**Roadmap**

**JavaScript:**

* [Classes](https://www.geeksforgeeks.org/javascript-classes/)
* [Data Types](https://www.geeksforgeeks.org/javascript-course-data-types-in-javascript/)
* [Variables](https://www.geeksforgeeks.org/javascript-course-variables-in-javascript/)
* [Functions](https://www.geeksforgeeks.org/functions-in-javascript/)
* [Loops](https://www.geeksforgeeks.org/loops-in-javascript/)
* [Arrays](https://www.geeksforgeeks.org/arrays-in-javascript/)
* [Objects](https://www.geeksforgeeks.org/objects-in-javascript/)
* [Operators](https://www.geeksforgeeks.org/javascript-operators/#:~:text=An%20operator%20is%20capable%20of,values%2C%20perform%20arithmetic%20operations%20etc.)
* Control Flow
* DOM Node
* [JavaScript | Promises](https://www.geeksforgeeks.org/javascript-promises/)
* [JavaScript | Callbacks](https://www.geeksforgeeks.org/javascript-callbacks/)
* [Async-Await](https://www.geeksforgeeks.org/async-await-function-in-javascript/)
* [Error-Handling](https://www.geeksforgeeks.org/javascript-error-and-exceptional-handling-with-examples/)
* [Data Structures in JavaScript](https://www.geeksforgeeks.org/tag/javascript-ds/)
* [OOPS](https://www.geeksforgeeks.org/tag/javascript-oop/)
* [Asynchronous JavaScript](https://www.geeksforgeeks.org/synchronous-and-asynchronous-in-javascript/)
* [JavaScript | Modules](https://www.geeksforgeeks.org/javascript-modules/)

**Build Projects:**

* *A Calculator*
* *Countdown Timer*
* *To-Do List*
* *Movie App*
* *Social Media App Clone*
* *Resume Builder*
* *Online Editor*
* *A Gaming App*
* *A Quiz App*
* *Tic Tac Toe*

***Follow:***

* *geeks for geeks*
* *W3 school*
* *Yaho Baba*

***RoadMap***

[*https://roadmap.sh/pdfs/roadmaps/javascript.pdf*](https://roadmap.sh/pdfs/roadmaps/javascript.pdf)

**Another RoadMap:**

# **Roadmap of Javascript Learning #Javascript**

## **Basics**

* Understand what is Javascript #Basics
  + What is Javascript?
  + Where is Javascript used?
* Setting up the development environment #Basics
  + Choosing the right text editor
  + Setting up the text editor

## **Syntax and Basics**

* Learn the basic syntax of Javascript #Syntax
  + Variables and Data Types
  + Operators
  + Control Structures
* Understand Functions and scope #Syntax
  + What is a function?
  + Scope of variables

## **Intermediate**

* Learn about Objects and Arrays #Intermediate
  + What are Objects?
  + What are Arrays?
* Learn about the DOM (Document Object Model) #Intermediate
  + What is the DOM?
  + How to manipulate the DOM?

## **Advanced**

* Understand Asynchronous Javascript #Advanced
  + Callbacks
  + Promises
  + Async/Await
* Understand ES6 and beyond #Advanced
  + Let and Const
  + Arrow functions
  + Template literals
  + Destructuring

## **Libraries and Frameworks**

* Learn a Javascript library (like jQuery) #Library
* Learn a Javascript Framework (like React, Angular, Vue) #Framework

## **Projects**

1. Build a simple application (like a To-Do list) #Project
2. Build an application using a library (like a jQuery slideshow) #Project
3. Build an application using a framework (like a React blog) #Project

# **RoadMap of React.js Development**

## **I. Basic Setup and Installation [#Setup]**

* Install Node.js and NPM
* Install Create-React-App CLI tool
* Create a new React.js project

## **II. Understanding React.js Fundamentals [#Basics]**

* Learn JSX syntax
* Understand components and props
* Understand state and lifecycle methods
* Understand event handling
* Learn conditional rendering

## **III. Advanced React.js Concepts [#Advanced]**

* Understand React Hooks
  + useState
  + useEffect
  + useContext
  + useReducer
* Learn about Context API
* Learn about React Router

## **IV. Working with External APIs [#APIs]**

* Understand REST APIs
* Learn to use fetch API
* Learn to use axios
* Implement API calls in a React.js app

## **V. Testing and Deployment [#Testing\_Deployment]**

1. Write unit tests for React.js apps
   * Jest
   * React Testing Library
2. Deployment
   * Deploy React.js app on Netlify
   * Deploy React.js app on Vercel

## **VI. State Management [#State\_Management]**

* Learn Redux
* Implement Redux in a React.js app

## **VII. UI Libraries [#UI\_Libraries]**

* Ant Design
* Material-UI
* Semantic UI

## **VIII. Next Steps [#Next\_Steps]**

* Learn Next.js for server-side rendering
* Understand GraphQL and how to use it with React.js
* Explore other libraries in the React ecosystem (e.g., Gatsby, Redux Saga, etc.)

**RoadMap:**

<https://roadmap.sh/pdfs/roadmaps/react.pdf>