


Agenda

- ① What is JS
- ② How JS runs on the browser
- ③ Node.js
- ④ Variables, Typing
Arrays, Functions, Objects

Recap

① Syntax

② Inheritance

③ Positioning

↳ Static

↳ Relative

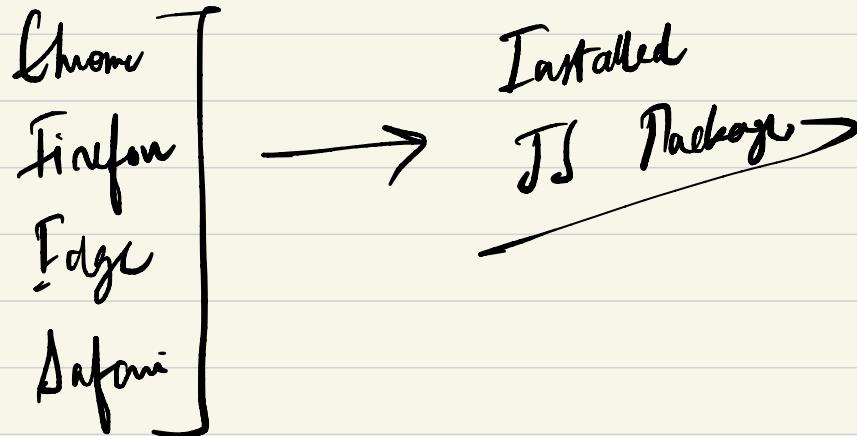
↳ Absolute

↳ Fixed
↳ Sticky

What is JS

↳ Brendan Eich

How does JS Work in the browser



✓ Java —
✓ C++ —
✓ Python —

ECMA

—

↳ Rules of JS.

console.log()

Browser

↳ JS Engine

Implementation of Rules

Chrome → V8 Engine

Firefox

→ SpiderMonkey

JS Outside the browser

Node.js

① Server

② Mobile Development

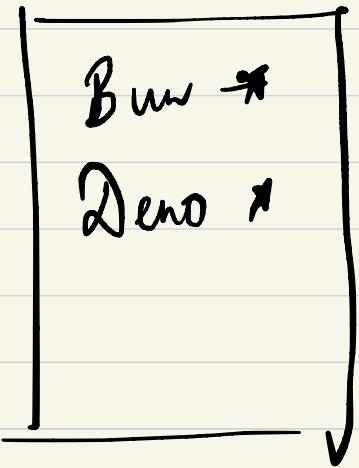
③ AR/VR
libraries.

④ Desktop
Application → Electron

JS Engine (v8)

← local Computer

Node.js → JS Runtime ↗



Variables

Var a = 20

Declaring *

Defining *

No Explicit Types

Dynamically Typed
language.

var a —
a = 30 —



var a = 30

Problems with var

Type of variable	Re-declaration possible	Re-initialization possible	Scoping
var	✓	✓	
let	✗	✓	
const	✗	✗	

data (ESlint + Prettier)

Datatypes

Primary | Primitive
Data Types

Reference Datatypes

var a = 20

var b = "hello"

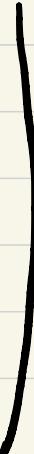
Primitive → Number, String, Boolean

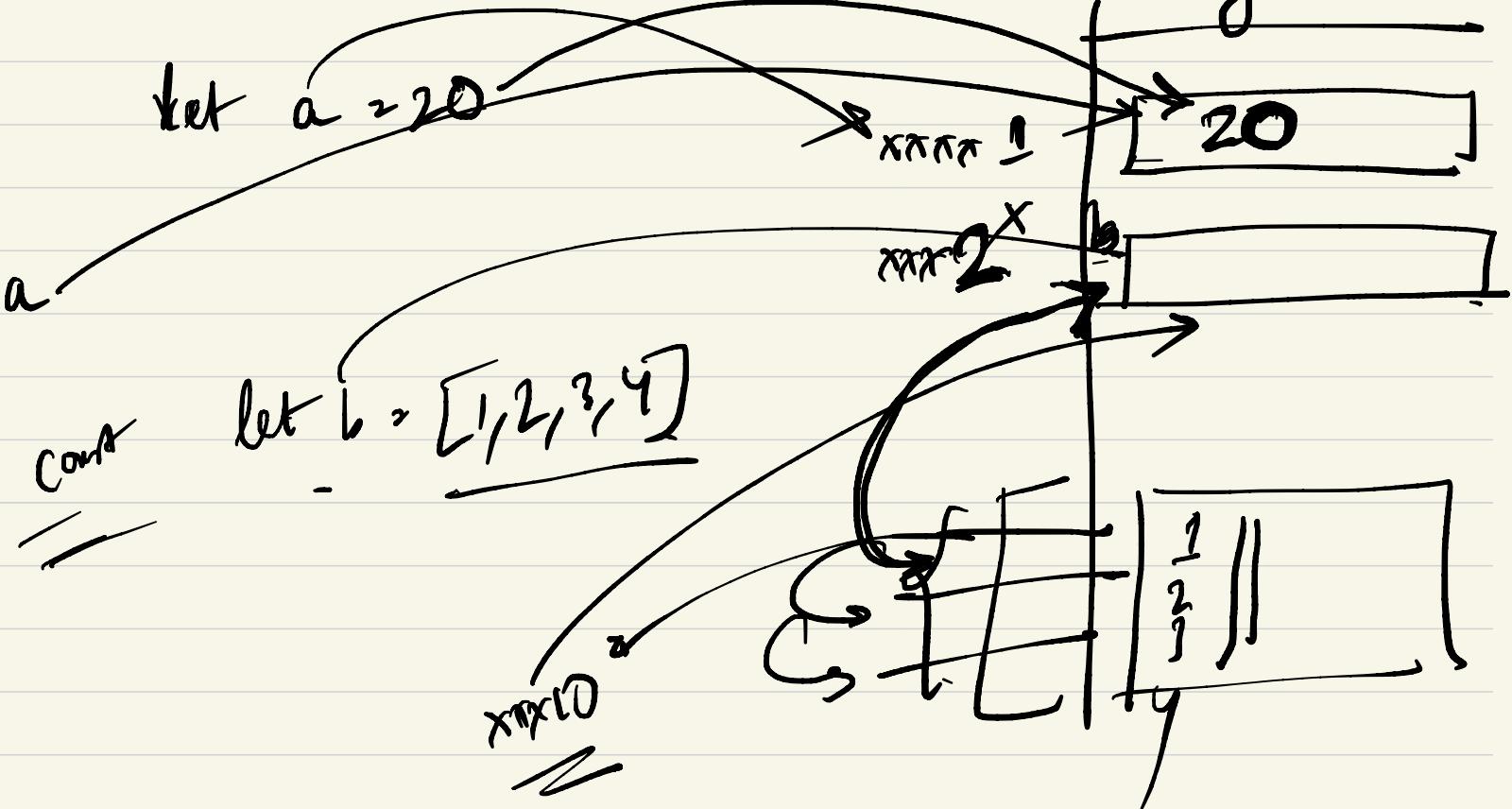
Undefined, Null → Absence of Value

Reference Datatype

Arrays

Function





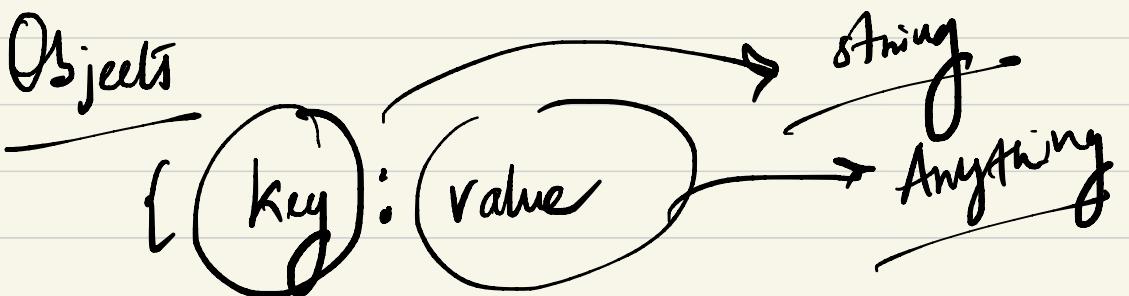
const a = [1, 2, 3, 4] -

const b = a

Point to the
same address

→

Objects



}

Asyc / Defer

① Script Download

② Script Execution

<script async>

</script>

Download.

Parse

<script>

↓
External

defers

Download

↓
Execution after
Browser has
rendered