Cobra is a library for creating powerful modern CLI applications.

Cobra is used in many Go projects such as Kubernetes, Hugo, and Github CLI to name a few. This list contains a more extensive list of projects using Cobra.

Test passing GO reference go report A+ Slack cobra

Overview

Cobra is a library providing a simple interface to create powerful modern CLI interfaces similar to git & go tools.

Cobra provides:

- Easy subcommand-based CLIs: `app server`, `app fetch`, etc.
- Fully POSIX-compliant flags (including short & long versions)
- Nested subcommands
- Global, local and cascading flags
- Intelligent suggestions (`app srver`... did you mean `app server`?)
- Automatic help generation for commands and flags
- Automatic help flag recognition of `-h`, `--help`, etc.
- Automatically generated shell autocomplete for your application (bash, zsh, fish, powershell)
- Automatically generated man pages for your application
- Command aliases so you can change things without breaking them
- The flexibility to define your own help, usage, etc.
- Optional seamless integration with viper for 12-factor apps

Concepts

Cobra is built on a structure of commands, arguments & flags.

Commands represent actions, **Args** are things and **Flags** are modifiers for those actions.

The best applications read like sentences when used, and as a result, users intuitively know how to interact with them.

The pattern to follow is `APPNAME VERB NOUN --ADJECTIVE.` or `APPNAME COMMAND ARG --FLAG`

A few good real world examples may better illustrate this point.

In the following example, 'server' is a command, and 'port' is a flag:

```
hugo server --port=1313
```

In this command we are telling Git to clone the url bare.

```
git clone URL --bare
```

Commands

Command is the central point of the application. Each interaction that the application supports will be contained in a Command. A command can have children commands and optionally run an action.

In the example above, 'server' is the command.

More about cobra.Command

Flags

A flag is a way to modify the behavior of a command. Cobra supports fully POSIX-compliant flags as well as the Go flag package. A Cobra command can define flags that persist through to children commands and flags that are only available to that command.

In the example above, 'port' is the flag.

Flag functionality is provided by the pflag library, a fork of the flag standard library which maintains the same interface while adding POSIX compliance.

Installing

Using Cobra is easy. First, use `go get` to install the latest version of the library.

```
go get -u github.com/spf13/cobra@latest
```

Next, include Cobra in your application:

```go
import "github.com/spf13/cobra"
```

Usage

`cobra-cli` is a command line program to generate cobra applications and command files. It will bootstrap your application scaffolding to rapidly develop a Cobra-based application. It is the easiest way to incorporate Cobra into your application.

It can be installed by running:

```
go install github.com/spf13/cobra-cli@latest
```

For complete details on using the Cobra-CLI generator, please read The Cobra Generator README

For complete details on using the Cobra library, please read the The Cobra User Guide.

License

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