Getting to Know Rust

This lesson discusses what Rust is and provides a brief history.

Rust: A History

- A *Mozilla* employee, Graydon Hoare, started working on a language as a personal project.
- Later, *Mozilla* sponsored the project in 2009 and announced it in 2010.
- The first stable release was on *May 15, 2015*.

What Is Rust?

Rust is a *system programming* language that is safe and concurrent.

It is inspired by many languages:

- **System Programming Languages** : (C, C++)

  In terms of syntax and performance.

- **Functional Programming Languages** : (Haskell, Erlang, Meta Language)

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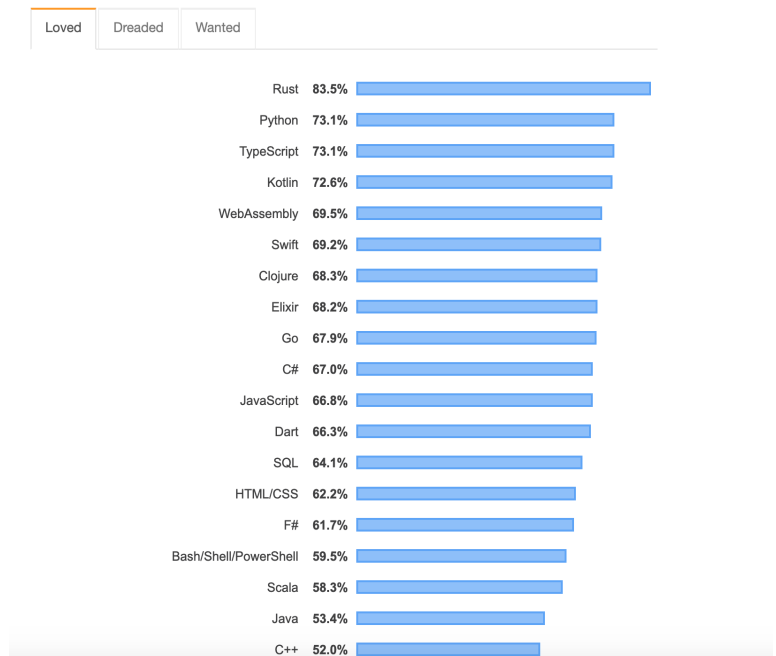
In terms of syntax only.

Rust Stats

According to **a 2019 Stack Overflow developer survey**, Rust has been the most loved language for four consecutive years.

Top 5 most loved languages:

- **Rust: 83.5%**

- Python: 73.1%

- TypeScript: 73.1%

- Kotlin: 72.6%

- WebAssembly: 69.5%

Most Loved, Dreaded, and Wanted Languages

Loved	Dreaded	Wanted

Rust	83.5%
Python	73.1%
TypeScript	73.1%
Kotlin	72.6%
WebAssembly	69.5%
Swift	69.2%
Clojure	68.3%
Elixir	68.2%
Go	67.9%
C#	67.0%
JavaScript	66.8%
Dart	66.3%
SQL	64.1%
HTML/CSS	62.2%
F#	61.7%
Bash/Shell/PowerShell	59.5%
Scala	58.3%
Java	53.4%
C++	52.0%

What Is Rust Used For?

Rust is fit for:

- building powerful web applications
- embedded systems programming
- building distributed online services
- cross-platform command line support

Who Is Using Rust?

- Rust is used in **production and building apps** by many companies.

  The famous among these are:

  - DropBox

  - Atlassian

  - Amazon's Firecracker 🔥 Firecracker

What makes Rust different? Let's learn this in the next lesson.

Or, you can go back to the Learn Rust from Scratch *course homepage.*