

Sharing Code

Jonathan Dönszelmann & Vivian Roest

Delft University of Technology

2024-11-18

And now for something completely different

Sharing code

- Distributing Code
- Visibility
- Documenting code
- Quality assurance:
 - Testing
 - Style
 - Static Analysis

Live! Anything can (and will) go wrong

package types

Question:

- What's a library?
- What's a binary?
- What's the difference?

Rustdoc

- `///` comment (triple slashes)
- Supports markdown, and linking to source code
- `cargo doc` automatically generates

Testing

- **Smoke tests** test everything
- **Unit tests** test a specific component (isolated)
- **Integration tests** test components working together
- more? search for: *Testing Pyramid*

Coverage

- Testing your tests
- How well do they work?

Rustfmt

- cargo fmt
- “Idempotent”
- Reformats code consistently

Clippy

- `cargo clippy`
- Static analysis (“lints”)
- More than what the compiler does by default

Semantic Versioning

Semver:

- `major.minor.patch`
- `<0.x.x` is development
- `>1.x.x` is stable
- “Backwards Compatibility”
- <https://semver.org/>

Summary

- Documenting using rustdoc
- Testing Code
 - Use coverage to ensure you test enough
- Static Analysis
- Publishing code