

Related Roadmaps

✓

 Backend Roadmap

✓

 DevOps Roadmap

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 Go Roadmap

Pattern Matching and Destructuring

Functions and Method Syntax

Control Flow Constructs

Variables, Constants, and Data Types

Syntax and Semantics

Ownership System

Ownership Rules and Memory Safety

Borrowing, References, and Slices

Deep Dive: Stack vs Heap

Option & Result Enumerations

Propagating Errors and `?` Operator

Custom Error Types and Traits

Declarative Macros with `macro_rules!`

Procedural Macros and Custom Derive

Domain-Specific Languages (DSLs) in Rust

Rocket

Warp

Actix

Yew

ring

rust-crypto

sodiumoxide

clap

structopt

termion

wasm-bindgen

wasm-pack

wasmer

rust-gdb

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Enums

Structs

Traits

Impl Blocks

Constructs

Data Structures

Integers

Floats

Boolean

Character

Tuple

Array

Vector

String

Hashmap

Hashset

LinkedList

BinaryHeap

Stack

Queue

Advanced

BTreeMap

BTreeSet

Rc

Arc

Mutex

RwLock

Channels

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Dependency Management with Cargo.toml

Publishing to crates.io

Explicit Lifetime Annotations

Lifetime Elision Rules

Covariant and Contravariant Lifetimes

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smol

Diesel

sqlx

rusqlite

bevy

fyrox

ggez

macroquad

wgpu-rs

WebAssembly (WASM)

Documenting with `rustdoc`

Performance and Profiling

What is Rust?

Why use Rust?

Memory Safety and Zero-Cost Abstractions

Environment Setup

Installing Rust and Cargo

IDEs and Rust Toolchains

Rust REPL (Rust Playground)

Threads, Channels, and Message Passing

Atomic Operations and Memory Barriers

Futures and Async/Await Paradigm

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Trait Bounds and Associated Types

Advanced Generics and Type-level Programming

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quinn

Serde

json-rust

toml-rs

druid

gtk-rs

relm

embedded-hal

rppal

nrf-hal

Unit and Integration Testing

Mocking and Property-based Testing

Criterion.rs

Keep Learning