

Overview Slides and Exercises

April 15, 2024

Basic Syntax

- ▶ PDF: 2_1-basic-syntax-export.pdf
- ▶ Exercise:
2-foundations-of-rust/1-basic-syntax/1-basic-syntax/

Ownership

- ▶ `2-foundations-of-rust/2-ownership-and-references/1-move-semantics/src/bin/02.rs`

Ownership 2

- ▶ PDF: [2_2-ownership-and-references-export.pdf](#)
- ▶ Exercise: [2-foundations-of-rust/2-ownership-and-references/move-semantics](#)
- ▶ Bonus Exercise:
[2-foundations-of-rust/2-ownership-and-references/2-borrowing](#)

Advanced Syntax

- ▶ PDF: [2_3-advanced-syntax-export.pdf](#)
- ▶ Exercise:
[2-foundations-of-rust/3-advanced-syntax/1-error-propagation](#)
- ▶ Bonus Exercise:
[2-foundations-of-rust/3-advanced-syntax/2-error-handling](#)
- ▶ Tip: `map_err()`?

Advanced Syntax 2

- ▶ PDF: [2_3-advanced-syntax-export.pdf](#)
- ▶ Exercise:
[2-foundations-of-rust/3-advanced-syntax/4-ring-buffer](#)
- ▶ Bonus Exercise:
[2-foundations-of-rust/3-advanced-syntax/5-boxed-data](#)
- ▶ What is `Box<[u8]>` and why do we need it?

Traits and Generics

- ▶ PDF: [2_4-traits-and-generics-export.pdf](#)
- ▶ Exercise: [2-foundations-of-rust/4-traits-and-generics/1-local-storage-vec/](#)

Polymorphismus

- ▶ PDF: [2_5-closures-and-dynamic-dispatch-export.pdf](#)
- ▶ Exercise:
[2-foundations-of-rust/5-closures-and-dynamic-dispatch/](#)

Crate Engineering

- ▶ PDF: [3_1-crate-engineering-export.pdf](#)
- ▶ Exercise 1: [exercises/3-crate-engineering/1-crate-engineering/1-my-serde-app](#)
- ▶ Exercise 2:
[exercises/3-crate-engineering/1-crate-engineering/3-bsn](#)
- ▶ Bonus Exercise:
[exercises/3-crate-engineering/1-crate-engineering/5-fizz-buzz](#)

Foreign Function Interfaces

- ▶ PDF: [4_1-foreign-function-interface-export.pdf](#)
- ▶ Exercise: [4-rust-for-systems-programming/1-foreign-function-interface/1-crc-in-c](#)
- ▶ Exercise: [4-rust-for-systems-programming/1-foreign-function-interface/2-crc-in-rust](#)
- ▶ Exercise: [4-rust-for-systems-programming/1-foreign-function-interface/3-tweetnacl-bindgen](#)