WHICH PROGRAMMING LANGUAGE

SHOULD I LEARN FIRST?

WHAT IS PROGRAMMING?

Writing very specific instructions to a very dumb, yet obedient machine.
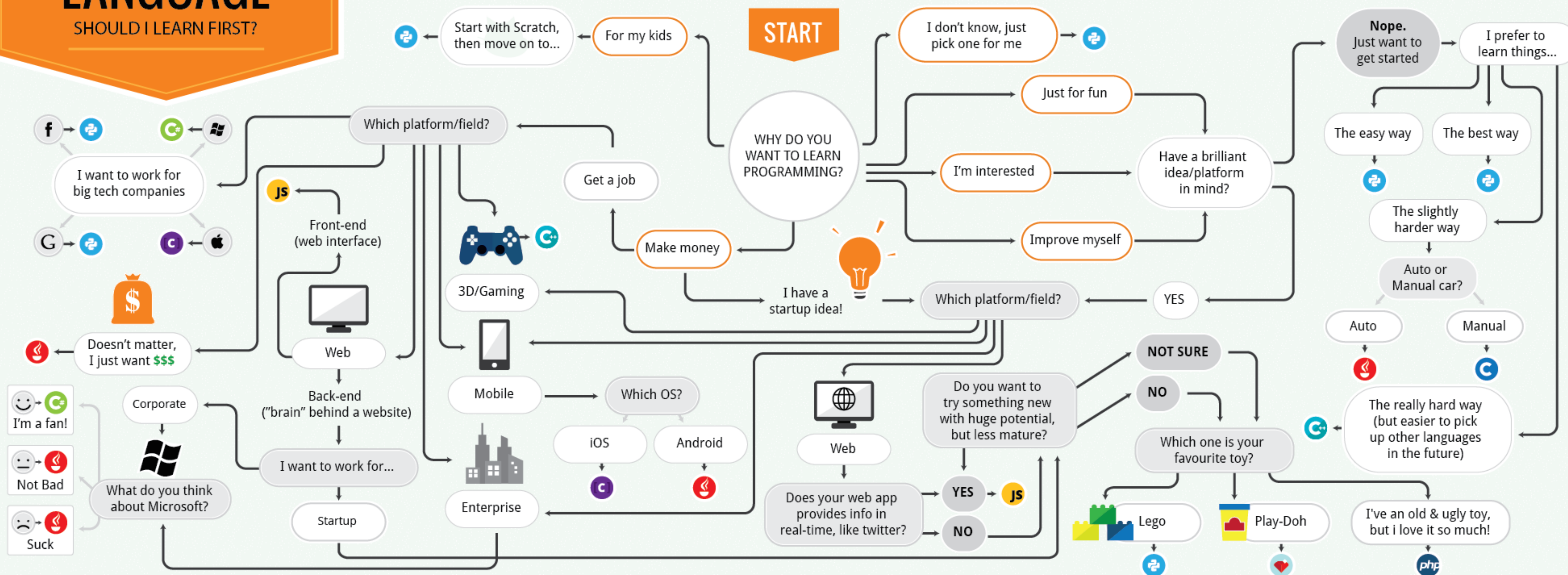
OK

LANGUAGES

- PYTHON
- JAVA
- C
- PHP
- C++
- JAVASCRIPT
- C#
- RUBY
- OBJECTIVE-C

START

WHY DO YOU WANT TO LEARN PROGRAMMING?

For my kids → Start with Scratch, then move on to...

I don't know, just pick one for me

Just for fun

I'm interested

Improve myself

Get a job

Make money

I have a startup idea!

Have a brilliant idea/platform in mind?

Nope. Just want to get started

I prefer to learn things...

The easy way

The best way

The slightly harder way

Auto or Manual car?

Auto

Manual

The really hard way (but easier to pick up other languages in the future)

YES

Which platform/field?

Which platform/field?

I want to work for big tech companies

I want to work for...

Front-end (web interface)

Web

Back-end ("brain" behind a website)

Corporate

Startup

Doesn't matter, I just want $$$

3D/Gaming

Mobile

Which OS?

iOS

Android

Web

Does your web app provides info in real-time, like twitter?

YES

NO

Do you want to try something new with huge potential, but less mature?

NOT SURE

NO

Which one is your favourite toy?

Lego

Play-Doh

I've an old & ugly toy, but i love it so much!

Enterprise

I want to work for...

What do you think about Microsoft?

I'm a fan!

Not Bad

Suck

THE LORD OF THE RINGS ANALOGY TO PROGRAMMING LANGUAGES

Python
The Ent

DIFFICULTY ★☆☆☆☆

Help little Hobbits (beginners) to understand programming concepts

Help Wizards (computer scientists) to conduct researches

Widely regarded as the best programming language for beginners

Easiest to learn

Widely used in scientific, technical & academic field, i.e. Artificial Intelligence

You can build website using Django, a popular Python web framework

POPULARITY ★★★★½

USED TO BUILD
YouTube, Instagram, Spotify

AVG. SALARY
$107,000

Java
Gandalf

DIFFICULTY ★★★☆☆

Wants peace & works with everyone (portable)

Very popular on all platforms, OS, and devices due to its portability

One of the most in demand & highest paying programming languages

Slogan: write once, work everywhere

POPULARITY ★★★★★

USED TO BUILD
Gmail, Minecraft, Most Android Apps, Enterprise applica-tions

AVG. SALARY
$102,000

C
One Ring

DIFFICULTY ★★★☆☆

The power of C is known to them all

Everyone wants to get its Power

Lingua franca of programming language

One of the oldest and most widely used language in the world

Popular language for system and hardware programming

A subset of C++ except the little details

POPULARITY ★★★★★

USED TO BUILD
Operating systems and hardware

AVG. SALARY
$102,000

C++
Saruman

DIFFICULTY ★★★★☆

Everyone thinks that he is the good guy

But once you get to know him, you will realize he wants the power, not good deeds

Complex version of C with a lot more features

Widely used for developing games, industrial and performance-critical applications

Learning C++ is like learning how to manufacture, assemble, and drive a car

Recommended only if you have a mentor to guide you

POPULARITY ★★★★½

USED TO BUILD
Operating systems, hardware, and browsers

AVG. SALARY
$104,000

JavaScript
Hobbit

DIFFICULTY ★★☆☆☆

Frequently underestimated (powerful)

Well-known for the slow, gentle life of the Shire (web browsers)

"Java and Javascript are similar like Car and Carpet are similar" - Greg Hewgill

Most popular clients-side web scripting language

A must learn for front-end web developer (HTML and CSS as well)

One of the hottest programming language now, due to its increasing popularity as server-side language (node.js)

POPULARITY ★★★★½

USED TO BUILD
Paypal, front-end of majority websites

AVG. SALARY
$99,000

C#
Elf

DIFFICULTY ★★★☆☆

Beautiful creature (language), used to stay in their land, Rivendell (Microsoft Platform), but recently started to open up to their neighbours (open source)

A popular choice for enterprise to create websites and Windows application using .NET framework

Can be used to build website with ASP.NET, a web framework from Microsoft

Similar to Java in basic syntax and some features

POPULARITY ★★★★☆

USED TO BUILD
Enterprise and Windows applica-tions

AVG. SALARY
$94,000

Ruby
Man (Middle Earth)

DIFFICULTY ★★☆☆☆

Very emotional creature

They (some Ruby developers) feel they are superior & need to rule the Middle Earth

Mostly known for its popular web framework, Ruby on Rails

Focuses on getting things done

Designed for fun and productive coding

Best for fun and personal projects, startups, and rapid development

POPULARITY ★★★★½

USED TO BUILD
Hulu, Groupon, Slideshare

AVG. SALARY
$107,000

PHP
Orc

DIFFICULTY ★★☆☆☆

Ugly guy (language) and doesn't respect the rules (inconsistent and unpredictable)

Big headache to those (developers) to manage them (codes)

Yet still dominates the Middle-earth (most popular web scripting language)

Suitable for building small and simple sites within a short time frame

Supported by almost every web hosting services with lower price

POPULARITY ★★★★☆

USED TO BUILD
Wordpress, Wikipe-dia, Flickr

AVG. SALARY
$89,000

Objective-C
Smaug

DIFFICULTY ★★★☆☆

Lonely and loves gold

Primary language used by Apple for Mac OS X & iOS

Choose this if you want to focus on developing iOS or OS X apps only

Consider to learn Swift (newly introduced by Apple in 2014) as your next language

POPULARITY ★★★☆☆

USED TO BUILD
Most iOS Apps and part of Mac OS X

AVG. SALARY
$107,000

ACTUALLY… IT DOESN'T REALLY MATTER HOW YOU START.

You need to know at least few languages to understand the underlying concepts. Just get your feet wet!

TO GET STARTED, CHECK OUT THE FULL LIST OF BEST TUTORIALS AND TOOLS FOR EACH PROGRAMMING LANGUAGE AT:

CARLCHEO.COM/STARTCODING