

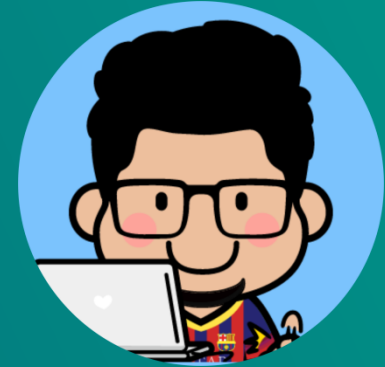
Programming Fundamental

JS

# Introduction to JavaScript

Programming Fundamental

# Lintang Wisesa



Lintang Wisesa



@Lintang\_Wisesa



Lintang Wisesa



Lintang Wisesa



simpLINnovation.id

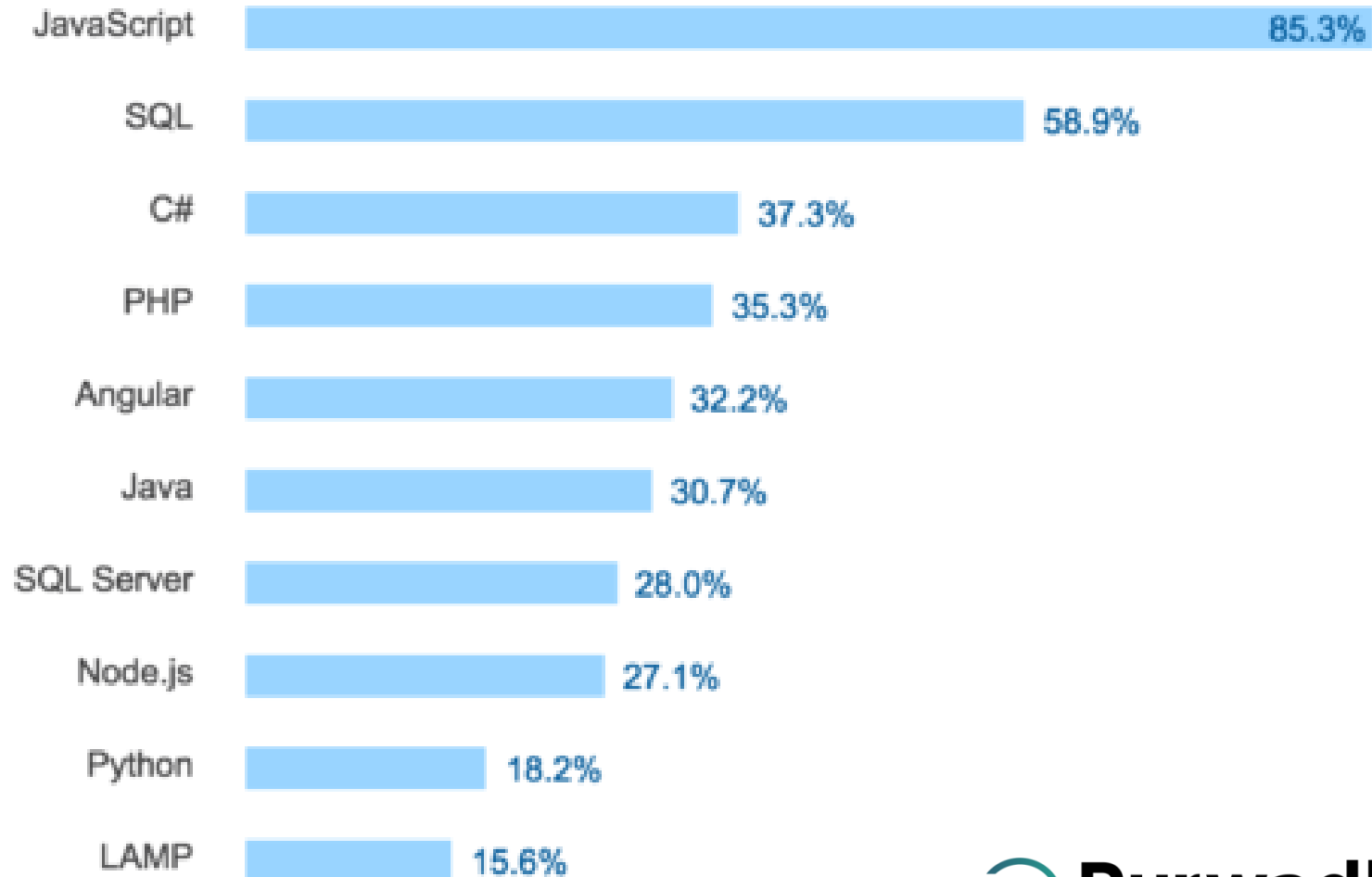
# Why Should You Learn to Code?

“Everybody in this country should learn how to program a computer... because it teaches you how to think.”





- Steve Jobs

# Why Should You Learn Javascript?

## Most Popular Technologies per Dev Type








# Top JS Front-End Frameworks 2017

1		<b>Vue.js</b> □ A progressive, incrementally-adoptable JavaS...	+40.0k ★
2		<b>React</b> A declarative, efficient, and flexible JavaScript li...	+27.8k ★
3		<b>Angular</b> One framework. Mobile & desktop.	+12.2k ★
4		<b>Preact</b> ⚙ Fast 3kB React alternative with the same mod...	+10.4k ★
5		<b>Hyperapp</b> 1 KB JavaScript library for building web applicatio...	+8.1k ★






<https://risingstars.js.org/2017/en/>

# Top React Ecosystem 2017

1		Create React App Create React apps with no build configuration.	+22.5k ★
2		Ant Design A UI Design Language	+13.3k ★
3		Next.js Framework for server-rendered or statically-exp...	+12.7k ★
4		Storybook Interactive UI component dev & test: React, React ...	+9.7k ★
5		Gatsby Blazing fast static site generator for React	+9.7k ★




<https://risingstars.js.org/2017/en/>

# Top JS Static Site Generator 2017

1		<b>Gatsby</b> 🌀 📦 ⚡ Blazing fast static site generator for React	+9.7k ★
2		<b>Hexo</b> A fast, simple & powerful blog framework, powered...	+6.2k ★
3		<b>React Static</b> 🌀 ⚡ A progressive static-site generator for React.	+3.0k ★
4		<b>Phenomic</b> Modular website compiler ↩	+1.4k ★
5		<b>Metalsmith</b> An extremely simple, pluggable static site generat...	+1.0k ★

<https://risingstars.js.org/2017/en/>






# Top Node JS Back-End Frameworks 2017

1		<b>Express</b> Fast, unopinionated, minimalist web framework f...	+6.7k ★
2		<b>Koa</b> Expressive middleware for node.js using ES2017 a...	+5.8k ★
3		<b>Fastify</b> Fast and low overhead web framework, for Node.js	+5.8k ★
4		<b>micro</b> Asynchronous HTTP microservices	+3.2k ★
5		<b>Keystone</b> node.js cms and web app framework	+3.0k ★

<https://risingstars.js.org/2017/en/>








# Top JS Mobile Frameworks 2017

1		<b>React Native</b> A framework for building native apps with React.	+15.6k ★
2		<b>Weex</b> A framework for building Mobile cross-platform UI.	+6.5k ★
3		<b>Ionic</b> Build amazing native and progressive web apps ...	+5.5k ★
4		<b>Quasar</b> Quasar Framework	+3.7k ★
5		<b>NativeScript</b> NativeScript is an open source framework for buil...	+2.9k ★

<https://risingstars.js.org/2017/en/>

# Top Code Editor 2017

1		<b>VS Code</b> Visual Studio Code	+20.2k ★
2		<b>Atom</b> The hackable text editor	+9.1k ★
3		<b>Reactide</b> Reactide is the first dedicated IDE for React web a...	+7.4k ★
4		<b>Brackets</b> An open source code editor for the web, written in...	+1.9k ★
5		<b>Nuclide</b> An open IDE for web and native mobile developm...	+1.4k ★

<https://risingstars.js.org/2017/en/>



JS

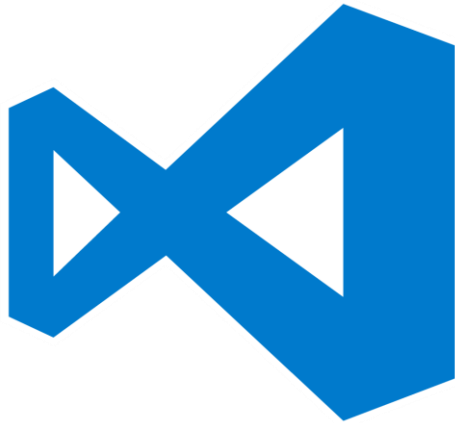
*JavaScript* often abbreviated as JS, is a high-level, dynamic, weakly typed, object-based, multi-paradigm, and interpreted programming language.

Alongside *HTML* and *CSS*, JavaScript is one of the three core technologies of World Wide Web content production.



***Node.js*®** is a JavaScript runtime built on Chrome's V8 JavaScript engine. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient. Node.js' package ecosystem, *npm*, is the largest ecosystem of open source libraries in the world.

# SetUp



## Visual Studio Code

Download & install here:

[\*code.visualstudio.com\*](https://code.visualstudio.com)

## Node.Js

Download & install here:

[\*nodejs.org\*](https://nodejs.org)

**\$ node --version**

**\$ node -v**



# Make your first JS file #1

## <Running Node Shell on prompt #1>

- \* Buka terminal <run cmd>
- \* Ketik **node** lalu enter
- \* Ketik program & enter untuk eksekusi
- \* Ketik **process.exit()** untuk keluar

```
console.log( 'Halo' );
```

# Make your first JS file #2

## <Running on command prompt #2>

```
console.log( 'Halo' );
```

- \* Simpan sebagai **file.js**
- \* Buka terminal <run cmd>
- \* Masuk ke direktori **file.js**
- \* Eksekusi **node file.js**

# Make your first JS file #3

## <Insert JS on HTML>

```
<script>  
    console.log('Halo Dunia');  
</script>
```

- \* Simpan sebagai **file.htm**
- \* Buka **file.htm** di browser
- \* Inspect & lihat hasil di tab console



# Make your first JS file #4

<Insert JS on HTML, running on web page>

```
<script>  
document.write('Halo Dunia');  
</script>
```

- \* Simpan sebagai **file.htm**
- \* Buka **file.htm** di browser
- \* Hasil langsung terlihat di page

# Make your first JS file #5

## <inner HTML>

```
<p id="demo"></p>
```

```
<script>  
document.getElementById("demo").innerHTML = 5 + 6;  
</script>
```

- \* Simpan sebagai **file.htm**
- \* Buka **file.htm** di browser
- \* Hasil langsung terlihat di page

# Make your first JS file #6

<Running on browser, calling from HTML>

```
console.log('Halo');
```

- \* Simpan sebagai **file.js**
- \* Buat file HTML berikut (**file.htm**)

```
<script src="file.js"></script>
```

- \* Buka **file.htm** di browser
- \* Inspect & lihat hasil di tab console

# Comment

**// komentar 1 line**

**/\*  
komentar multiline  
komentar multiline  
komentar multiline  
\*/**

# dirname & filename

```
console.log(__dirname);  
// menampilkan directory path
```

```
console.log(__filename);  
// menampilkan file path
```

# Variabel

```
var nama = 'Andi';  
console.log(nama);
```

```
var usia;  
usia = 22;  
usia = 32;  
console.log(usia);
```

```
let jomblo = true;  
console.log(jomblo);
```

# var vs let

```
var x = 21  
var x = 22  
console.log(x);  
// output = 22
```

=====

```
let y = 'hai'  
let y = 'halo'  
console.log(y);  
// SyntaxError
```

# Prompt & Alert

<write on HTML>

```
<script>  
var kabar = prompt('Apa kabar?');  
//muncul kotak dialog input
```

```
console.log(kabar);  
//tampilkan input di console
```

```
alert(kabar);  
//tampilkan input di alert window  
</script>
```



# Solve It!

**Buatlah sebuah aplikasi interaktif (user input) dengan prompt & alert, kemudian input dari user ditampilkan di console.**

# Solve It!

This page says:

Silakan ketik nama Anda:

Lintang Wisesa

OK

Cancel

This page says:

Silakan ketik tanggal lahir Anda:

26 November 1992

OK

Cancel

This page says:

Silakan ketik alamat lengkap Anda:

Griya Loka, BSD, Tangerang Selatan

OK

Cancel

This page says:

Silakan ketik jenjang pendidikan terakhir Anda:

S1 Fisika UGM

OK

Cancel

This page says:

Data berhasil disimpan.  
Terima kasih atas partisipasi Anda.

OK



Elements

Console

Sources



top

Filter

- ☐ Hide network
- ☐ Preserve log
- ☐ Selected context only
- ☐ User messages only

Nama: Lintang Wisesa

Tgl Lahir: 26 Nov 1992

Alamat: Griya Loka BSD

Profesi: Hardware Engineer

# Solved!

```
<script>
```

```
var nama = prompt('Silakan ketik nama Anda:');  
console.log('Nama: ' + nama);
```

```
var tglahir = prompt('Ketik tanggal lahir Anda:');  
console.log('Tgl Lahir: ' + tglahir);
```

```
var alamat = prompt('Ketik alamat lengkap Anda:');  
console.log('Alamat: ' + alamat);
```

```
var pendidikan = prompt('Ketik pendidikan terakhir:');  
console.log('Pendidikan: ' + pendidikan);
```

```
var profesi = prompt('Silakan ketik pekerjaan Anda:');  
console.log('Profesi: ' + profesi);
```

```
alert('Data berhasil disimpan. \n Terima kasih atas  
partisipasi Anda.');
```

```
</script>
```

Programming Fundamental

A yellow square containing the letters 'JS' in white, representing JavaScript.

# Introduction to JavaScript