

Workshop



**[https://github.com/up1/
course-go-2021](https://github.com/up1/course-go-2021)**



Workshop 01



Requirements



Requirements

Command line tool
Manage user in JSON file



1. Add data

`$task add name=somkiat age=40`

File = users.json

```
[  
  {  
    "id": 1,  
    "name": "somkiat",  
    "age": 40  
  }  
]
```



2. List all users (read from file)

\$task list

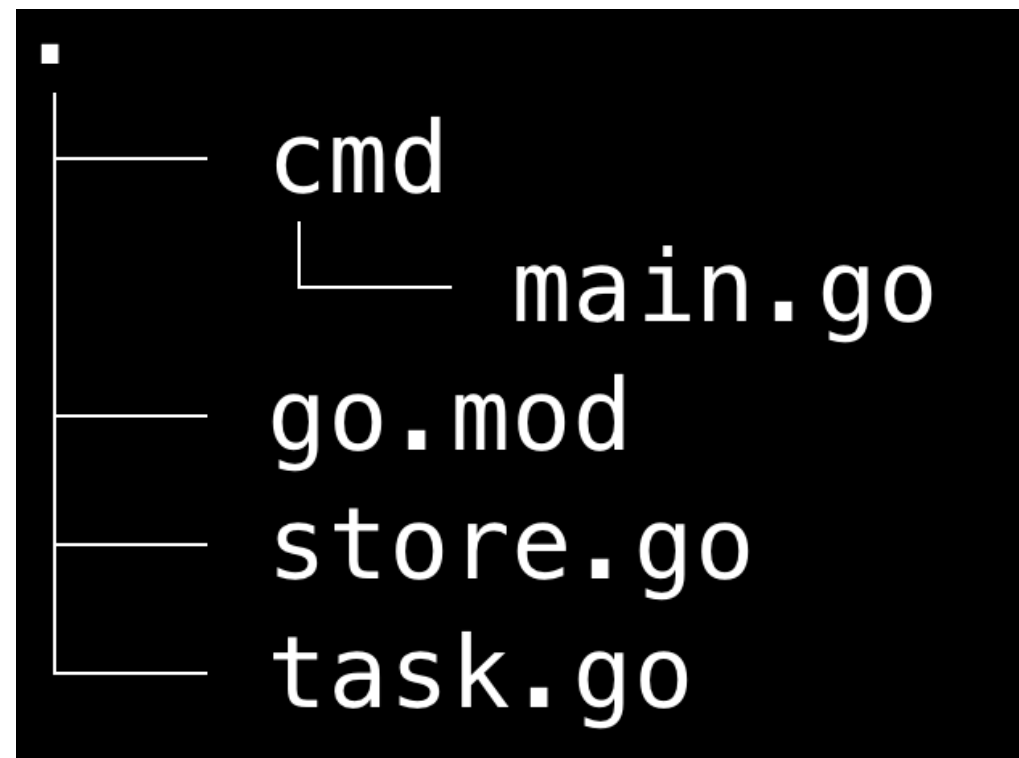
```
[  
  {  
    "id": 1,  
    "name": "somkiat",  
    "age": 40  
  }  
]
```



Design



Design structure of project



Design structure of project



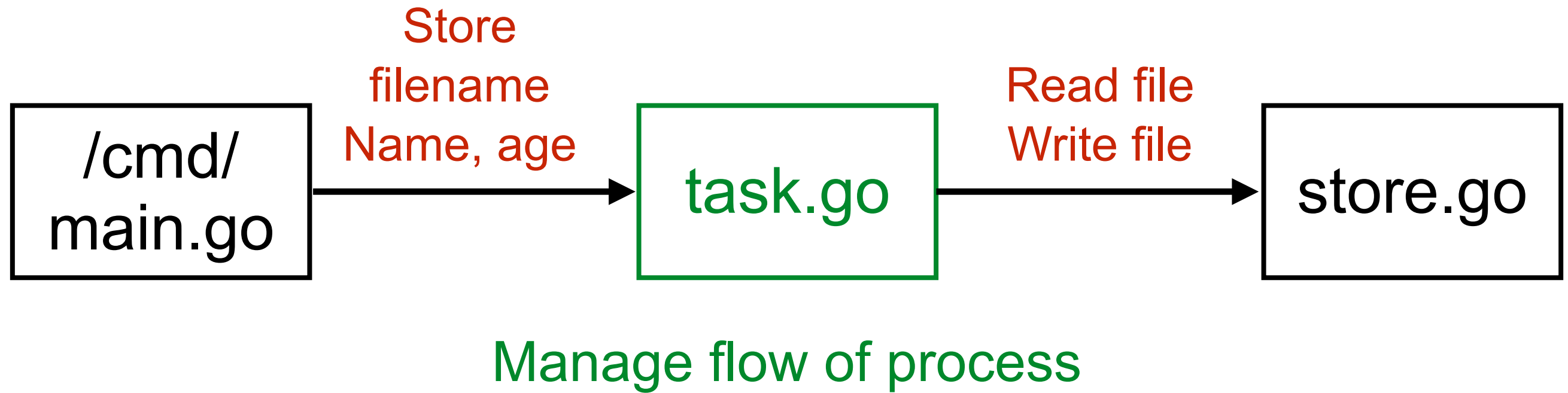
Design structure of project



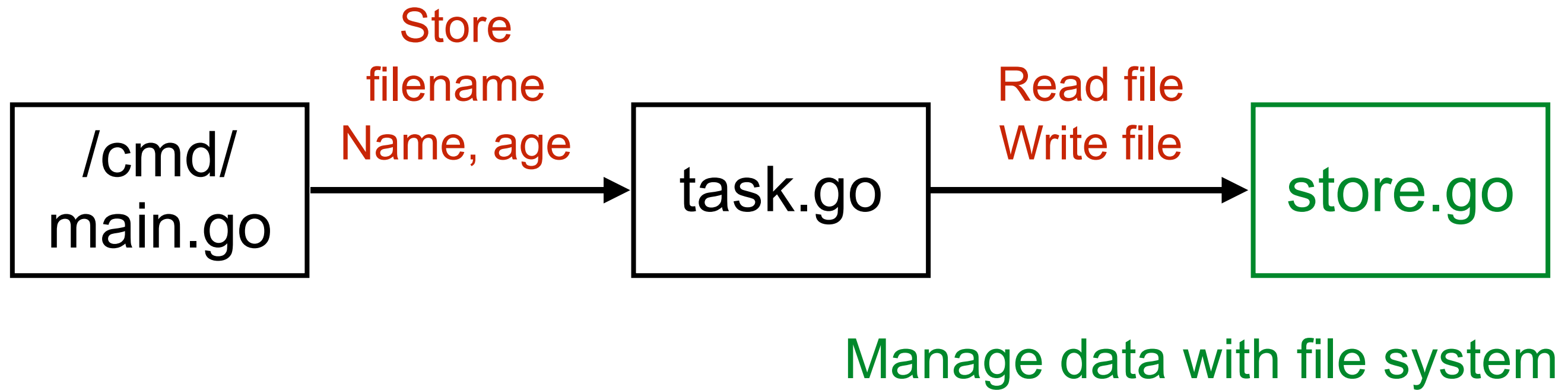
Parser input from command line



Design structure of project



Design structure of project



Develop



Hello Go

\$go version



Testing



Testable ?

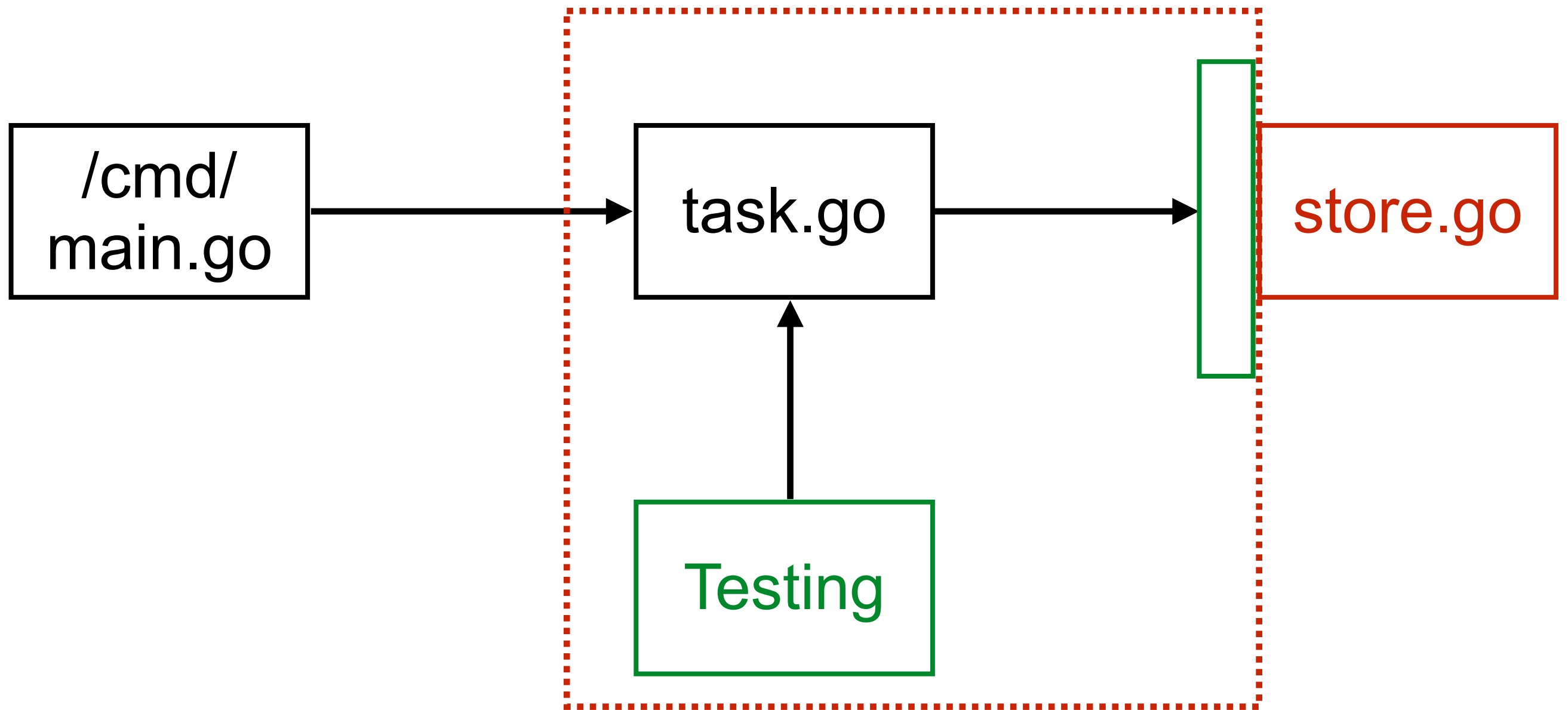


Problem working with file system



Testable ?

Working with **interface**



Working with Testify

Easy assertions

Mocking

Test suite

<https://github.com/stretchr/testify>



Refactoring



Refactoring

Focus on responsibilities



ID
Read data
Append data
Write data
Formating data
JSON to struct
Struct to JSON



Refactoring

Focus on responsibilities



ID

Read data

Append data

Write data

Formating data

JSON to struct

Struct to JSON



Workshop 02



Requirements



Requirements

Develop REST API with Gin

Working with MongoDB

Testable structure

Testing

Monitoring with prometheus

Swagger

Working with Docker



1. Add new user

POST /users

Body

```
{  
  "name": "somkiat",  
  "age": 40  
}
```

Response code = 201



2. List all users (read from file)

GET /users

Response code = 200

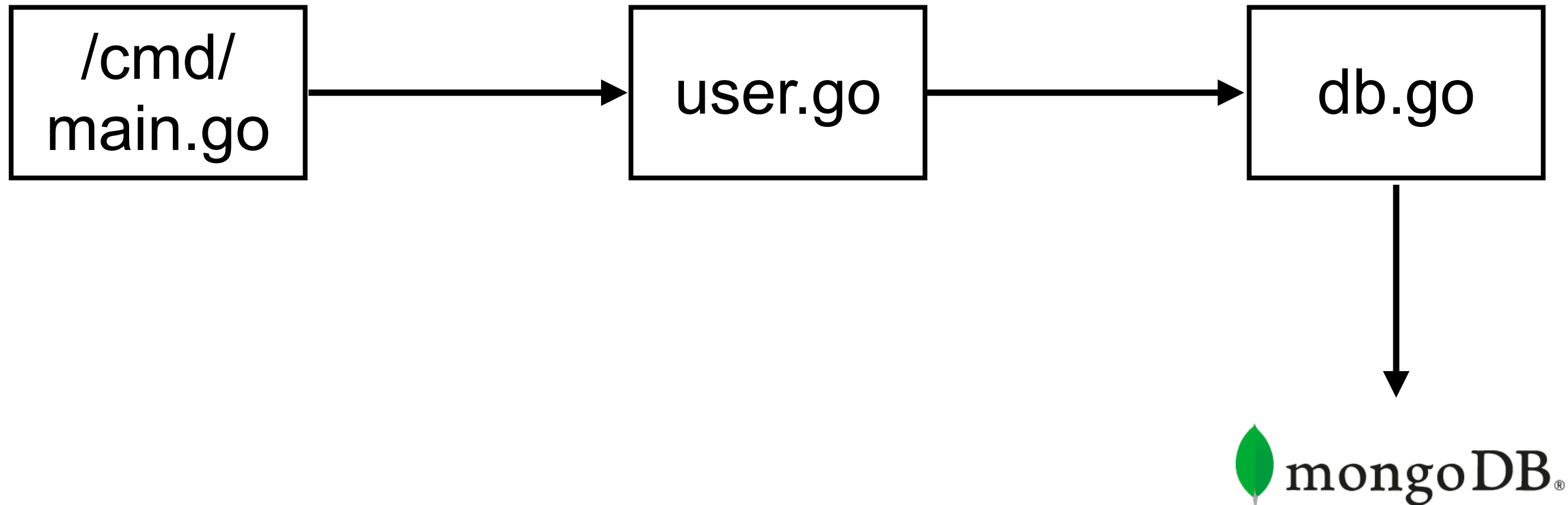
```
[  
  {  
    "id": 1,  
    "name": "somkiat",  
    "age": 40  
  }  
]
```



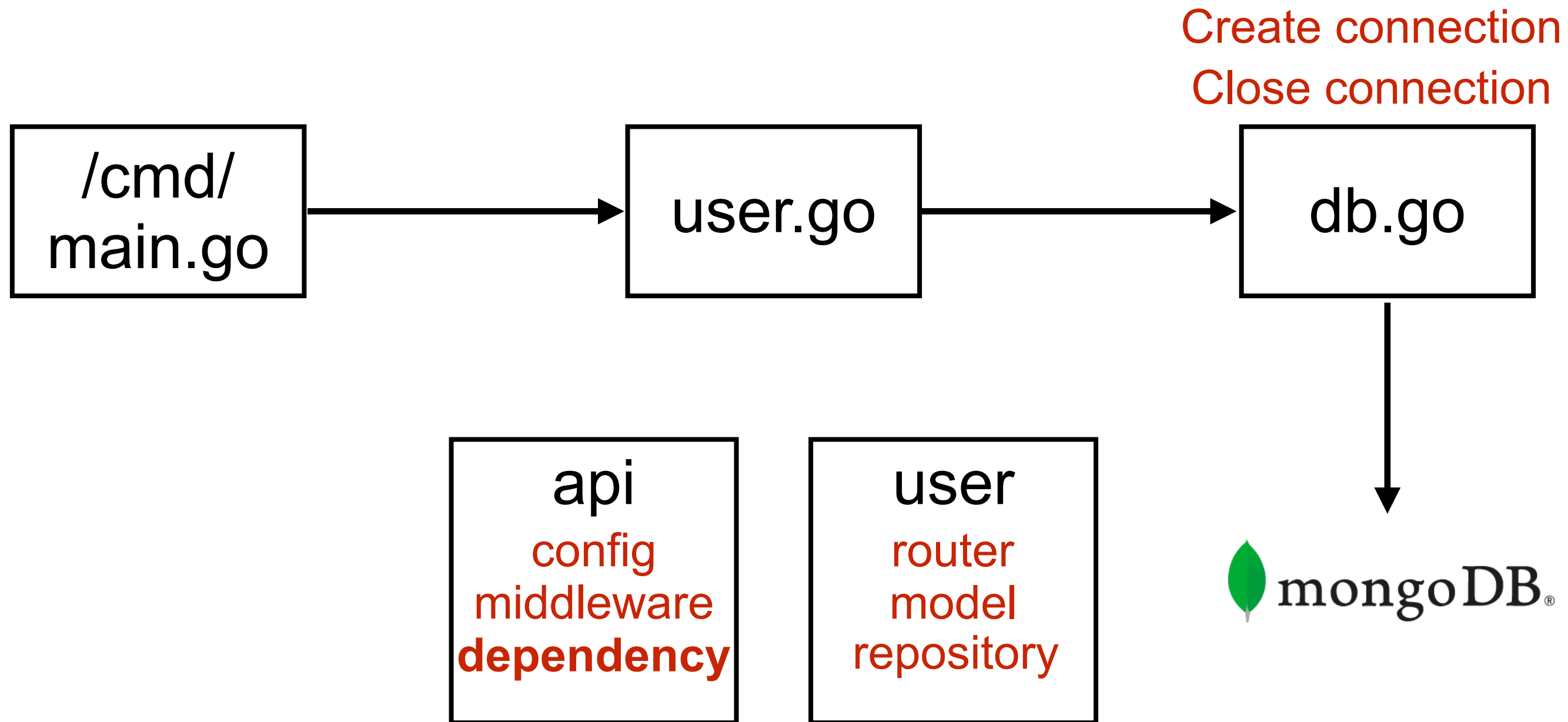
Design structure of project



Design structure of project



Design structure of project



Dependency Injection

