

Rust BuildOn #6

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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 #6 Topics

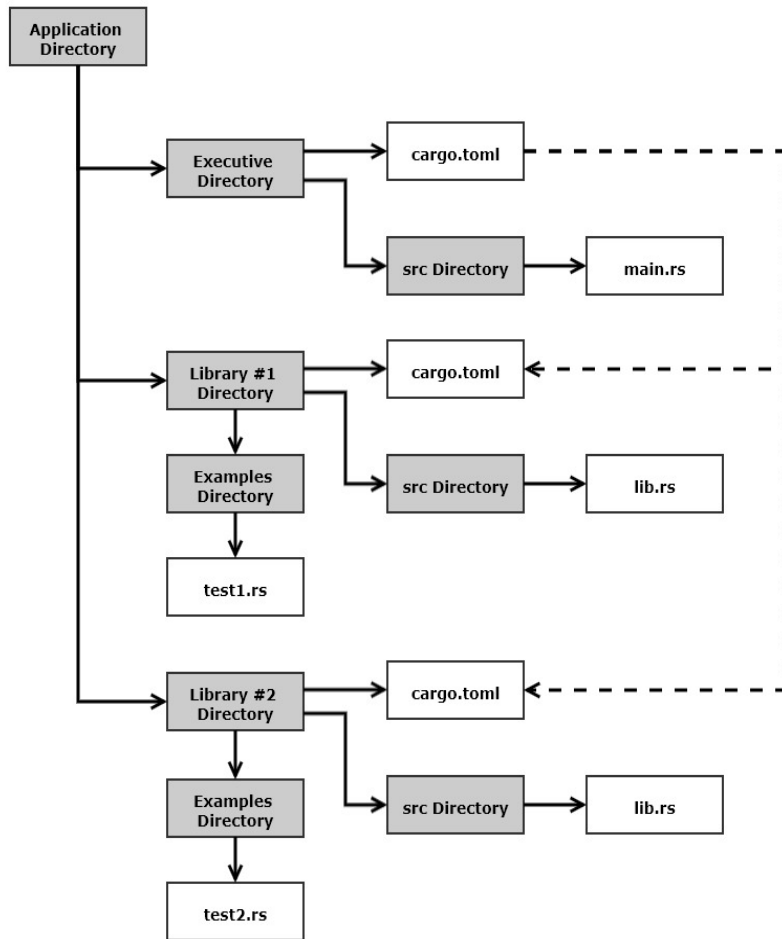
Focus: Integration of parts

- Step #4 – Basic TextFinder
 - [Solution Code](#)
- [Step #5](#) – Add RegEx to TextSearch pkg
 - Fairly simple code substitution
 - May wish to handle both list of successes and list of failures
- [BuildOn](#) – click on BuildOn code

Focus: RegEx & Threads

- [RegEx](#)
- [Threads](#)
- [Debugging Rust in Visual Studio Code](#)
- [RustBites](#)
- **Questions?**

Rust Project Structure for TextFinder

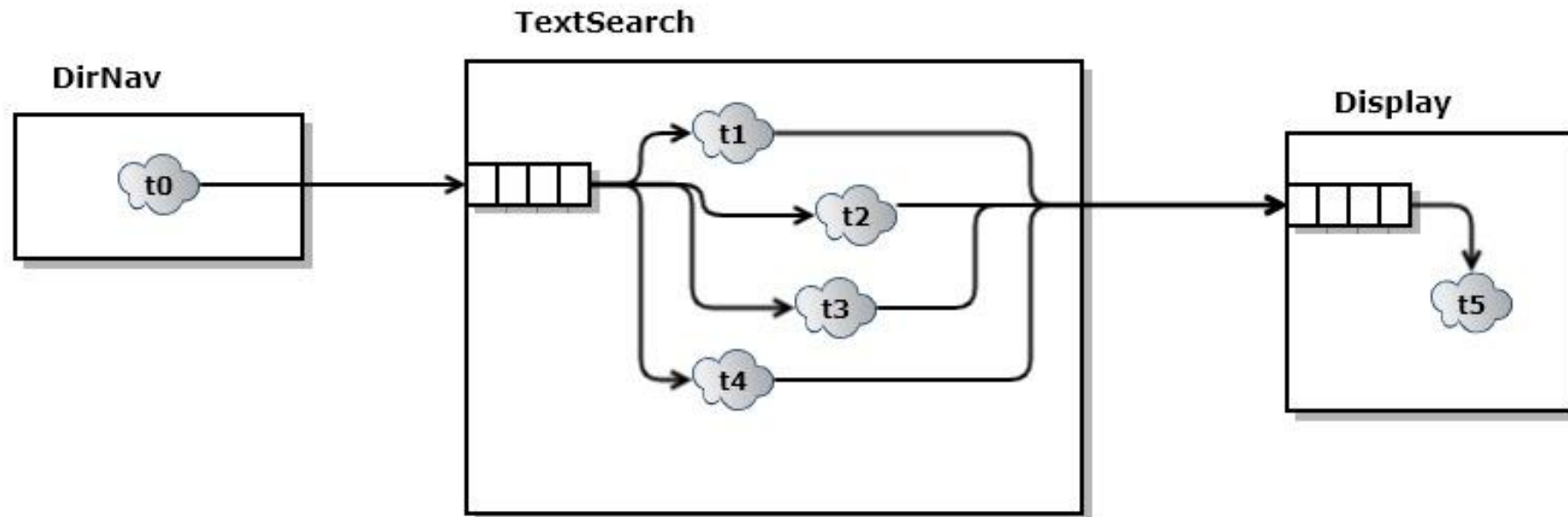


- All components on same level
 - Makes dependency metadata simpler
- Each component has at least one testN.rs file with a main.
 - Use for testing and demonstrations
- Traits are defined in the caller's package if you use DIP.
 - Otherwise they usually go in the called package.

BuildOn

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

Parallel Text Search



That's All Folks!