GO = ${CIFLAGS} GO111MODULE=on go

## display this help message

help:

    @echo ''

    @echo 'make targets for the project:'

    @echo

    @echo 'Usage:'

    @echo ' ## Develop / Test Commands'

    @echo ' all Run all the commands.'

    @echo ' clean Run clean up.'

    @echo ' setup Run setup of tools needed. This should only be executed once.'

    @echo ' fmt Run code formatter.'

    @echo ' check Run static code analysis (lint).'

    @echo ' test Run tests on project.'

    @echo ' deps Run all dependencies that are needed.'

    @echo ''

all: clean deps fmt check test

clean:

    rm -f report.json coverage.out

    rm -f ${BINARY}

deps:

    ${GO} mod tidy

    ${GO} mod download

test:

    CGO\_ENABLED=0 ${GO} test -v -covermode=atomic -count=1 ./... -coverprofile coverage.out

    ${GO} test -race -covermode=atomic -count=1 ./... -json > report.json

    ${GO} tool cover -func=coverage.out

fmt:

    ${GO} fmt ./...

check: fmt

    golangci-lint run --fast --tests

## run this to install the needed tools in this make file (for the lint and check targets).

## You should only need to do this once.

setup:

    ${GO} get -u github.com/golangci/golangci-lint/cmd/golangci-lint

**Different Ways of writing the MakeFile::**

1. **Writing the make file:**

# Go Tools

GO = GO111MODULE=off go

all: fmt check test info

clean:

rm -f coverage.txt

dep: deps

deps:

${GO} get -u -v ./...

test:

${GO} test -count=1 ./...

test-coverage:

${GO} test -v -race -coverprofile=coverage.txt -covermode=atomic ./...

fmt:

${GO} fmt ./...

check: fmt

golangci-lint run --fast -E gocyclo --tests ./notification/...

lint:

golint ./notification/...

# run this to install the needed tools in the make file

setup:

go get -u golang.org/x/lint/golint

go get -u github.com/golangci/golangci-lint/cmd/golangci-lint

1. Another way of writing the makefile.

GO = GO111MODULE=on go

BINARY = hello-project-controller

## display this help message

help:

    @echo ''

    @echo 'Management commands'

    @echo

    @echo 'Usage:'

    @echo ' ## Develop / Test Commands'

    @echo ' all Run all the commands.'

    @echo ' clean Run clean up.'

    @echo ' setup Run setup of tools needed. This should only be executed once.'

    @echo ' fmt Run code formatter.'

    @echo ' check Run static code analysis (lint).'

    @echo ' test Run tests on project.'

    @echo ' deps Run all dependencies that are needed.'

    @echo ' build Build the Controller Binary.'

    @echo ' build\_CI Build the Controller Binary for CI.'

    @echo ''

## Run all the commands

all: fmt check test clean

## Build the Controller

build: test

    ${GO} build -o ${BINARY} ./cmd/main.go

## Build the Controller for CI

build\_CI: test

    GOOS=linux GOARCH=amd64 ${GO} build -o ${BINARY} ./cmd/main.go

## Clean up

clean:

    @echo "==> Cleaning..."

    rm -f coverage.out

## install all dependencies that are needed.

deps:

    @echo "==> Getting Dependencies..."

    ${GO} mod tidy

    ${GO} mod download

## Run test cases

test:

    @echo "==> Testing..."

    ${GO} test -v -race -count=1 ./... -coverprofile coverage.out

## Run code formatter

fmt:

    @echo "==> Code Formatting..."

    ${GO} fmt ./...

## Run static code analysis (lint)

check: fmt

    @echo "==> Code Check..."

    golangci-lint run --fast --tests -D gocritic

## run this to install the needed tools in this make file (for the lint and check targets).

## You should only need to do this once.

setup:

    @echo "==> Setup..."

    go get -u github.com/golangci/golangci-lint/cmd/golangci-lint