JavaScript tutorial link -> <https://www.youtube.com/watch?v=akmz4EqBNCc&ab_channel=CodingChat>

<https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbTdYcFVkTkJ3N1NITjJtSDRsX1B6NVo3d0NOUXxBQ3Jtc0trbzJDX1lVb3o3Q1hleDJCRWNEMDljMWRMQmFMUU1HcjE3MzRVdVQwbW5DdDNpc0t5ampBQ1BjTmt3SzBKY0RVWE5kX1pVeU1BbDlQQVpuWGhSRnQtbXd3X2dHN2VMQlVib0ZreXBtTnVXRW5La3Fldw&q=https%3A%2F%2Fcdm.sh%2Fjsbasicscourse>

JavaScript Beginning to Mastery Syllabus

* JavaScript vs EcmaScript
* 00:00 Introduction
* 01:09 Syllabus
* 11:12 History of JavaScript
* 21:34 Download and Install vscode
* 23:34 How to execute javascript code
* Install vscode and run first program

# Basics of Programming in JavaScript

* Hello world program- **29:34**
* Declare variable using var- **33:29**
* More about variable- **42:05**
* Let- **49:20**
* Const- **54:02**
* String Indexing- **56:41**
* Useful string methods- **01:00:40**
* Template Strings- **01:19:01**
* Null, undefined, BigInt, typeof- **01:22:34**
* Booleans and Comparison Operator- **01:31:00**
* Truthy and Falsy Values- **01:37:01**
* If else statement
* Ternary Operator
* && || operator
* Nested if else
* If elseif else
* Switch statement
* While loop
* While loop examples
* For loop
* For loop examples
* Break and continue keyword
* Do while loop- **02:38:17**

# Arrays in JavaScript

* Intro to arrays- **02:41:56**
* Push pop shift unshift
* Primitive vs reference data types
* Clone array & spread operator
* For loop- **03:26:12**
* use const for creating arrays
* While loop in array
* For of loop
* For in loop
* Array destructuring- **03:46:46**

# Objects in JavaScript

* Intro to objects- **03:56:46**
* Dot vs Bracket Notation
* Iterate objects- **04:11:09**
* Computed properties
* Spread operator in objects- **04:23:14**
* Object Destructuring
* Objects inside Array- **04:42:13**
* Nested Destructuring- **04:46:03**

# Functions in JavaScript

* Function declaration- **04:51:08**
* Function Expression
* Arrow Functions- **05:16:22**
* Function declarations are hoisted (covered in great detail , later in this course)
* Function inside function-**05:29:22**
* Lexical Scope
* Block Scope Vs Function Scope- **05:43:15**
* Default Parameters
* Rest Parameters- **05:56:19**
* Parameter Destructuring
* Very brief intro to callback functions(covered in great detail , later in the course)- **06:05:54**
* Functions returning Functions- **06:13:09**

# Very Important Array Methods

* Foreach method- **06:18:48**
* Map method
* Filter- **06:43:57**
* Reduce
* Sort- **07:04:34**
* Find
* Every- **07:33:12**
* Some
* Fill method- **07:43:18**
* Splice method- **07:46:08**

# More useful things

* Iterables- **07:52:20**
* Sets
* Maps- **08:11:13**
* Object.assign
* Optional chaining- **08:32:02**

# Object Oriented JavaScript / Prototypal Inheritance

* Methods- **08:38:42**
* This keyword, Window object
* Call , apply and bind method- **08:55:44**
* Some warnings
* This inside arrow functions- **09:08:55**
* Short syntax for methods
* Factory functions & discuss some memory related problems
* First solution to that problem
* Why that solution isn’t that great
* What is \_\_proto\_\_ , [[prototype]]- **09:45:55**
* What is prototype
* Use prototype
* New keyword- **10:04:18**
* Constructor function with new keyword
* More discussion about proto and prototype
* Class keyword- **10:26:43**
* Example using class keyword
* Super keyword- **10:42:48**
* Method overriding
* Getters and setters- **10:49:35**
* Static methods and properties- **11:02:47**

=================================PART 2 =================================

# How JavaScript Works

* Global Execution context-18:00
* This and window in global execution context
* Hoisting- 45:33
* Are let and const are hoisted? What is a reference Error?
* Function execution context-01:14:54
* Scope chain and lexical environment
* Intro to closures
* Closure example 1
* Closure Example 2
* Closure Example 3- 02:31:55

# DOM Tutorial

* HTML and CSS Crash course ( Around 30-40 minutes)
* Async vs defer
* Select elements using id
* querySelector
* textContent & innerText
* Change the styles of elements using js
* Get and set attributes
* Select multiple elements and loop through them
* innerHTML
* Deeply understand dom tree, root node , element nodes, text nodes
* classList
* Add new elements to page
* Create elements
* Insert adjacent elements
* Clone nodes
* More methods to add elements on page
* How to get the dimensions of the element
* Intro to events
* This keyword inside eventListener callback
* Add events on multiple elements
* Event object
* How event listener works
* Practice with events
* Create demo project
* More events
* Event bubbling
* Event Capturing
* Event delegation
* Create Project using event delegation

=================================PART 3 =================================

# Asynchronous JavaScript

* Is Javascript a synchronous or asynchronous programming language ?
* SetTimeout()
* SetTimeout() with 0 millisecond
* Callback Queue
* SetInterval and create little project with setInterval
* Understand callbacks in general
* Callbacks in asynchronous programming
* Callback Hell and Pyramid of doom
* Intro to promises
* Microtask Queue
* Function that returns promise
* Promise and settimeout
* Promise.resolve and more about then method
* Convert nested Callbacks to flat code using promises
* Intro to Ajax, HTTP Request
* XHR requests
* Error handling in XHR requests
* XHR request Chaining
* Promisifying XHR requests and chaining using then method
* Fetch API
* Error Handling in Fetch API
* Consume Promises with async and Await
* Split code into multiple files using ES6 modules.
* Congratulations
* Now you know javascript in Great Details
* What next ?