# Training Program

## Online course

* <https://www.udemy.com/course/golang-fight/>
  + please ask [Wayre Chen](mailto:wayrechen@truetel.com) or [Alfred Yu](mailto:alfred.yu@cienet.com) for the credential
    - please **do not** leak the credential to anyone else
* please **skip** the following chapters
  + Go 語言實戰 GraphQL
  + Go 語言搭配 GitHub Actions
  + Go 語言自動化部署 AWS Lambda
  + Go 語言搭配 Drone CI/CD 自動化測試部署
  + Infrastructure as Code (IaC)

### Schedule

* 2 weeks to finish the online courses
* 2 weeks to implement the exercise#1 and prepare a presentation for it
* 1 week for the exercise#2 and prepare a presentation for it

## Exercise #1

### Topic

* .html -> .csv -> spreadsheet
* Please write a program to parse the data from a certain web page and save the results in a .csv file.
* Each .html file should generate one csv file.
* The .csv file should be able to import to Google spreadsheet with minimized adjustments.

### File: `test.csv`

* This is the example of how you should format the csv files.
* Please use `;` as a separator (because the default separator: `,` is very likely to be used in a formula).
  + The goal is to import this csv to Google spreadsheet with minimized adjustments.

### Folder: `test data`

* Under the `test data`, there are lots of .html files.
* Each of them represents the test results of a test case.
  + the x-axis represents ChromeOS releases
  + the y-axis represents DUT models
  + each cell might results as

1. blank

* the test didn't run on this DUT model-ChromeOS release

1. a number in white color and red background

* the test failed on this DUT model-ChromeOS release
* the number indicates the failure times

1. a number in white color and gray background
   * + - the test failed on this DUT model-ChromeOS release but identified as known issue
       - the number indicates the failure times
       - please treat this as the same as #1
2. a symbol or a number in green color
   * + - the test passed on this DUT model-ChromeOS release but identified as known issue
       - the number indicates the pass times

### Hint

* You can consider using this: "github.com/gocolly/colly"
  + You might need to use the "net/http/httptest" to host a local server to serve all those html files.
* Please write the full document (README.md) with proper markdown syntax, the document should include installation, execution and all other details.
* Please use `flag`, having these arguments at least.
  + dir: the working directory, default should be the same as the executable file.
  + at least 2 other custom flags.
    - This should be included in the document.
* There are 68 files under the `test data` in total.
  + **do not** expect users to execute 68 commands to complete the whole task, please design a program that can complete the whole task by one single command.
  + **do not** process files sequentially.
* Please at least verify your work by importing the file(s) as a Google Spreadsheet.
  + You might need to change the separator from default to custom.
  + The final spreadsheet should contain not only the data values, but also the formula.

## Exercise #2

### Topic

* Study on an actual MTBF/MTA test case and prepare a presentation
  + please ask [Alfred Yu](mailto:alfred.yu@cienet.com) for more information.