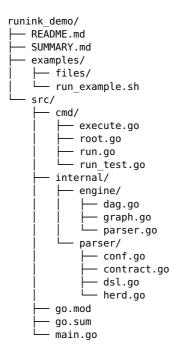
RunInk Project Summary

Project Overview

RunInk is a command-line tool for parsing contract, conf, dsl, and herd files to build and execute Directed Acyclic Graphs (DAGs). This implementation provides a skeleton structure that can be extended to implement the full functionality.

Project Structure



Components

- 1. Command Line Interface (CLI)
 - Built using the Cobra CLI framework
 - Provides a run command with flags for input files
 - Supports verbose output
- 2. Parser Package
 - Skeleton implementations for parsing different file types:
 - Contract files (.contract)
 - Configuration files (.conf)
 - Domain Specific Language files (.dsl)
 - Herd files (.herd)
- 3. Engine Package
 - $\circ \ \ DAG \ configuration \ structure$
 - Graph implementation for representing the DAG
 - $\circ~$ Execution logic for running the DAG $\,$

Next Steps

The current implementation provides a skeleton structure that can be extended to implement the full functionality. The following steps are recommended for further development:

1. Implement File Parsers

- Develop parsers for each file type
- Define data structures to represent the parsed content

2. Implement DAG Builder

- Create logic to build the DAG based on the parsed files
- Define node relationships and dependencies

3. Implement DAG Execution

- Implement topological sort for execution order
- Add error handling and recovery mechanisms

4. Add Testing

- Create unit tests for each component
- Add integration tests for the entire workflow

5. Improve Documentation

- Add detailed API documentation
- Create user guides and examples

Usage

```
# Build the tool
cd ~/runink_demo/src
go build -o runink

# Run with required files
./runink run --contract file.contract --conf file.conf --dsl file.dsl

# Run with optional herd file
./runink run --contract file.contract --conf file.conf --dsl file.dsl --herd file.herd

# Run with verbose output
./runink run --contract file.contract --conf file.conf --dsl file.dsl --verbose
```

Example

An example script is provided in examples/ $run_example.sh$ that demonstrates how to use the tool with the sample files.