

Rust BuildOn #4

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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

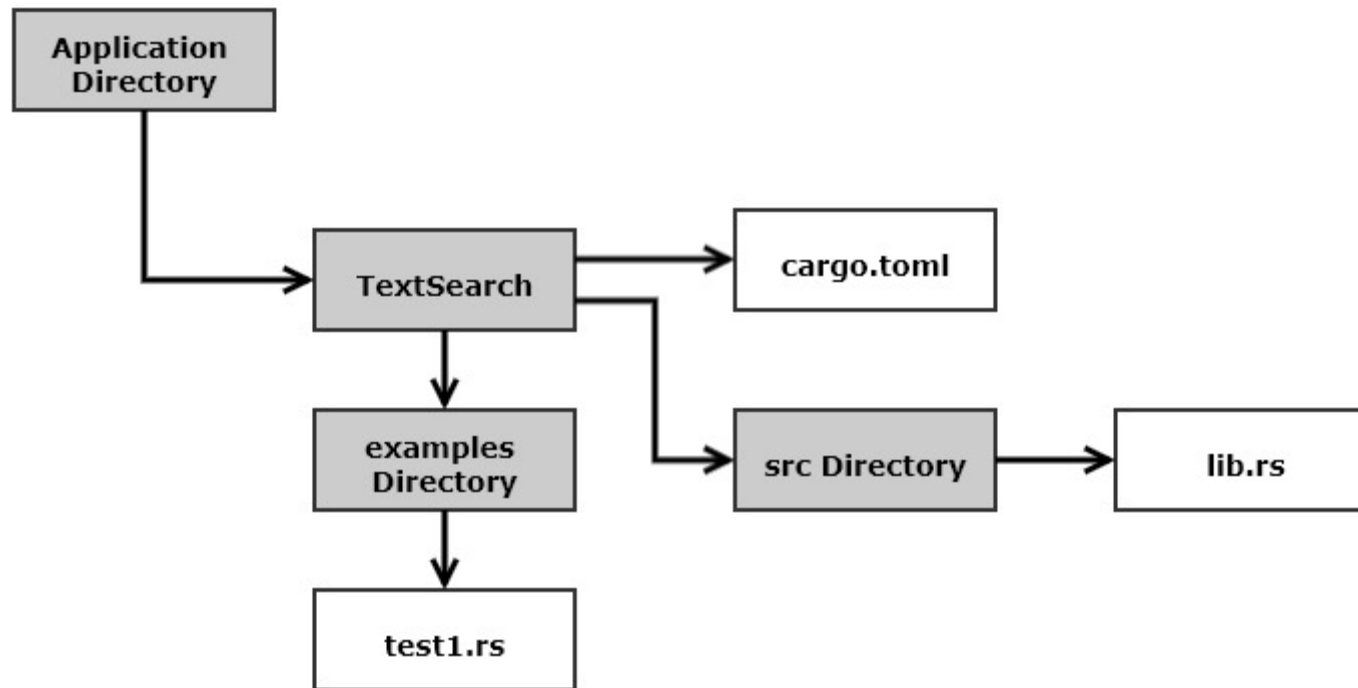
Focus: DirNav & CmdInParser Packages

- [Step #1](#) - TextSearch
 - [A TextSearch Solution](#)
- [Step #2](#) – DirNav
 - [Solution Code](#)
 - Generate documentation
 - Document-private-items
 - Run clippy
- [Step #3](#) – CmdInParser
 - No starter code
 - Design ideas
 - Run parser
- [BuildOn](#) – click on BuildOn code

Focus: Design, then Rust

- CParser Design
 - Hashmap<String, Vec<String>>
 - Two parts
 - Reusable parser
 - Application specific attributes w/defaults
- [Iterators](#)
- [Idiomatic Rust](#)
- [Anim Features](#)
- [DesignBites](#)
- **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!