

Classes and Inheritance in JS

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

<https://sakshat.ac.in>

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Learning Objectives



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► Classes



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- ▶ Classes
- ▶ Inheritance **in** JS



System Specifications

This tutorial is recorded using:



System Specifications

This tutorial is recorded using:

▶ **Ubuntu Linux OS version 18.04**



System Specifications

This tutorial is recorded using:

- ▶ **Ubuntu Linux OS version 18.04**
- ▶ **Visual Studio Code version 1.45.0**
(code editor)



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This tutorial is recorded using:

- ▶ **Ubuntu Linux OS version 18.04**
- ▶ **Visual Studio Code version 1.45.0**
(code editor)
- ▶ **Firefox Web Browser**



Prerequisites



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- ▶ You should be familiar with writing and executing JS files



Prerequisites

- ▶ You should be familiar with writing and executing JS files
- ▶ If not, please go through the prerequisite tutorials on <https://spoken-tutorial.org>



Code Files

- ▶ The files used in this tutorial are available in the [Code files link](#) on this tutorial page



Code Files

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- ▶ Please download and extract the files



Code Files

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- ▶ Make a copy and then use them for practicing



Classes



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- ▶ Classes **are** templates **for creating** objects



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- ▶ Class declarations **are not** hoisted



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- ▶ Classes **have** 'this' context



Classes

- ▶ Classes **are** templates **for creating** objects
- ▶ Class declarations **are not** hoisted
- ▶ Classes **have** 'this' context
- ▶ constructor, variables **and** methods **can be declared inside the class**



Inheritance

- ▶ Inheritance is a concept of inheriting the **parent** class properties



Inheritance

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- ▶ **In JS, we do that using** extends keyword



Inheritance

- ▶ Inheritance is a concept of inheriting the **parent** class properties
- ▶ In JS, we do that using `extends` keyword
- ▶ **When using** `extends` **to invoke the** parent class constructor, **we need to use** `super` keyword



Summary

In this tutorial, we have learnt:

- ▶ **Classes**
- ▶ **Inheritance in JS**



Assignment

- ▶ **Open the file `assignment.js` which you have created earlier**
- ▶ **Clear the existing code**
- ▶ **Create a class `Car`**
- ▶ **Create the methods `engine` and `wheels` in the class `Car`**



Assignment

- ▶ **Create a class called ElectricCar and inherit the properties of Car class**
- ▶ **Create a method battery in the class ElectricCar**
- ▶ **Log the method name in all the three methods**



Assignment

- ▶ **Create an object `ec1` using `ElectricCar` and then execute `Car` methods using `ec1`**
- ▶ **Open the file `MyPage.html` in a web browser**
- ▶ **Observe the output in the browser's console**



About Spoken Tutorial project

- ▶ Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project
- ▶ If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Answers for THIS Spoken Tutorial

- ▶ Questions in THIS Spoken Tutorial?
- ▶ Visit <https://forums.spoken-tutorial.org>
- ▶ Choose the minute and second where you have the question
- ▶ Explain your question briefly
- ▶ The Spoken Tutorial project will ensure an answer
- ▶ You will have to register to ask questions



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Thank you

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