of Using React js



5. How is React different from Angular?

How is React different from Angular? React is a JavaScript library, whereas Angular is a TypeScript-based JavaScript framework. React uses one-way data binding and virtual DOM trees, whereas Angular uses two-way data binding and real DOM. Moreover, React is faster than Angular as it has a smaller bundle size.

6. How is React different from React Native?

React is an open-source JS library for building the UIs for web applications; besides, React Native is used to build rich mobile UI from declarative components using only JavaScript. Both React and React Native are ruling the industry and are widely used for mobile and web applications.

7. Why react js used?

One of the main benefits of using React JS is its potential to reuse components. It saves time for developers as they don't have to write various codes for the same features.

8. What is spreading?

The JavaScript spread operator (...) allows us to quickly copy all or part of an existing array or object into another array or object.

9. What is destructuring?

Destructuring is an efficient way to extract multiple values from data that is stored in arrays or objects. When destructuring an array, we use their positions (or index) in an assignment.

Example :-

```
var arr = ["Hello", "World"]  
var [first, second] = arr;
```

```
console.log(first); // Hello  
console.log(second); // World
```

10. What is Map?

map() creates a new array from calling a function for every array element.
map() does not execute the function for empty elements.
map() does not change the original array.

11. What is key?

React. Keys are used in React to identify which items in the list are changed, updated, or deleted.

12. What is filter?

The filter() method creates a new array filled with elements that pass a test provided by a function. The filter() method does not execute the function for empty elements.

13. What is reduce ?

The reduce function use all array element sum return.

14. What command in create react project?

npx create-react-app project_name

15. What is jsx? Explain it.

JSX stands for JavaScript XML.

JSX allows us to write HTML in React.

JSX makes it easier to write and add HTML in React.

JSX allows us to write HTML elements in JavaScript and place them in the DOM without any createElement() and/or appendChild() methods.

JSX converts HTML tags into react elements.

16. What is the difference between the ES6 and ES5 standards?

ES5	ES6
ECMA script is a trademarked scripting language specification defined by Ecma International. The fifth edition of the same is known as ES5	ECMA script is a trademarked scripting language specification defined by Ecma International. The sixth edition of the same is known as ES6
It was introduced in 2009.	It was introduced in 2015.
It supports primitive data types that are string, number, boolean, null, and undefined.	In ES6, there are some additions to JavaScript data types. It introduced a new primitive data type 'symbol' for supporting unique values.

There is only one way to define the variables by using the var keyword.	There are two new ways to define variables that are let and const.
It has a lower performance as compared to ES6.	It has a higher performance than ES5.
Object manipulation is time-consuming in ES5.	Object manipulation is less time-consuming in ES6.
In ES5, both function and return keywords are used to define a function.	An arrow function is a new feature introduced in ES6 by which we don't require the function keyword to define the function.
It provides a larger range of community support than that of ES6	It provides a smaller range of community support than ES5.

17. What is state?

React components has a built-in state object.

The state object is where you store property values that belong to the component.

When the state object changes, the component re-renders.

18. What is props?

Props are arguments passed into React components.

Props are passed to components via HTML attributes.

19. What are the differences between state and props?

PROPS	STATE
The Data is passed from one component to another.	The Data is passed within the component only.
It is Immutable (cannot be modified).	It is Mutable (can be modified).
Props can be used with state and functional components.	The state can be used only with the state components/class component (Before 16.0).
Props are read-only.	The state is both read and write.

20. What is component in react js?

Components are independent and reusable bits of code. They serve the same purpose as JavaScript functions, but work in isolation and return HTML.

Components come in two types, Class components and Function components, in this tutorial we will concentrate on Function components.

21. What is functional component?

Functional component is just a simple javascript function; it accepts the data in the form of props and returns the react element.

22. What is class component?

The class component will be created using the class keyword, and it extends the React

23. Difference between function component and class component?

Functional components do not have a state or lifecycle methods.
Class components have a state and can implement lifecycle methods like `componentDidMount` and `componentDidUpdate`.
Faster as they do not have state and lifecycle, react needs to do less work to render these components

24. How many component life cycle which?

Lifecycle of Components

The three phases are: Mounting, Updating, and Unmounting.

25. What is hooks?

Hooks allow function components to have access to state and other React features.

26. What is useState hook?

The React useState Hook allows us to track state in a function component.

27. What is useEffect hook?

The useEffect Hook allows you to perform side effects in your components.

Some examples of side effects are: fetching data, directly updating the DOM, and timers.

useEffect accepts two arguments. The second argument is optional.

`useEffect(<function>, <dependency>)`

28. What is Events?

Just like HTML DOM events, React can perform actions based on user events.

React has the same events as HTML: click, change, mouseover etc.

29. What is conditional rendering?

React allows us to conditionally render components which means that the developer can decide which component to render on the screen on the basis of some predefined conditions. This is known as conditional rendering.

30. What is List?

Lists are used to display data in an ordered format and mainly used to display menus on websites.

31. What is refs?

32. What is fragment?

A common pattern in React is for a component to return multiple elements. Fragments let you group a list of children without adding extra nodes to the DOM.

33. What is control component?

React's Controlled Components manage form data via component state, receiving values through props and updating through callbacks like onChange. The parent component maintains the state, passing updated values as props to the controlled component. Form elements, whether typed (e.g., textarea, input) or selected (e.g., radio buttons, checkboxes), trigger state updates through functions on change.

34. What is uncontrol component?

Uncontrolled Components are the components that are not controlled by the React state and are handled by the DOM (Document Object Model). So in order to access any value that has been entered we take the help of refs.

35. What is HOC full form?

Higher Order Component

36. What use of HOC component?

Higher-order components (HOCs) are a powerful feature of the React library. They allow you to reuse component logic across multiple components.

37. What is npm ?

Node package manager

38. What is localStorage?

LocalStorage is a data storage type of web storage

39. What is routes?

React Router, is your essential tool for building single-page applications (SPAs).

40. What is redux?

Redux is a state managing library used in JavaScript apps. It is used to manage the data and the state of the application.

41. What is action?

Actions are JavaScript object that contains information. Actions are the only source of information for the store. It basically carries a payload of information from the application to the store. It only tells us what has happened. Actions have a type property that they must include as type property tells what kind of action to perform. Action can also contain the payload(data field in the action) to describe the action.

Example :-


```
const Actions = {  
  type: '',  
  payload: ''  
}
```

42. What is reducers?

Reducers in Redux are pure function that determines changes to an application's state. Reducer is one of the building blocks of Redux.

Example :-

```
const initialState = {};  
  
const Reducer = (state = initialState, action) => {  
  // Write your code here  
}
```

43. What is store?

The Redux store is the main, central bucket which stores all the states of an application.

44. What is useContext hook?

React Context is a way to manage state globally.

45. What is useSelector hook?

useSelector is a hook provided by React Redux that allows functional components to extract and access data from the Redux store.

46. What is useDispatch hook?

useDispatch is another hook provided by React Redux, which allows functional components to dispatch actions to the Redux store.

47. What is redux thunk?

Redux Thunk acts as a middleware that will return you a function instead of an object while calling through the action creators

48. What is api?

Application program interface.

React uses API calls to connect with external services to receive or send data.

49. What is json server?

JSON Server is a lightweight and easy-to-use Node.js tool that simulates a RESTful API using a JSON file as the data source. With JSON Server, front-end developers can create mock APIs without the need to write complex server-side code, or when a backend API isn't ready yet.

50. How many methods api calling?

2 method api calling in react js

1 fetch method

The fetch() method in JavaScript is used to request to the server and load the information in the webpages. The request can be of any APIs that return the data of the format JSON or XML. This method returns a promise.

Example :-

// Filename - App.js

```
import { useEffect } from "react";
```

```
function App() {
```

```
  useEffect(() => {
    fetch('https://jsonplaceholder.typicode.com/todos')
      .then(response => response.json())
      .then(json => console.log(json))
  }, []);
```

```
  return (
    <div>
      Different ways to fetch Data
    </div>
  );
```

```
}
```

```
export default App;
```

2 axios method

Axios is a promise-based HTTP client designed for Node.js and browsers. With Axios, we can easily send asynchronous HTTP requests to REST APIs and perform create, read, update and delete operations.

Install third party package
npm i axios

Example :-

// Filename - App.js

```
import { useEffect } from "react";
import axios from "axios"

function App() {

  useEffect(() => {
    axios.get("https://jsonplaceholder.typicode.com/todos")
      .then((response) => console.log(response.data));
  }, []);

  return (
    <div>
      Different ways to fetch Data
    </div>
  );
}

export default App;
```

51. What is fetch method?

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Install third party package
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53. What is async?

Async functions are a powerful feature in JavaScript that allow us to write cleaner, more readable code when handling asynchronous operations such as API calls, timeouts, and promises. React

54. What is await?

The `await` keyword is placed before the call to a function or variable that returns a promise. It makes JavaScript wait for the promise object to settle before running the code in the next line.

55. What is promises?

Promises are a crucial feature in JavaScript that simplifies and enhances the handling of asynchronous operations

56. What is firebase?

Firebase is an all-in-one backend as a service provider (BaaS) that provides a database, authentication, and cloud storage among its many services.

57. What is firebase database?

The Firebase Realtime Database is a cloud-based NoSQL database that manages your data at the blazing speed of milliseconds. In simplest term, it can be considered as a big JSON file.

58. How can you embed two or more components into one?

Yes

59. What is babel?

Babel is a JavaScript compiler that converts modern JavaScript code into a version compatible with all browsers

60. Explain children's prop.

Children is a prop (this. props. children) that allow you to pass components as data to other components.

61. Why we will use empty tags?

What is an Empty Tag `<> </>`? Empty Tag `<> </>` is the simplest and shorthand syntax for `<React. Fragment>` component.

62. What is prop drilling?

Prop drilling occurs when a parent component generates its state and passes it down as props to its children components

63. What is virtual dom?

React JS Virtual DOM is an in-memory representation of the DOM. DOM refers to the Document Object Model that represents the content of XML or HTML documents as a tree structure so that the programs can be read, accessed and changed in the document structure, style, and content.

64. Difference between js and jsx?

JS is a programming language used for creating both frontend and backend applications. - JSX: It is a syntax extension for JavaScript, often used with React. JSX allows you to write HTML elements and components in a syntax that looks similar to XML or HTML.