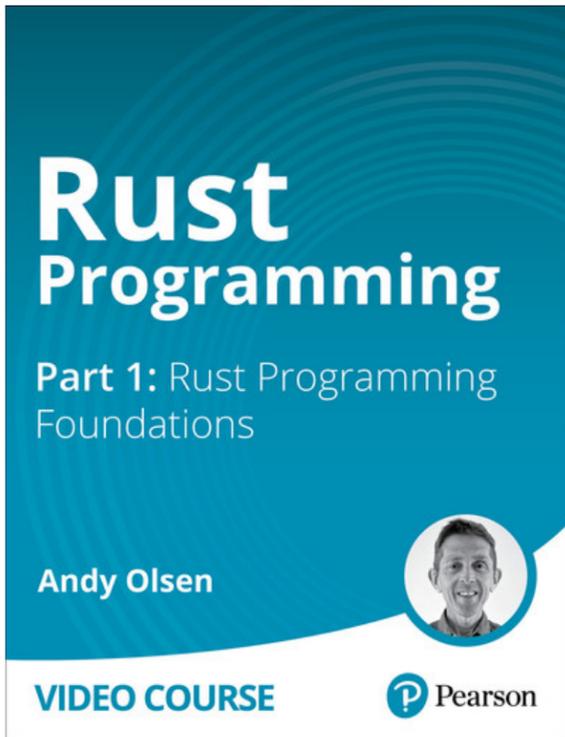


Rust Programming Part 1: Rust Programming Foundations

Write the [first review](#)

By [Andy Olsen](#)



TIME TO COMPLETE:
7h 4m

TOPICS:
[Rust](#)

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7 Hours of Video Instruction

Rust programming for real-world applications.

Overview:

Rust Programming Part 1 teaches you the foundations of Rust programming through clear training and detailed examples. Rust is the language many passionate programmers have embraced because of its expressiveness, sophistication, and rigor. The Rust language combines the efficiency, speed, and low-level power of C/C++ with the benefits of higher-level languages such as Java, Python, and C# and you can use it to implement all kinds of solutions including embedded systems, DevOps operators, operating systems, and platforms, and much more besides.

Rust Programming Foundations is Part 1 of your learning journey. You will learn about the Rust toolset, the Rust type system, and how to implement flow control. You will also learn how to use compound types and collections, and how Rust carefully manages the lifetime of objects and how they are referenced safely in your code. Experienced trainer Andy Olsen will systematically show you how to avoid the pitfalls and errors that are common in C and C++.

Topics included in this course:

- **Getting Started with Rust** starts with a quick overview of Rust as a programming language and shows you how to download the Rust toolset.
- **Understanding Rust Variables and Types** shows how to declare variables in Rust and takes a closer look at some of the primitive types available in the language.
- **Implementing Flow Control** shows how to implement conditional logic and iteration in Rust.
- **Understanding Enums** describes the syntax for defining and using enum types, also discusses some of the important standard enums in the Rust library.
- **Using Compound Types and Collections** shows how to create and use arrays and tuples, and how to use vectors and maps in the Rust collection library.
- **Understanding Ownership in Rust** dives into the details of how Rust manages the lifetime of objects. You will learn about the differences between copying values and moving values in Rust.
- **Understanding Borrowing in Rust** looks at a concept called "borrowing", which is effectively where you take a reference to a variable without claiming ownership.

About the Instructor

Downloading "1.5 Building and running an application by using Cargo.mp4" ...

Andy is a freelance consultant, instructor, and developer with more than 30 years of experience in IT. Andy began his professional career as a C/C++ developer and transitioned into Java, C#, and other languages as the years passed by. Andy is actively involved in a wide range of technologies including full-stack development, cloud native applications, data science, and more. Andy is passionate about technology education and runs training courses around the world across diverse market sectors.

**Skill Level:**

- Beginner to Intermediate

Learn How To:

- Create, build, and run Rust applications
- Organize Rust code and application structure properly
- Manage memory safely and effectively

Course requirement:

- None

Who Should Take This Course:

- Developers that want to get started writing efficient and well-structured Rust applications.

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