Rust BuildOn #3

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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**: CmdlnParser ->   "
- Session #5 – **Step #4**: Executive, Display -> Functional project
- Session #6 – RegEx Extension ?
- Session #7 – Parallel Text Searh ?
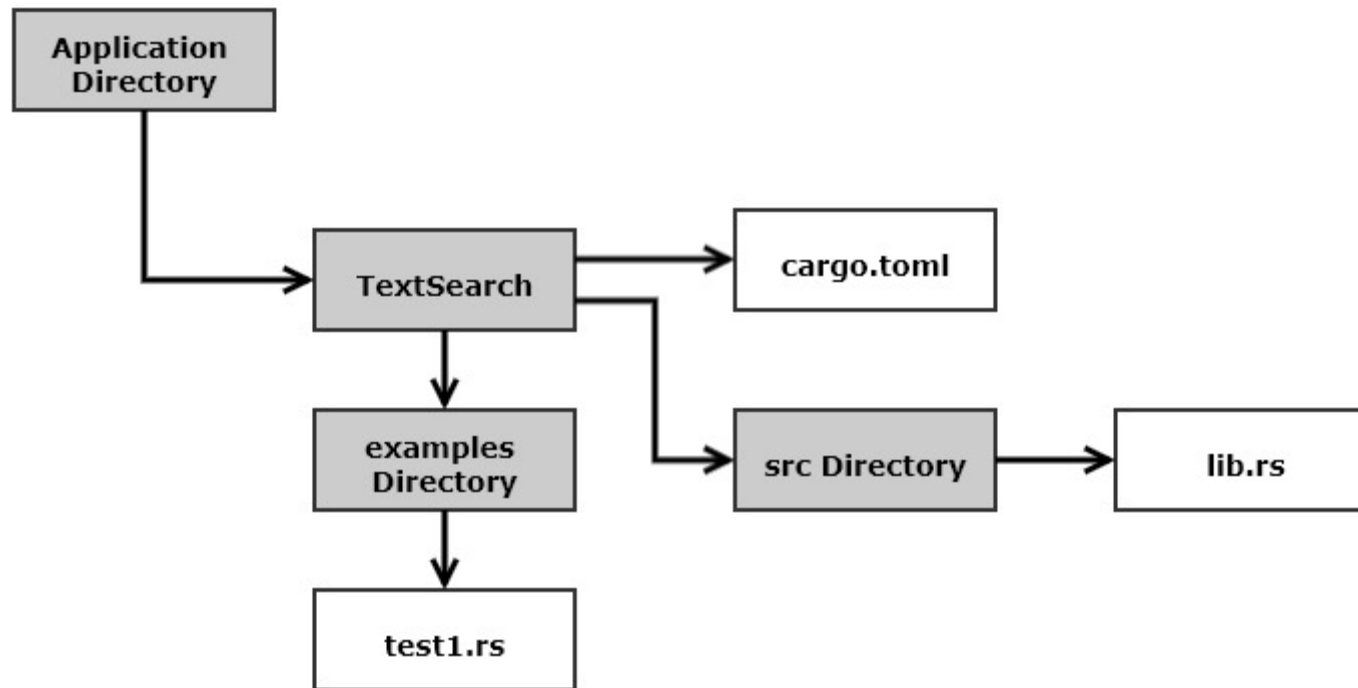
BuildOn Session #3 Topics

Focus: TextSearch & DirNav Packages

- Step #0
  - Run TextFinder
  - DesignBites
- 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
  - CmdlnParser
- Session #5
  - Executive & Display
- Session #6 ?
  - RegEx Search
- Session #7 ?
  - Parallel Text Search

That's All Folks!