

# Road to Mercari Gopher Dojo module 01

Summary: This document is the subject for the Gopher Dojo module 01 of the Road to Mercari @ 42 Tokyo.

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## Chapter I

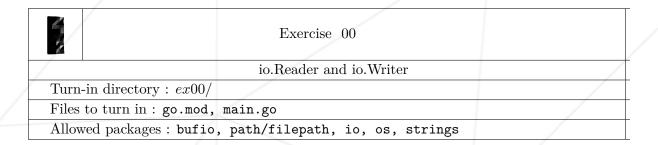
### Instructions

- Only this page will serve as reference; do not trust rumors.
- Watch out! This document could potentially change up to an hour before submission.
- These exercises are carefully laid out by order of difficulty from easiest to hardest. We will not take into account a successfully completed harder exercise if an easier one is not perfectly functional.
- Make sure you have the appropriate permissions on your files and directories.
- You have to follow the submission procedures for every exercise.
- Your exercises will be checked and graded by your fellow classmates.
- You <u>cannot</u> leave <u>any</u> additional file in your directory than those specified in the subject.
- Got a question? Ask your peer on the right. Otherwise, try your peer on the left.
- Your reference guide is called Google / man / the Internet / ....
- Examine the examples thoroughly. They could very well call for details that are not explicitly mentioned in the subject...
- If no other explicit information is displayed, you must use the latest versions of Go.

# Chapter II Foreword https://gopherdojo.org/ 3

### Chapter III

Exercise 00: cat



Find out io.Reader and io.Writer, and create a program called ft\_cat which does the same thing as the system's cat command-line with the following specifications.

- You don't have to handle options.
- Create and use a function that takes io.Reader and io.Writer as arguments, one each.
- Use Go Modules.



Let's find out how io. Reader and io. Writer are used in the standard package.



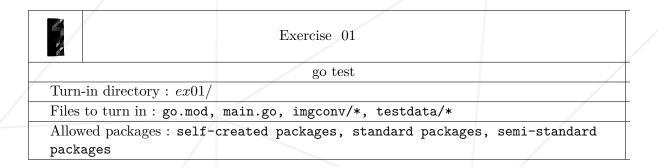
Let's think about what the advantages of having io.Reader and io.Writer.



man cat

# Chapter IV

### Exercise 01: Test



Create tests for the image conversion command created in Exercise 00 of Road-to-Mercari-Gopher-Dojo-00 that meets the following specifications.

- Refactoring to make it easier to test.
- The image conversion package should be separated from the main package.
- The test package should be separated from the image conversion package.
- Self-created packages should be placed in the imgconv directory.
- Test images should be placed in the testdata directory.
- $\bullet$  The ex01 directory structure should be as follows.

### Example

- Create a user-defined type.
- The tests should be written in Go.
- The tests should be able to run in parallel.
- Measure test coverage.

- Use table-driven tests.
- Use test helper functions.
- Run the tests as follows.

### Example

```
?> cd imgconv
?> go test -run
PASS
ok imgconv 0.794s
```

• Use Go Modules.



Semi-standard packages are packages under golang.org/x  $\,$