

If you are totally new to JavaScript (Not familiar with JavaScript Lexical Structure, Loops, conditionals, classes, prototypes, objects, functions etc.

Must Read
Additional Reading
Optional

# **JavaScript**

### Chapter 0:

#### **Basics and fundamentals:**

- 1. <a href="https://www.w3schools.com/js/default.asp">https://www.w3schools.com/js/default.asp</a>
  or
- 2. <a href="https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First\_steps">https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First\_steps</a>
- 3. https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Building\_blocks
- 4. https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Objects

### **Chapter 1:**

### \*this\* in javascript:

1. https://www.w3schools.com/js/js this.asp

#### **Difference between Normal Functions and Arrow Functions:**

1. https://dmitripavlutin.com/differences-between-arrow-and-regular-functions/

#### ES6 features:

1. <a href="https://www.w3schools.com/js/js es6.asp">https://www.w3schools.com/js/js es6.asp</a>

#### Scopes in JavaScript:

1. https://www.w3schools.com/js/js\_scope.asp

### **Template Literals:**

1. <a href="https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Template\_liter-als-">https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Template\_liter-als-</a>

### Strict Mode:

1. https://www.w3schools.com/js/js strict.asp

#### **Execution Context:**

1. <a href="https://www.youtube.com/watch?v=Wk0-6b1W\_VQ&t=1838s">https://www.youtube.com/watch?v=Wk0-6b1W\_VQ&t=1838s</a>

### **Prototypes:**

1. <a href="https://www.w3schools.com/js/js\_object\_prototypes.asp">https://www.w3schools.com/js/js\_object\_prototypes.asp</a>



### Closures in JavaScript:

1. <a href="https://www.youtube.com/watch?v=9acXwUkddZl&ab\_channel=LearnwithSumitBa\_ngladesh">https://www.youtube.com/watch?v=9acXwUkddZl&ab\_channel=LearnwithSumitBa\_ngladesh</a>

### **Chapter 2:**

### **Asynchronous Concept:**

 https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Asynchronous/Concept s

### **Asynchronous JavaScript:**

- 1. <a href="https://www.freecodecamp.org/news/javascript-async-await-tutorial-learn-callback-s-promises-async-await-by-making-icecream/">https://www.freecodecamp.org/news/javascript-async-await-tutorial-learn-callback-s-promises-async-await-by-making-icecream/</a> [MUST]
- 2. <a href="https://javascript.info/async-await">https://javascript.info/async-await</a>
- 3. [Practice Questions]
  - https://www.codingame.com/playgrounds/347/javascript-promises-mastering-the-asynchronous/what-is-asynchronous-in-javascript
- 4. <a href="https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Asynchronous/Introducing">https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Asynchronous/Introducing</a>
- 5. <a href="https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Asynchronous/Timeouts and intervals">https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Asynchronous/Timeouts and intervals</a>
- 6. <a href="https://nodejs.dev/en/learn/discover-javascript-timers">https://nodejs.dev/en/learn/discover-javascript-timers</a>
- 7. <a href="https://nodejs.dev/en/learn/javascript-asynchronous-programming-and-callbacks">https://nodejs.dev/en/learn/javascript-asynchronous-programming-and-callbacks</a>
- 8. <a href="https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Asynchronous/Promises">https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Asynchronous/Promises</a>
- 9. <a href="https://nodejs.dev/en/learn/understanding-javascript-promises">https://nodejs.dev/en/learn/understanding-javascript-promises</a>
- 10. <a href="https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Asynchronous/Asyncawait">https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Asynchronous/Asyncawait</a>
- 11. https://nodejs.dev/en/learn/modern-asynchronous-javascript-with-async-and-await

#### JavaScript Event Loop:

1. <a href="https://www.youtube.com/watch?v=8aGhZQkoFbQ">https://www.youtube.com/watch?v=8aGhZQkoFbQ</a>

### Asynchronous Under the Hood:

1. <a href="https://www.youtube.com/watch?v=SrNQS8J67zc">https://www.youtube.com/watch?v=SrNQS8J67zc</a>

### **Chapter 3:**

#### **Google Chrome Developer Tools Crash Course:**



1. <a href="https://www.youtube.com/watch?v=x4q86ljJFaq">https://www.youtube.com/watch?v=x4q86ljJFaq</a>

### Chapter 4:

### Manipulating DOM:

- 1. <a href="https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Client-side\_web\_APIs/Manipulating\_documents">https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Client-side\_web\_APIs/Manipulating\_documents</a>
- 2. <a href="https://www.youtube.com/playlist?list=PLHiZ4m8vCp9MJDxMOzhYVuTrO1b5n-Tq">https://www.youtube.com/playlist?list=PLHiZ4m8vCp9MJDxMOzhYVuTrO1b5n-Tq</a>

### **Fetching Data:**

1. <a href="https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Client-side\_web\_APIs/Fetching\_data">https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Client-side\_web\_APIs/Fetching\_data</a>

### Client-Side Storage:

1. <a href="https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Client-side\_web\_APIs/Client-side\_storage">https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Client-side\_web\_APIs/Client-

### Video and Audio API:

1. <a href="https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Client-side\_web\_APIs/V">https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Client-side\_web\_APIs/V</a> ideo and audio APIs

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### W3Schools JS blogs:

https://www.w3schools.com/js/default.asp

JavaScript Video Tutorials in Bangla: Interested ones can go through this playlist in their own time. We won't encourage you to go through this as official learning material because of the video lengths.

https://www.youtube.com/watch?v=rePN-VFo1Eo&list=PLHiZ4m8vCp9OkrURufHpGUUTB jJhO9Ghy&ab\_channel=LearnwithSumitBangladesh

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# **NodeJS**

### **Chapter 0:**

### **History of NodeJS:**

- 1. <a href="https://www.youtube.com/watch?v=WC-g0JtElwM&list=PLHiZ4m8vCp9PHnOIT7gd">https://www.youtube.com/watch?v=WC-g0JtElwM&list=PLHiZ4m8vCp9PHnOIT7gd</a> 30PCBoYCpGoQM
- 2. <a href="https://www.youtube.com/watch?v=qlmH1bFubW4&list=PLHiZ4m8vCp9PHnOIT7g">https://www.youtube.com/watch?v=qlmH1bFubW4&list=PLHiZ4m8vCp9PHnOIT7g</a> d30PCBoYCpGoQM&index=2

#### **How to install NodeJS:**

- 1. https://nodejs.dev/en/learn/how-to-install-nodejs
- 2. <a href="https://www.youtube.com/watch?v=J5sCarsKX1s&list=PLHiZ4m8vCp9PHnOIT7gd30PCBoYCpGoQM&index=3">https://www.youtube.com/watch?v=J5sCarsKX1s&list=PLHiZ4m8vCp9PHnOIT7gd30PCBoYCpGoQM&index=3</a>

#### Difference between NodeJs and Browser:

1. https://nodejs.dev/en/learn/differences-between-nodejs-and-the-browser/

#### What is V8 Engine:

1. <a href="https://nodejs.dev/en/learn/the-v8-javascript-engine">https://nodejs.dev/en/learn/the-v8-javascript-engine</a>

#### **Asynchronous NodeJS:**

- 1. <a href="https://www.youtube.com/playlist?list=PLC3y8-rFHvwj1\_l8acs\_lBi3a0HNb3bAN">https://www.youtube.com/playlist?list=PLC3y8-rFHvwj1\_l8acs\_lBi3a0HNb3bAN</a> Blocking vs Non Blocking:
  - 1. <a href="https://nodejs.org/en/docs/quides/blocking-vs-non-blocking/">https://nodejs.org/en/docs/quides/blocking-vs-non-blocking/</a>

### **Event Loop Timers and Next Tick: \***

1. <a href="https://nodejs.org/en/docs/guides/event-loop-timers-and-nexttick/">https://nodejs.org/en/docs/guides/event-loop-timers-and-nexttick/</a>

#### Don't Block the Event Loop:

1. <a href="https://nodejs.org/en/docs/guides/dont-block-the-event-loop/">https://nodejs.org/en/docs/guides/dont-block-the-event-loop/</a>

#### How to run NodeJS from command line:

- 1. <a href="https://nodejs.dev/en/learn/run-nodejs-scripts-from-the-command-line">https://nodejs.dev/en/learn/run-nodejs-scripts-from-the-command-line</a>
- 2. https://nodejs.dev/en/learn/how-to-exit-from-a-nodejs-program

### **Expose Functionality using exports:**

1. https://nodejs.dev/en/learn/expose-functionality-from-a-nodejs-file-using-exports

#### What is NPM package manager and its alternatives (Yarn)?

1. <a href="https://nodejs.dev/en/learn/an-introduction-to-the-npm-package-manager">https://nodejs.dev/en/learn/an-introduction-to-the-npm-package-manager</a>

#### Difference between installing a package locally and globally:

- 1. https://nodejs.dev/en/learn/where-does-npm-install-the-packages
- 2. https://nodejs.dev/en/learn/npm-global-or-local-packages

#### Package.json and package.lock.json? What's the difference?

- 1. https://nodejs.dev/en/learn/the-package-json-guide
- 2. <a href="https://nodejs.dev/en/learn/the-package-lock-json-file">https://nodejs.dev/en/learn/the-package-lock-json-file</a>



#### Semantic Versioning:

1. <a href="https://nodejs.dev/en/learn/semantic-versioning-using-npm">https://nodejs.dev/en/learn/semantic-versioning-using-npm</a>

### **Dev Dependencies:**

2. https://nodejs.dev/en/learn/npm-dependencies-and-devdependencies

#### **Event Emitter:**

3. https://nodejs.dev/en/learn/the-nodejs-event-emitter/

### Chapter 1:

#### **Build an HTTP server:**

- 1. https://nodejs.dev/en/learn/build-an-http-server
- 2. <a href="https://nodejs.dev/en/learn/making-http-requests-with-nodejs">https://nodejs.dev/en/learn/making-http-requests-with-nodejs</a>
- 3. https://nodejs.dev/en/learn/make-an-http-post-request-using-nodejs
- 4. <a href="https://nodeis.dev/en/learn/get-http-request-body-data-using-nodeis">https://nodeis.dev/en/learn/get-http-request-body-data-using-nodeis</a>
- 5. https://nodejs.dev/en/learn/the-nodejs-http-module
- 6. <a href="https://nodejs.org/en/docs/guides/anatomy-of-an-http-transaction/">https://nodejs.org/en/docs/guides/anatomy-of-an-http-transaction/</a>

#### Fs module in NodeJS:

- 1. <a href="https://nodejs.dev/en/learn/working-with-file-descriptors-in-nodejs">https://nodejs.dev/en/learn/working-with-file-descriptors-in-nodejs</a>
- 2. https://nodejs.dev/en/learn/nodejs-file-stats
- 3. <a href="https://nodejs.dev/en/learn/nodejs-file-paths">https://nodejs.dev/en/learn/nodejs-file-paths</a>
- 4. https://nodejs.dev/en/learn/reading-files-with-nodejs
- 5. <a href="https://nodejs.dev/en/learn/writing-files-with-nodejs">https://nodejs.dev/en/learn/writing-files-with-nodejs</a>
- 6. https://nodejs.dev/en/learn/working-with-folders-in-nodejs
- 7. <a href="https://nodejs.dev/en/learn/the-nodejs-fs-module">https://nodejs.dev/en/learn/the-nodejs-fs-module</a>

#### Path Module in NodeJs:

1. <a href="https://nodejs.dev/en/learn/the-nodejs-path-module">https://nodejs.dev/en/learn/the-nodejs-path-module</a>

#### OS module in Nodejs:

1. https://nodejs.dev/en/learn/the-nodejs-os-module

#### **Events module in NodeJs:**

1. <a href="https://nodejs.dev/en/learn/the-nodejs-events-module">https://nodejs.dev/en/learn/the-nodejs-events-module</a>

### **Buffers and Streams in Nodejs:**

- 1. https://nodejs.dev/en/learn/nodejs-buffers
- 2. <a href="https://nodeis.dev/en/learn/nodeis-streams">https://nodeis.dev/en/learn/nodeis-streams</a>

#### **Environments:**

1. <a href="https://nodejs.dev/en/learn/nodejs-the-difference-between-development-and-production">https://nodejs.dev/en/learn/nodejs-the-difference-between-development-and-production</a>



### **Error Handling and Logs in NodeJS:**

- 1. https://nodejs.dev/en/learn/error-handling-in-nodejs
- 2. <a href="https://nodejs.dev/en/learn/how-to-log-an-object-in-nodejs">https://nodejs.dev/en/learn/how-to-log-an-object-in-nodejs</a>

## **Express:**

https://www.youtube.com/playlist?list=PLHiZ4m8vCp9PHnOIT7gd30PCBoYCpGoQM (From Video #15 to #23)

# **Dockerize NodeJs app:**

1. <a href="https://nodejs.org/en/docs/guides/nodejs-docker-webapp/">https://nodejs.org/en/docs/guides/nodejs-docker-webapp/</a>

# **Git & Github**

- 1. <a href="https://www.youtube.com/playlist?list=PLNMnAEqLBwmqnr-hhla2z-2janfklDV4A">https://www.youtube.com/playlist?list=PLNMnAEqLBwmqnr-hhla2z-2janfklDV4A</a>
- 2. <a href="https://www.youtube.com/watch?v=oe21Nlq8GS4">https://www.youtube.com/watch?v=oe21Nlq8GS4</a>

# **REACTJS**

- Think in react way playlist
- React Official Doc : <a href="https://reactjs.org/docs/getting-started.html">https://reactjs.org/docs/getting-started.html</a>
- React hook
- MERN project by FreeCodeCamp