

# Build-On

Learn Rust in small steps

- Start with a simple Rust demo
  - Text Finder
  - Directed Graph
  - Lexer
  - ...
- 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

# Build-On Process

- Zoom meeting that:
  - Briefly describes motives for using Rust and Rust basic ideas
  - Provides two or three references
  - identifies a problem and refers to starter code
  - Q&A
- Subsequent meetings
  - Briefly describes my solution
  - Others may discuss their solutions and/or problems
  - Pose next extension to problem
  - Q&A

# Build-On Motivation

- Participate in a developer community interested in learning Rust
- Stay in contact with SU Computer Engineering and Computer Science alumni
- Support conversations about Rust and other interesting tech topics
  - Encourage both active learners and curious browsers
- Rust is a very clever language supporting development of secure, high performance code (same ballpark as C++ without undefined behavior)
  - Rust website lists 138 companies using Rust in production
  - Tiobe lists rust as 25<sup>th</sup> in their language popularity index (Oct 2020).