

# Rust BuildOn #3

Jim Fawcett

<https://JimFawcett.github.io>

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# Build-On

- Learn Rust in small steps
- Start with a simple Rust demo
  - Text Finder
- Build on that in interesting ways, e.g., for Text Finder:
  - Add capability – command line parsing, directory tree walking, ...
  - Use generics – plugin components
  - Use threads – parallel text searches, thread pool based dir traversal
  - Use library components
- Discord server
  - Q&A
  - Comments

# BuildOn Timeline: Bi-Weekly Sessions

- Session #1 – BuildOn Introduction & Rust Preview
- Session #2 – Project Introduction & Some Rust details
- Session #2 – **Step #1**: TextSearch -> Functional package with demo
- **Session #3 – Step #2: DirNav ->** “
- Session #4 – **Step #3**: CmdInParser -> “
- Session #5 – **Step #4**: Executive, Display -> Functional project
- Session #6 – RegEx Extension ?
- Session #7 – Parallel Text Search ?

# BuildOn Session #3 Topics

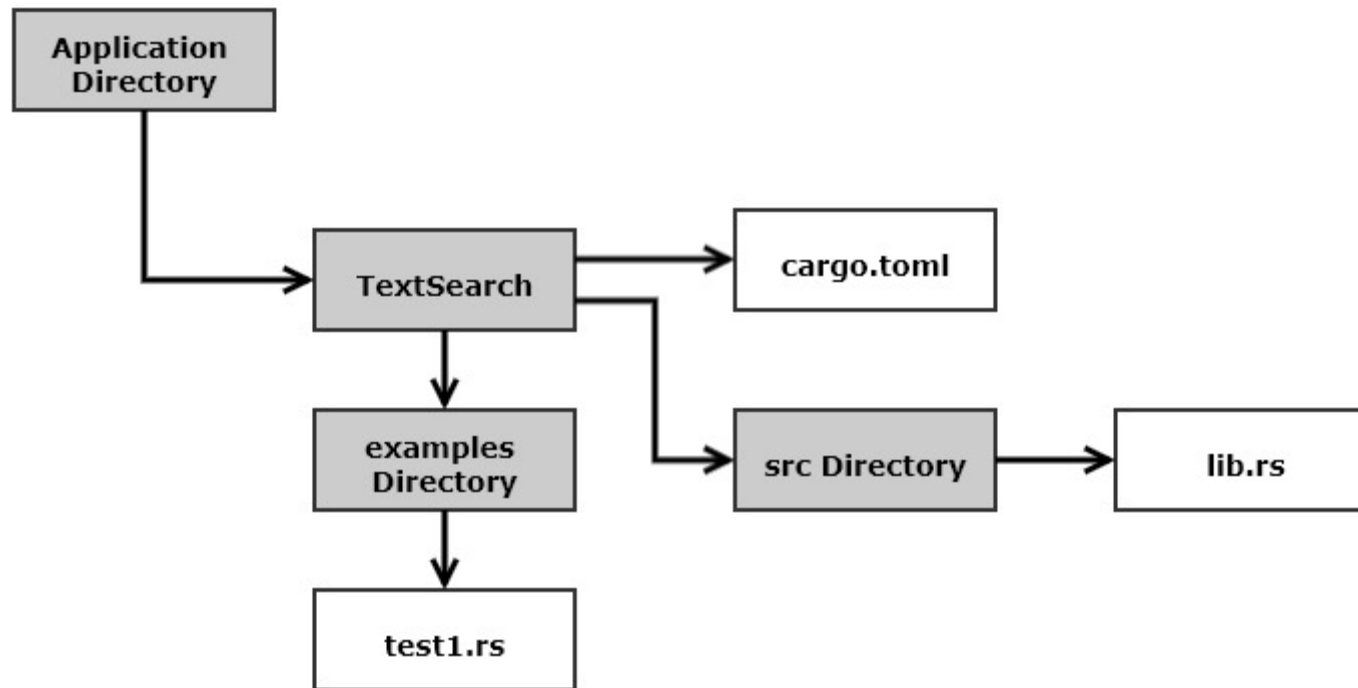
## Focus: TextSearch & DirNav Packages

- [Step #0](#)
  - Run TextFinder
  - [DesignBites Intro](#)
- [Step #1](#) - TextSearch
  - [A TextSearch Solution](#)
- [Step #2](#) – DirNav
  - [Starter Code](#)
  - [Error Handling Animations](#)
  - [RustStory Libraries.html#fs](#)
  - [std:fs](#)
- [BuildOn](#) – click on BuildOn code

## Focus: Rust

- [RustBites: Generics & Traits](#)
- [Iterating over Generics](#)
- [RustStory: Traits](#) – dynamic dispatch
- [Enumerations](#)
  - [Custom Enumerations and matching](#)
  - [Non-Enum matching](#)
- [RustBites: Options](#)
- [RustBites: Error Handling](#)
- [Anim Features](#)
- **Questions?**

# Rust Project Structure for TextSearch



# BuildOn

- Session #3
  - DirNav
- Session #4
  - CmdInParser
- Session #5
  - Executive & Display
- Session #6 ?
  - RegEx Search
- Session #7 ?
  - Parallel Text Search

That's All Folks!