JavaScript Development

"A dynamic programming language to develop Cross-platform Apps"

DotNetTricks

About Me

Hi, I'm Shailendra Chauhan

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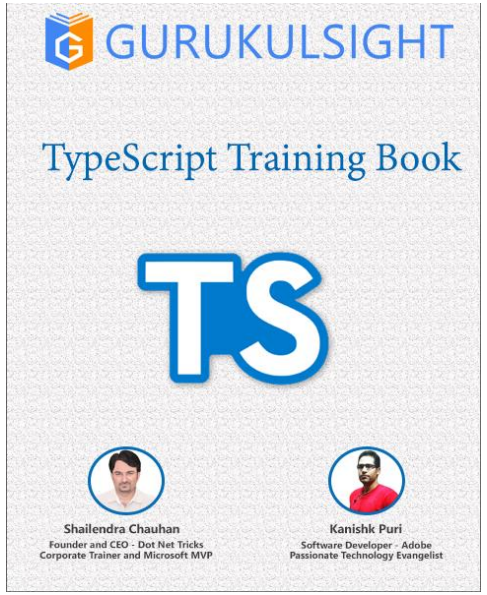
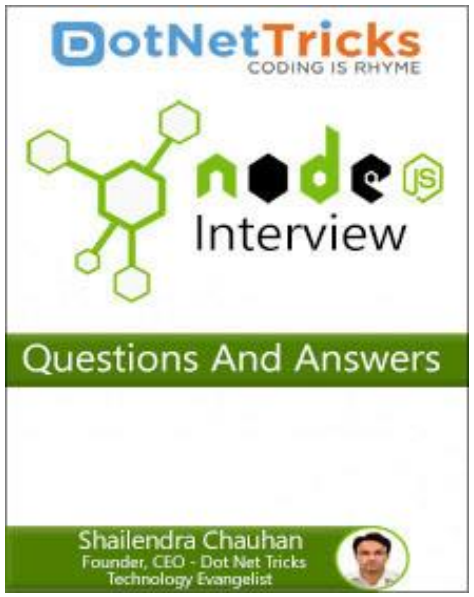
DotNetTricks

Author of Most Popular Free e-Books





Agenda

- Introduction to JavaScript
- JavaScript Basics
- Data Types
- Primitive Types
- Non-Primitive Types
- Functions
- Classes
- Inheritance

Introduction to JavaScript

Introduction to JavaScript

- An interpreted client-side scripting language developed by Netscape in 1996
- Initially used to manipulate HTML elements, validate input and communicate with server
- Platform-independent, event-driven and dynamic language
- Now a days, used as a programming language to develop cross platform desktop and mobile apps
- Compiled on server side if used with Node.js

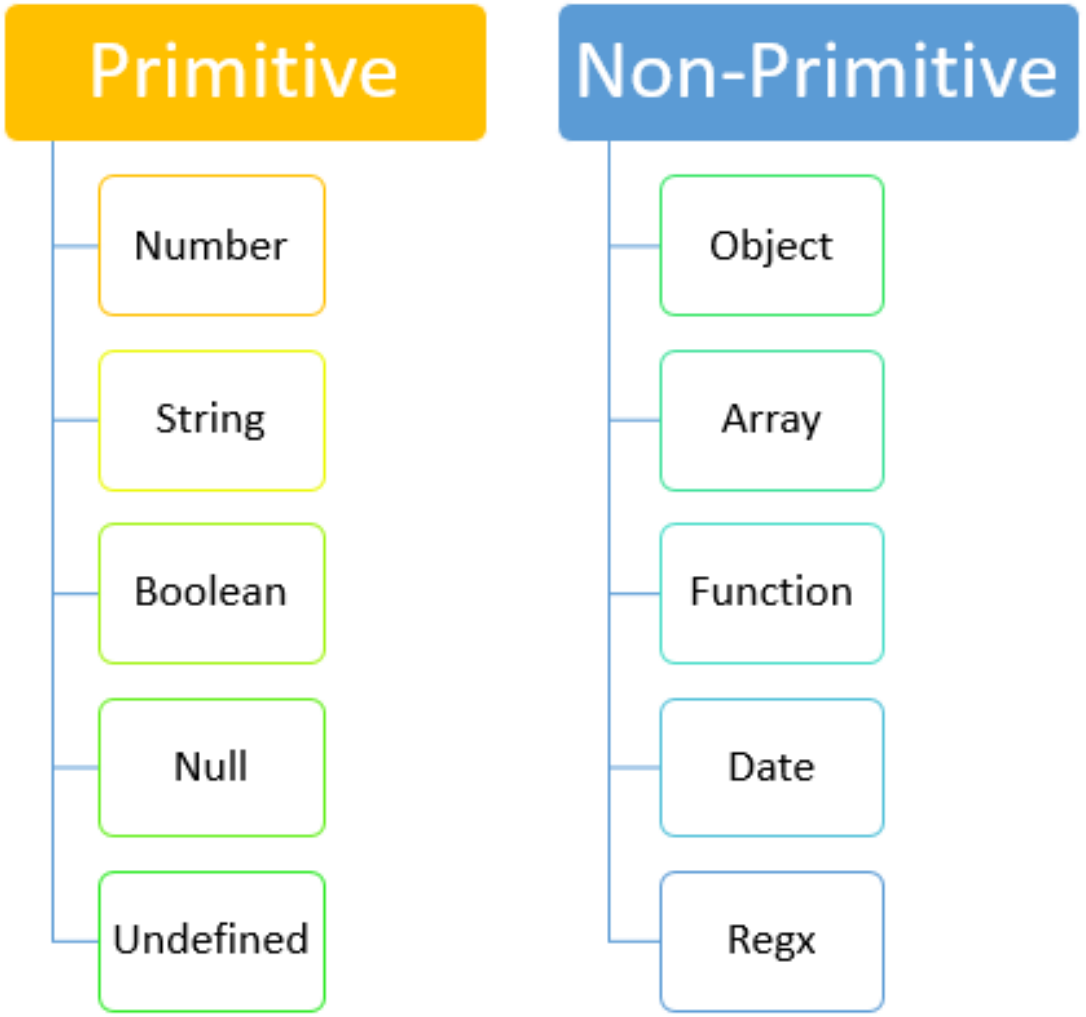
JavaScript Basics

JavaScript Basics

- JavaScript is case sensitive language
- A statement is terminated by return or semi-colons (;)
- A variable is defined by using *var* keyword
- *var* doesn't support block scope, only supports function scope
- ES6 introduced *let* and *const* keywords to define variables
- *let* and *const* keywords support block scope

Data Types

Data Types


Primitive
Number
String
Boolean
Null
Undefined
Non-Primitive
Object
Array
Function
Date
Regx

Primitive Types

Primitive Types

- Boolean
  - Two values : *true* and *false*
- Number
  - 64-bit floating number similar to Java double
  - No Integer Type
  - Special values : *NaN* and *Infinity*
- String
  - Sequence of zero or more Unicode characters
  - Literal string is defined by using ' or " character

Primitive Types

- Null & Undefined
  - Special values
  - typeof(null) : object;
  - typeof(undefined) : undefined;

Non-Primitive Types

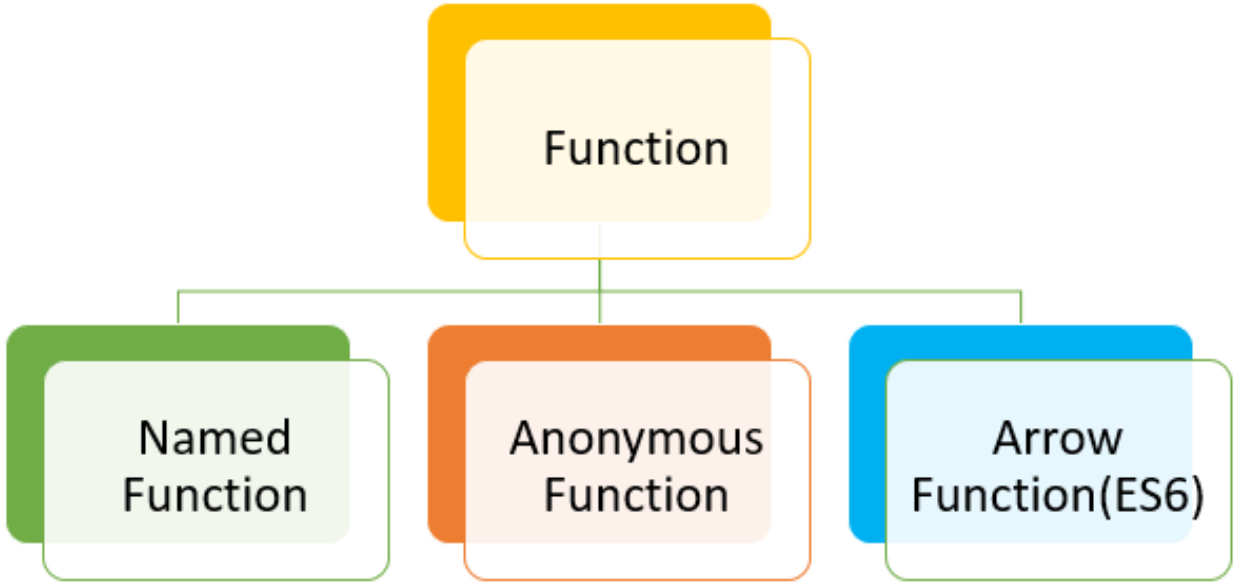
Non-Primitive Types

- Object
  - A collection of named properties
  - Can define by a set of *name: value* pairs
  - New members can be added at any time
  - Can define by constructor function
  - Can have methods and can refer to *this* keyword
- Array, Function, Date and Regx are regarded as objects
- Array
  - Sequence of zero or more Unicode characters
  - Literal string is defined by using ' or " character

Functions

Functions

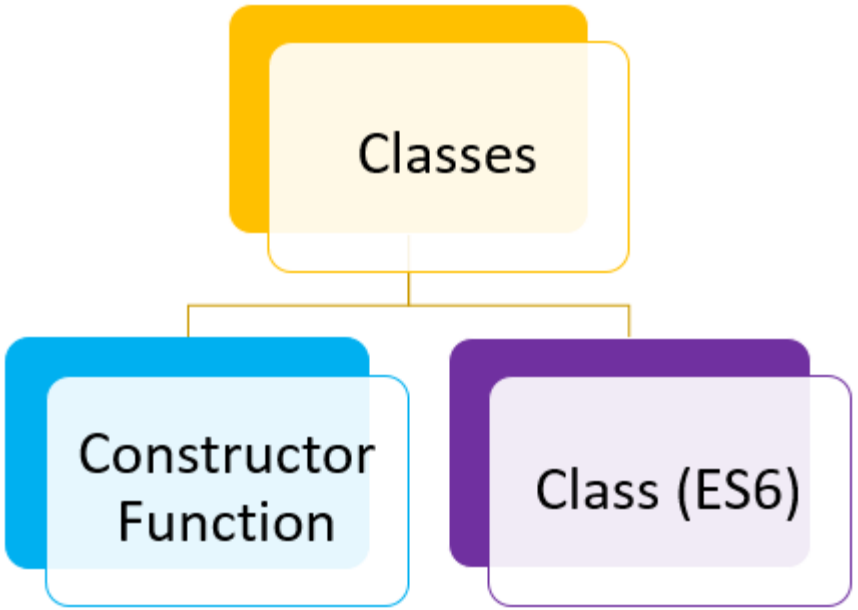
- Every function in JavaScript is a Function object
- The default return value for a function is undefined
- The parameters of a function call are the function's arguments



Classes

Classes

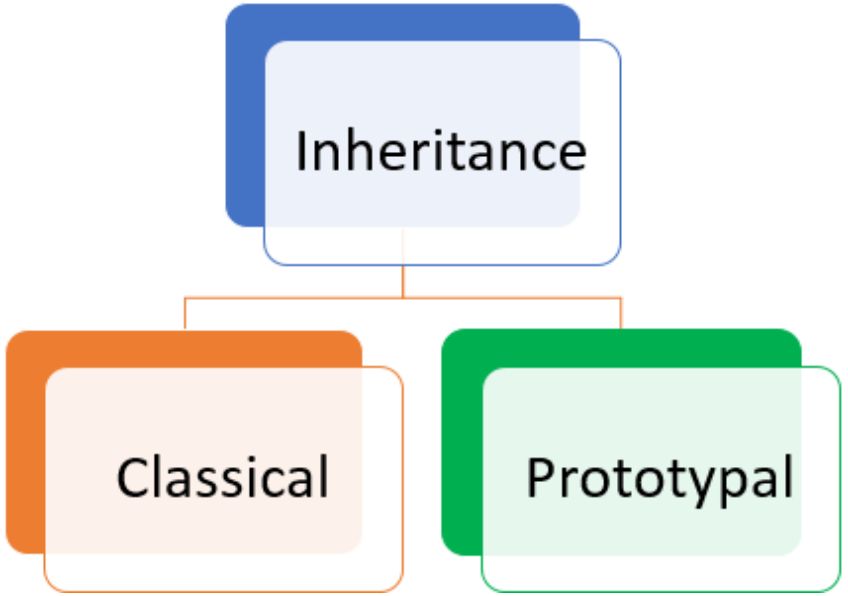
- Constructor function was only way to create a classes in ES5
- JavaScript classes were introduced in ES6



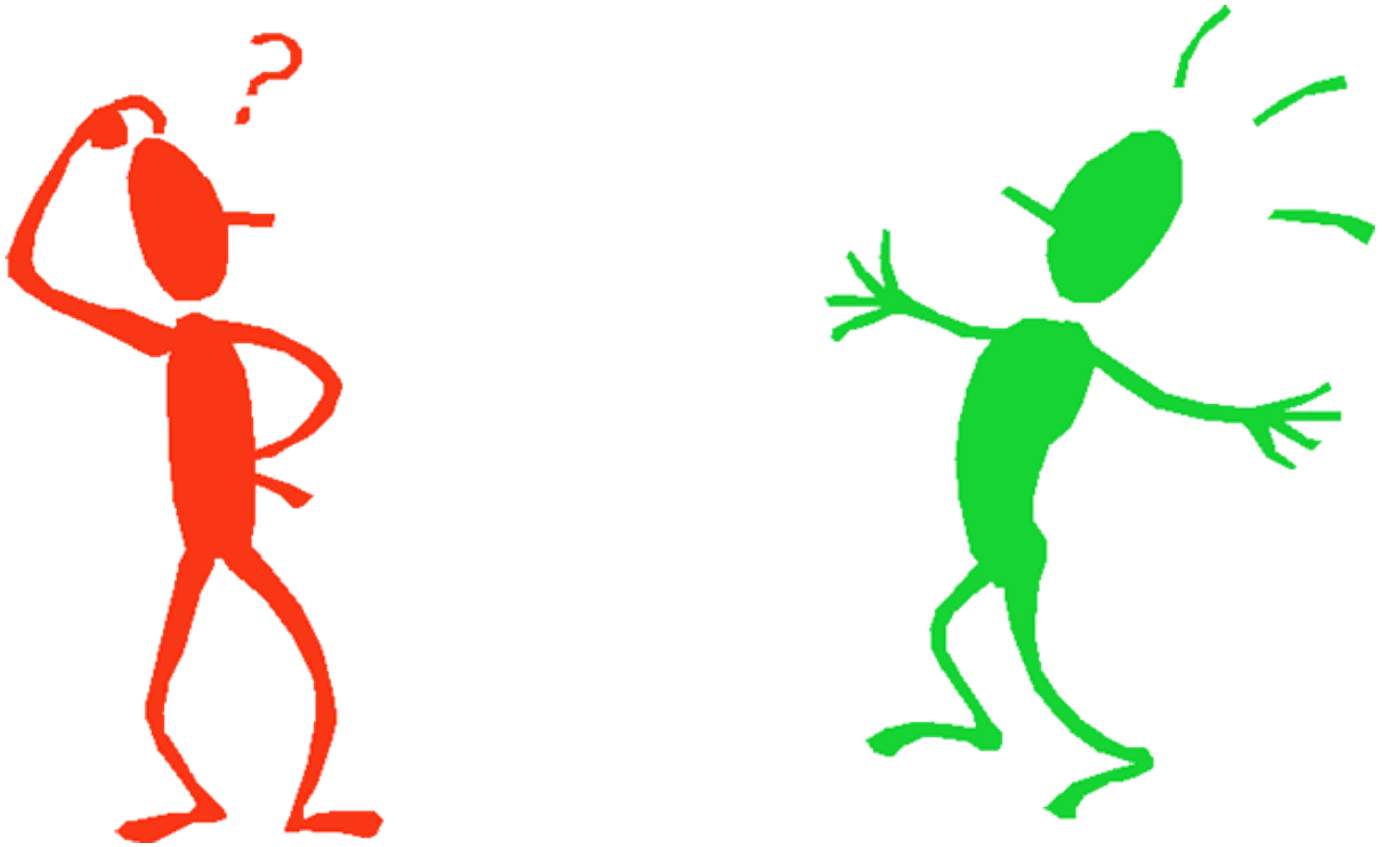
Inheritance

Inheritance

- Prototypal inheritance and classical inheritance are two different paradigms of inheritance
- JavaScript supports prototypal inheritance and other languages like C++, Java and C# support classical inheritance



Q&A



It’s the beginning…