

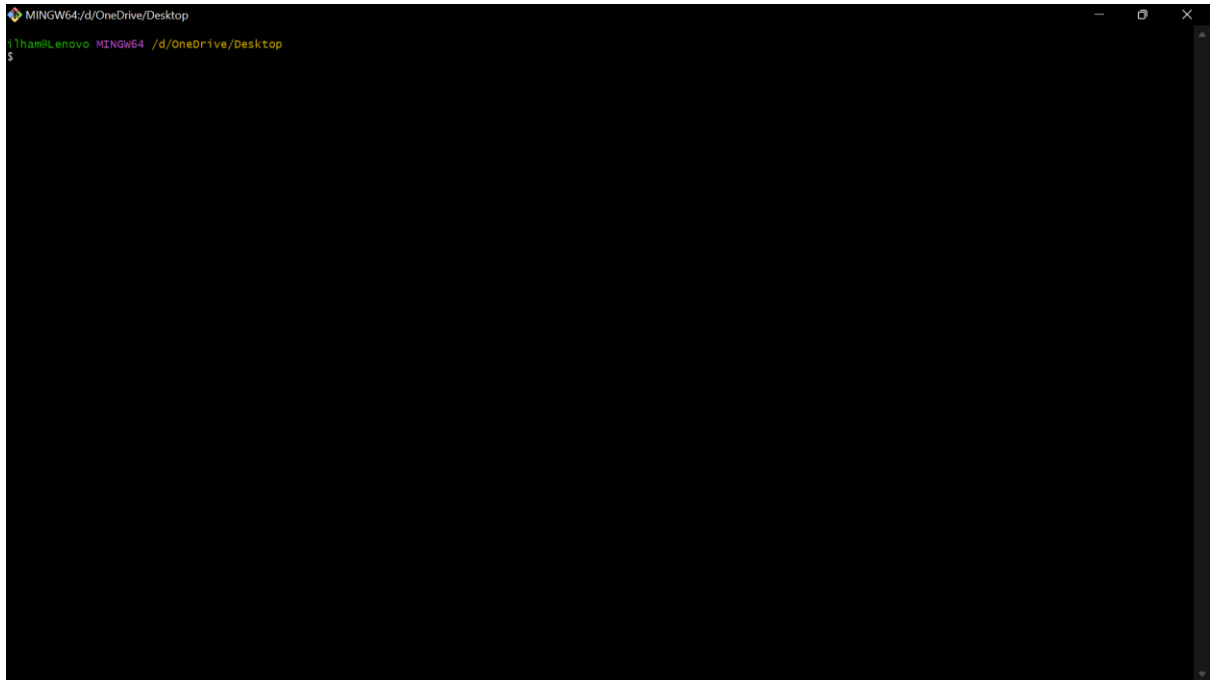
Beginner Golang

ACTIVITY 5

(Polymer Starter Kit)

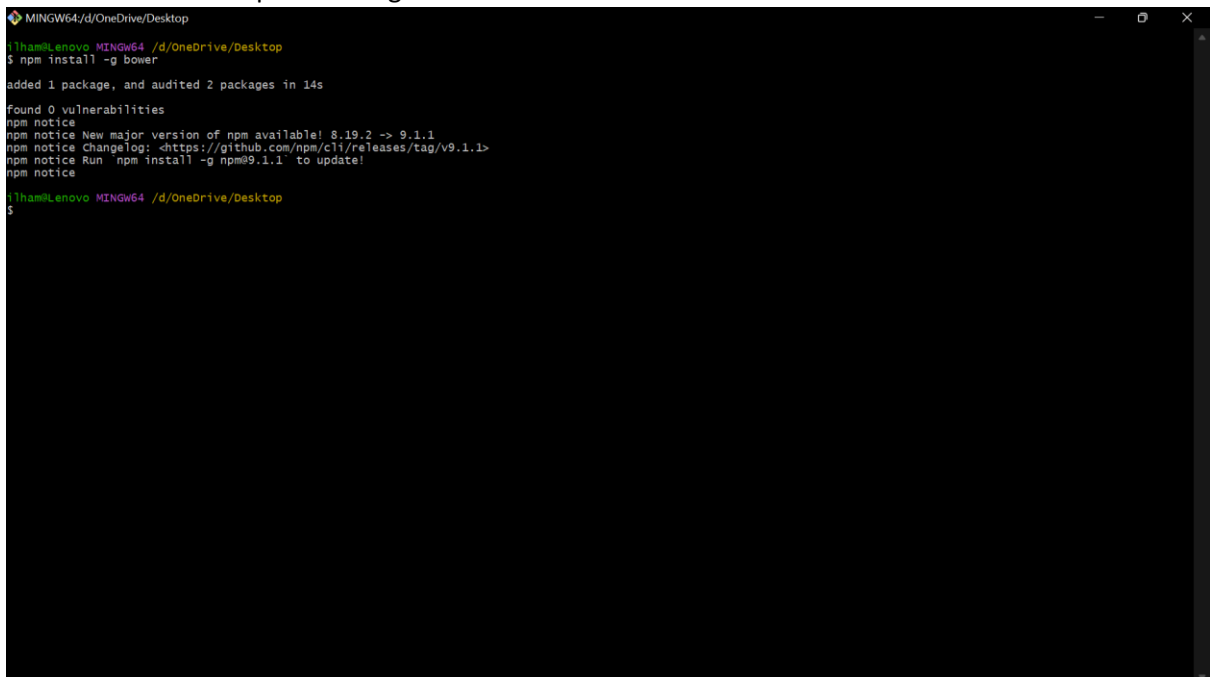
Act :

1. Jelaskan instalasi Polymer versi 2.0 dengan menggunakan bower (Poin : 30)
 - Untuk menginstall Polymer dengan Bower, dibutuhkan Node.js dan Git.
 - Pertama buka Gitbash.



```
MINGW64/d/OneDrive/Desktop
tham@Lenovo MINGW64 /d/OneDrive/Desktop
$
```

→ Kemudian ketikkan npm install -g bower.



```
MINGW64/d/OneDrive/Desktop
tham@Lenovo MINGW64 /d/OneDrive/Desktop
$ npm install -g bower
added 1 package, and audited 2 packages in 14s
found 0 vulnerabilities
npm notice
npm notice New major version of npm available! 8.19.2 -> 9.1.1
npm notice Changelog: <https://github.com/npm/cli/releases/tag/v9.1.1>
npm notice Run 'npm install -g npm@9.1.1' to update!
npm notice
tham@Lenovo MINGW64 /d/OneDrive/Desktop
$
```

→ Disini saya mengupdate npmnya.

```
MINGW64/d/OneDrive/Desktop
Tham@Lenovo MINGW64 /d/OneDrive/Desktop
$ npm install -g bower

added 1 package, and audited 2 packages in 14s

found 0 vulnerabilities

npm notice
npm notice New major version of npm available! 8.19.2 -> 9.1.1
npm notice Changelog: <https://github.com/npm/cli/releases/tag/v9.1.1>
npm notice Run 'npm install -g npm@9.1.1' to update!
npm notice

Tham@Lenovo MINGW64 /d/OneDrive/Desktop
$ npm install -g npm

added 1 package, and audited 223 packages in 7s

14 packages are looking for funding
  run npm fund for details

found 0 vulnerabilities

Tham@Lenovo MINGW64 /d/OneDrive/Desktop
$
```

→ Lalu ketik npm install -g polymer-cli

```
MINGW64/d/OneDrive/Desktop
Tham@Lenovo MINGW64 /d/OneDrive/Desktop
$ npm install -g bower

added 1 package, and audited 2 packages in 14s

found 0 vulnerabilities

npm notice
npm notice New major version of npm available! 8.19.2 -> 9.1.1
npm notice Changelog: <https://github.com/npm/cli/releases/tag/v9.1.1>
npm notice Run 'npm install -g npm@9.1.1' to update!
npm notice

Tham@Lenovo MINGW64 /d/OneDrive/Desktop
$ npm install -g npm

added 1 package, and audited 223 packages in 7s

14 packages are looking for funding
  run npm fund for details

found 0 vulnerabilities

Tham@Lenovo MINGW64 /d/OneDrive/Desktop
$ npm install -g polymer-cli

added 1285 packages in 1m

Tham@Lenovo MINGW64 /d/OneDrive/Desktop
$
```

→ Setelah berhasil, install Polymer Project.

```
MINGW64/d/OneDrive/Desktop
tham@lenovo MINGW64 /d/OneDrive/Desktop
$ bower install Polymer/polymer#2.0.0
bower polymer#2.0.0 not-cached https://github.com/Polymer/polymer.git#2.0.0
bower polymer#2.0.0 resolve https://github.com/Polymer/polymer.git#2.0.0
bower polymer#2.0.0 download https://github.com/Polymer/polymer/archive/v2
2.0.0.tar.gz
bower polymer#2.0.0 extract archive.tar.gz
bower polymer#2.0.0 invalid-meta for:C:\Users\lham\AppData\Local\Temp\LENOVO-
lham\bower\6ac9fb6e69374501bea0bcad9749c0a7-7512-NjP7vX\bower.json
bower polymer#2.0.0 invalid-meta The "main" field has to contain only 1 file p
er filetype. Found multiple .html files: ["lib/elements/array-selector.html", "lib/el
ements/custom-style.html", "lib/elements/dom-bind.html", "lib/elements/dom-if.html", "l
ib/elements/dom-module.html", "lib/elements/dom-repeat.html", "lib/legacy/class.html",
"lib/legacy/legacy-element-mixin.html", "lib/legacy/mutable-data-behavior.html", "lib/
legacy/polymer-fn.html", "lib/legacy/polymer.dom.html", "lib/legacy/templater-behavi
or.html", "lib/mixins/dlr-mixin.html", "lib/mixins/disable-upgrade-mixin.html", "lib/mi
xins/element-mixin.html", "lib/mixins/gesture-event-listeners.html", "lib/mixins/mutab
le-data.html", "lib/mixins/properties-changed.html", "lib/mixins/properties-mixin.html",
"lib/mixins/property-accessors.html", "lib/mixins/property-effects.html", "lib/mixin
s/strict-binding-parser.html", "lib/mixins/template-stamp.html", "lib/utis/array-spli
ce.html", "lib/utis/async.html", "lib/utis/boot.html", "lib/utis/case-map.html", "lib
/utis/debounce.html", "lib/utis/flattened-nodes-observer.html", "lib/utis/flush.htm
l", "lib/utis/gestures.html", "lib/utis/html-tag.html", "lib/utis/import-href.html",
"lib/utis/mixin.html", "lib/utis/path.html", "lib/utis/render-status.html", "lib/uti
ls/resolve-url.html", "lib/utis/settings.html", "lib/utis/style-gather.html", "lib/ut
ils/templater.html", "lib/utis/unresolved.html", "polymer-element.html", "polymer.htm
l"]
bower polymer#2.0.0 resolved https://github.com/Polymer/polymer.git#2.0.0
bower shadycss#v1.1.0 not-cached https://github.com/webcomponents/shadycss.git
#v1.1.0
bower shadycss#v1.1.0 resolve https://github.com/webcomponents/shadycss.git
#v1.1.0
bower webcomponentsjs#v1.1.0 not-cached https://github.com/webcomponents/webc
omponentsjs.git#v1.1.0
bower webcomponentsjs#v1.1.0 resolve https://github.com/webcomponents/webc
omponentsjs.git#v1.1.0
bower shadycss#v1.1.0 download https://github.com/webcomponents/shad
ycss/archive/v1.9.1.tar.gz
bower webcomponentsjs#v1.1.0 download https://github.com/webcomponents/webc
omponentsjs/archive/v1.3.3.tar.gz
bower shadycss#v1.1.0 extract archive.tar.gz
bower webcomponentsjs#v1.1.0 extract archive.tar.gz
bower shadycss#v1.1.0 resolved https://github.com/webcomponents/shad
ycss.git#1.9.1
bower webcomponentsjs#v1.1.0 resolved https://github.com/webcomponents/webc
omponentsjs.git#1.3.3
bower polymer#2.0.0 install polymer#2.0.0
bower shadycss#v1.1.0 install shadycss#1.9.1
bower webcomponentsjs#v1.1.0 install webcomponentsjs#1.3.3

polymer#2.0.0 bower_components/polymer
└─ shadycss#1.9.1
```

```
MINGW64/d/OneDrive/Desktop
tham@lenovo MINGW64 /d/OneDrive/Desktop
$ bower install Polymer/polymer#2.0.0
bower polymer#2.0.0 invalid-meta for:C:\Users\lham\AppData\Local\Temp\LENOVO-
lham\bower\6ac9fb6e69374501bea0bcad9749c0a7-7512-NjP7vX\bower.json
bower polymer#2.0.0 invalid-meta The "main" field has to contain only 1 file p
er filetype. Found multiple .html files: ["lib/elements/array-selector.html", "lib/el
ements/custom-style.html", "lib/elements/dom-bind.html", "lib/elements/dom-if.html", "l
ib/elements/dom-module.html", "lib/elements/dom-repeat.html", "lib/legacy/class.html",
"lib/legacy/legacy-element-mixin.html", "lib/legacy/mutable-data-behavior.html", "lib/
legacy/polymer-fn.html", "lib/legacy/polymer.dom.html", "lib/legacy/templater-behavi
or.html", "lib/mixins/dlr-mixin.html", "lib/mixins/disable-upgrade-mixin.html", "lib/mi
xins/element-mixin.html", "lib/mixins/gesture-event-listeners.html", "lib/mixins/mutab
le-data.html", "lib/mixins/properties-changed.html", "lib/mixins/properties-mixin.html",
"lib/mixins/property-accessors.html", "lib/mixins/property-effects.html", "lib/mixin
s/strict-binding-parser.html", "lib/mixins/template-stamp.html", "lib/utis/array-spli
ce.html", "lib/utis/async.html", "lib/utis/boot.html", "lib/utis/case-map.html", "lib
/utis/debounce.html", "lib/utis/flattened-nodes-observer.html", "lib/utis/flush.htm
l", "lib/utis/gestures.html", "lib/utis/html-tag.html", "lib/utis/import-href.html",
"lib/utis/mixin.html", "lib/utis/path.html", "lib/utis/render-status.html", "lib/uti
ls/resolve-url.html", "lib/utis/settings.html", "lib/utis/style-gather.html", "lib/uti
ls/templater.html", "lib/utis/unresolved.html", "polymer-element.html", "polymer.htm
l"]
bower polymer#2.0.0 resolved https://github.com/Polymer/polymer.git#2.0.0
bower shadycss#v1.1.0 not-cached https://github.com/webcomponents/shadycss.git
#v1.1.0
bower shadycss#v1.1.0 resolve https://github.com/webcomponents/shadycss.git
#v1.1.0
bower webcomponentsjs#v1.1.0 not-cached https://github.com/webcomponents/webc
omponentsjs.git#v1.1.0
bower webcomponentsjs#v1.1.0 resolve https://github.com/webcomponents/webc
omponentsjs.git#v1.1.0
bower shadycss#v1.1.0 download https://github.com/webcomponents/shad
ycss/archive/v1.9.1.tar.gz
bower webcomponentsjs#v1.1.0 download https://github.com/webcomponents/webc
omponentsjs/archive/v1.3.3.tar.gz
bower shadycss#v1.1.0 extract archive.tar.gz
bower webcomponentsjs#v1.1.0 extract archive.tar.gz
bower shadycss#v1.1.0 resolved https://github.com/webcomponents/shad
ycss.git#1.9.1
bower webcomponentsjs#v1.1.0 resolved https://github.com/webcomponents/webc
omponentsjs.git#1.3.3
bower polymer#2.0.0 install polymer#2.0.0
bower shadycss#v1.1.0 install shadycss#1.9.1
bower webcomponentsjs#v1.1.0 install webcomponentsjs#1.3.3

polymer#2.0.0 bower_components/polymer
└─ shadycss#1.9.1
  └─ webcomponentsjs#1.3.3

shadycss#1.9.1 bower_components/shadycss
webcomponentsjs#1.3.3 bower_components/webcomponentsjs
tham@lenovo MINGW64 /d/OneDrive/Desktop
```

2. Jelaskan instalasi Polymer Starter kit dengan menggunakan Polymer versi 2.0 (Poin : 30)

→ Untuk menginstall Polymer Starterkit, ketikkan `polymer init`.

```
MINGW64/d/OneDrive/Desktop
$ polymer init
? which starter template would you like to use?
1) polymer-3-element - A simple Polymer 3.0 element template
2) polymer-3-application - A simple Polymer 3.0 application
3) polymer-3-starter-kit - A Polymer 3.x starter application template, with navigation and "PRPL pattern" loading
4) polymer-2-element - A simple Polymer 2.0 element template
5) polymer-2-application - A simple Polymer 2.0 application
6) polymer-2-starter-kit - A Polymer 2.x starter application template, with navigation and "PRPL pattern" loading
7) shop - The "Shop" Progressive Web App demo
Answer: (node:14192) Warning: Accessing non-existent property 'cat' of module exports inside circular dependency
(Use 'node --trace-warnings ...' to show where the warning was created)
(node:14192) Warning: Accessing non-existent property 'cd' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'chmod' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'cp' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'dirs' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'pushd' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'popd' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'echo' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'tempdir' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'pwd' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'exec' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'ls' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'find' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'grep' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'head' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'ln' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'mkdir' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'rm' of module exports inside circular dependency
(node:14192) Warning: Accessing non-existent property 'mv' of module exports inside circular dependency
```

```
MINGW64/d/OneDrive/Desktop
? which starter template would you like to use? polymer-init-polymer-2-starter-kit
INFO: Running template polymer-2-starter-kit
INFO: Finding latest ^3.0.0 release of Polymer/polymer-starter-kit

I'm all done. Running npm install && bower install for you to install the required dependencies. If this fails, try running the command yourself.

npm WARN config cache-min This option has been deprecated in favor of '--prefer-offline'.
npm WARN deprecated circular-json@0.3.3: CircularJSON is in maintenance only, flat is its successor.

added 151 packages, and audited 152 packages in 12s

9 packages are looking for funding
  run npm fund for details

4 vulnerabilities (2 moderate, 2 high)

To address issues that do not require attention, run:
  npm audit fix

To address all issues (including breaking changes), run:
  npm audit fix --force

Run 'npm audit' for details.
bower app-layout#^2.0.0 not-cached https://github.com/PolymerElements/app-layout.git#^2.0.0
bower app-layout#^2.0.0 resolve https://github.com/PolymerElements/app-layout.git#^2.0.0
bower app-router#^2.0.0 not-cached https://github.com/PolymerElements/app-router.git#^2.0.0
bower app-router#^2.0.0 resolve https://github.com/PolymerElements/app-router.git#^2.0.0
bower iron-flex-layout#^2.0.0 not-cached https://github.com/PolymerElements/iron-flex-layout.git#^2.0.0
bower iron-flex-layout#^2.0.0 resolve https://github.com/PolymerElements/iron-flex-layout.git#^2.0.0
bower iron-iconset-svg#^2.0.0 not-cached https://github.com/PolymerElements/iron-iconset-svg.git#^2.0.0
bower iron-iconset-svg#^2.0.0 resolve https://github.com/PolymerElements/iron-iconset-svg.git#^2.0.0
bower iron-pages#^2.0.0 not-cached https://github.com/PolymerElements/iron-pages.git#^2.0.0
bower iron-pages#^2.0.0 resolve https://github.com/PolymerElements/iron-pages.git#^2.0.0
bower iron-media-query#^2.0.0 not-cached https://github.com/PolymerElements/iron-media-query.git#^2.0.0
bower iron-media-query#^2.0.0 resolve https://github.com/PolymerElements/iron-media-query.git#^2.0.0
bower iron-selector#^2.0.0 not-cached https://github.com/PolymerElements/iron-selector.git#^2.0.0
bower iron-selector#^2.0.0 resolve https://github.com/PolymerElements/iron-selector.git#^2.0.0
bower paper-icon-button#^2.0.0 not-cached https://github.com/PolymerElements/paper-icon-button.git#^2.0.0
bower paper-icon-button#^2.0.0 resolve https://github.com/PolymerElements/paper-icon-button.git#^2.0.0
bower web-component-tester#^6.0.0 not-cached https://github.com/Polymer/web-component-tester.git#^6.0.0
bower web-component-tester#^6.0.0 resolve https://github.com/Polymer/web-component-tester.git#^6.0.0
bower iron-flex-layout#^2.0.0 download https://github.com/PolymerElements/iron-flex-layout/archive/v2.0.3.tar.gz
bower app-layout#^2.0.0 download https://github.com/PolymerElements/app-layout/archive/v2.1.1.tar.gz
bower app-router#^2.0.0 download https://github.com/PolymerElements/app-router/archive/v2.1.2.tar.gz
```

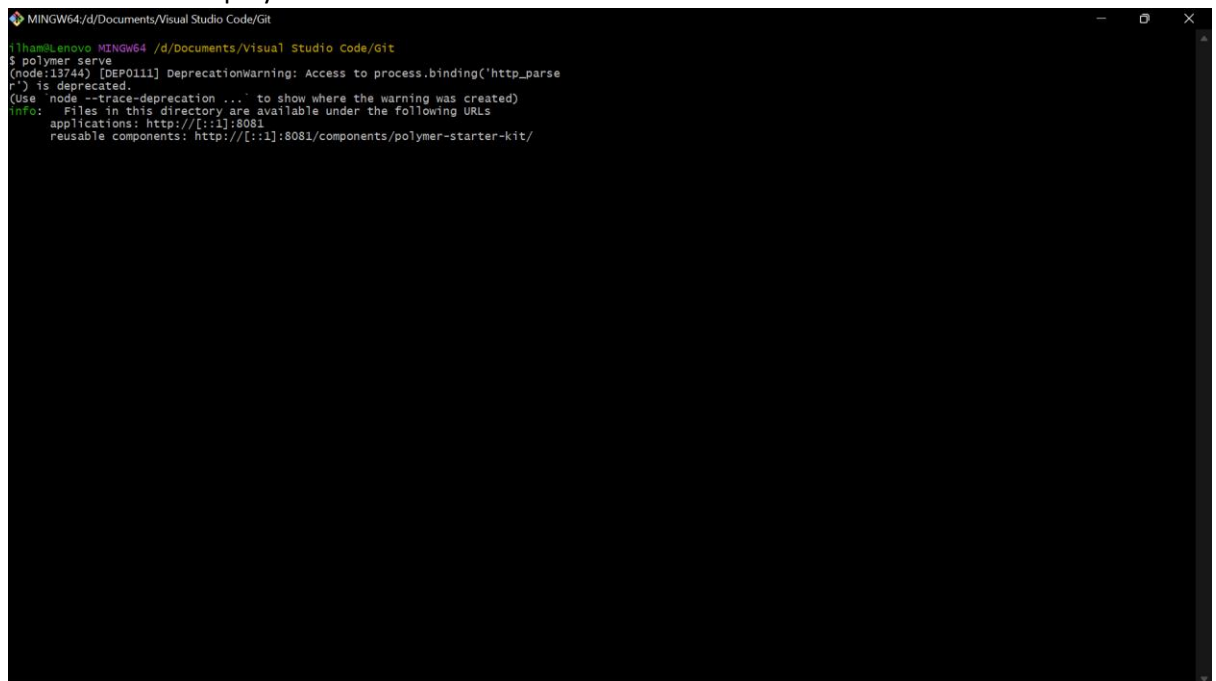
```
MINGW64/d/OneDrive/Desktop
└─ polymer#2.8.0
  └─ paper-styles#2.1.0 bower_components\paper-styles
    └─ font-roboto#1.1.0
      └─ iron-flex-layout#2.0.3
        └─ polymer#2.8.0
      └─ sinonjs#1.17.1 bower_components\sinonjs
    └─ paper-ripple#2.1.1 bower_components\paper-ripple
      └─ iron-ally-keys-behavior#2.1.1
        └─ polymer#2.8.0
      └─ iron-checked-element-behavior#2.1.1 bower_components\iron-checked-element-behavior
        └─ iron-form-element-behavior#2.1.3
          └─ iron-validatable-behavior#2.1.0
            └─ polymer#2.8.0
        └─ iron-behaviors#2.1.1 bower_components\iron-behaviors
          └─ iron-ally-keys-behavior#2.1.1
            └─ polymer#2.8.0
        └─ font-roboto#1.1.0 bower_components\font-roboto
      └─ async#1.5.2 bower_components\async
    └─ test-fixture#3.0.0 bower_components\test-fixture
      └─ stacky#1.3.2 bower_components\stacky
    └─ chai#3.5.0 bower_components\chai
    └─ sinon-chai#2.14.0 bower_components\sinon-chai
    └─ iron-ally-keys-behavior#2.1.1 bower_components\iron-ally-keys-behavior
      └─ polymer#2.8.0
    └─ lodash#3.10.1 bower_components\lodash
    └─ iron-form-element-behavior#2.1.3 bower_components\iron-form-element-behavior
      └─ polymer#2.8.0
    └─ accessibility-developer-tools#2.12.0 bower_components\accessibility-developer-tools
    └─ iron-validatable-behavior#2.1.0 bower_components\iron-validatable-behavior
      └─ iron-meta#2.1.1
        └─ polymer#2.8.0
    └─ mocha#3.5.3 bower_components\mocha
  └─ $IhamLenovo MINGW64 /d/OneDrive/Desktop
  $
```

→ Secara otomatis terinstall beberapa file.



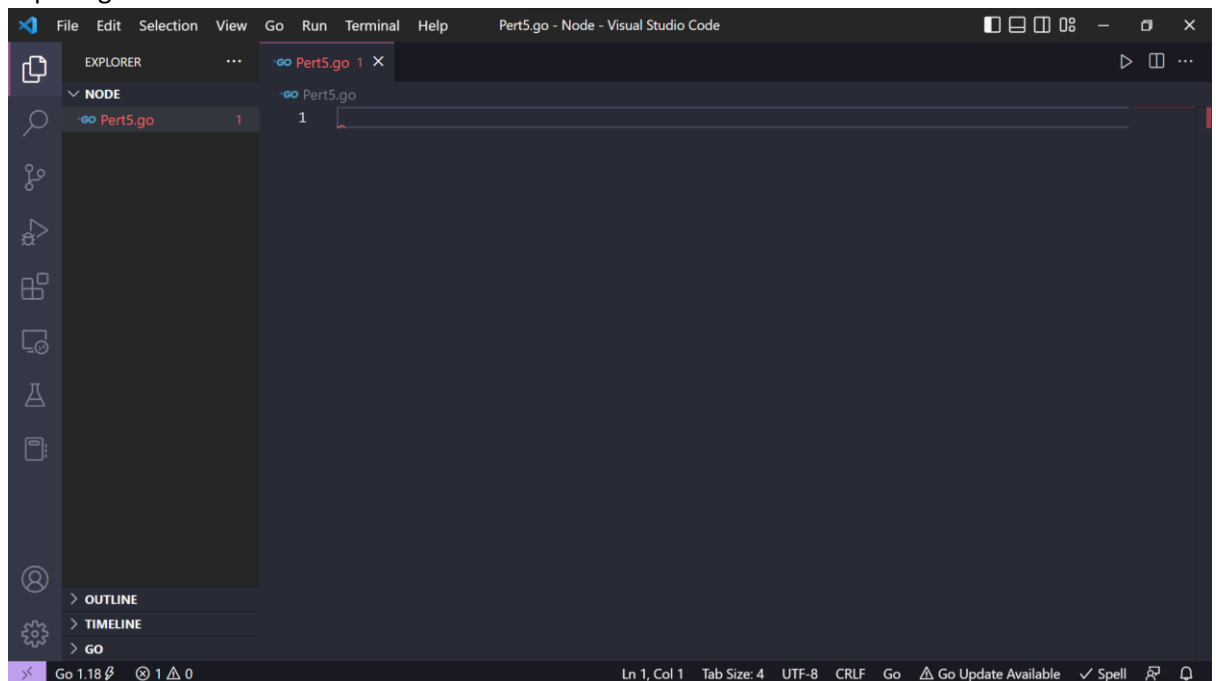
3. Jalankan dan integrasikan Polymer Starter kit dengan Golang (Poin : 40)

→ Pertama ketikkan polymer verse.



```
MINGW64/d/Documents/Visual Studio Code/Git
i1ham@Lenovo MINGW64 /d/Documents/Visual Studio Code/Git
$ polymer serve
(node:13744) [DEP0111] DeprecationWarning: Access to process.binding('http_parse
r') is deprecated.
(Use 'node --trace-deprecation ...' to show where the warning was created)
INFO: Files in this directory are available under the following URLs
applications: http://[::1]:8081
reusable components: http://[::1]:8081/components/polymer-starter-kit/
```

→ Lalu buka aplikasi Visual Studio Code dan saya memberikan nama filenya yaitu Pert5.go seperti gambar berikut :



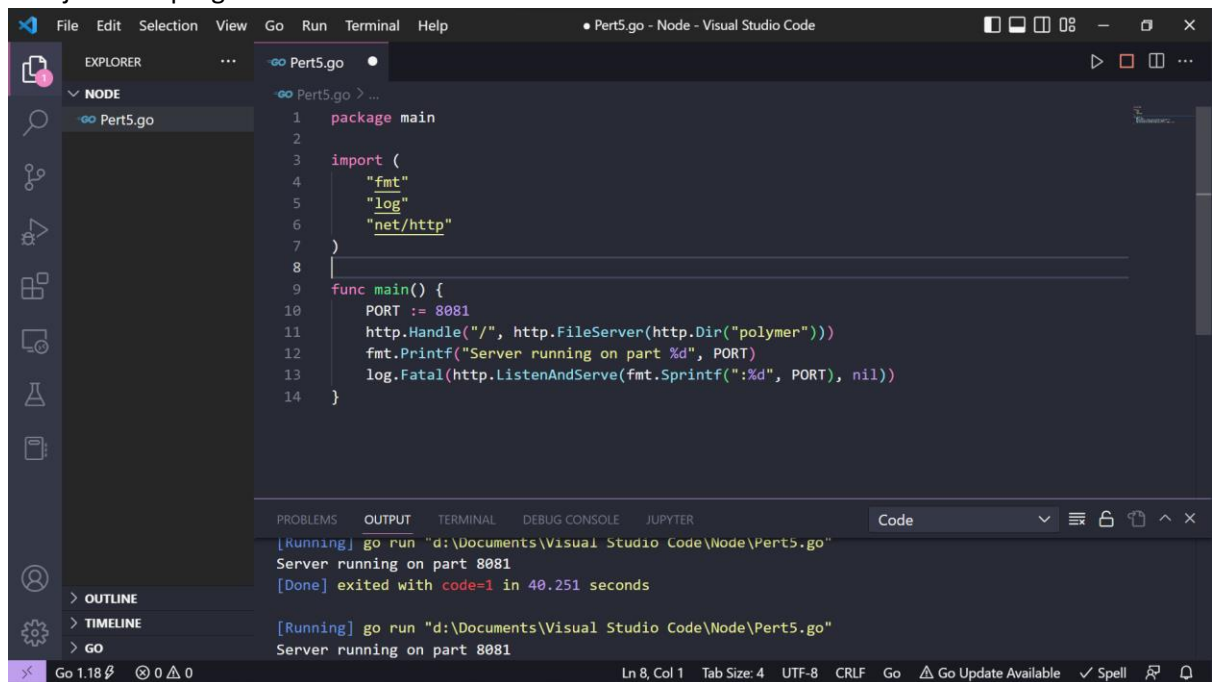
→ Kemudian ketikkan program.

```
package main

import (
    "fmt"
    "log"
    "net/http"
)

func main() {
    PORT := 8081
    http.Handle("/", http.FileServer(http.Dir("polymer")))
    fmt.Printf("Server running on port %d", PORT)
    log.Fatal(http.ListenAndServe(fmt.Sprintf(":%d", PORT), nil))
}
```

→ Lalu jalankan program tersebut.



```
File Edit Selection View Go Run Terminal Help
• Pert5.go - Node - Visual Studio Code

EXPLORER
  NODE
    Pert5.go

1 package main
2
3 import (
4     "fmt"
5     "log"
6     "net/http"
7 )
8
9 func main() {
10     PORT := 8081
11     http.Handle("/", http.FileServer(http.Dir("polymer")))
12     fmt.Printf("Server running on port %d", PORT)
13     log.Fatal(http.ListenAndServe(fmt.Sprintf(":%d", PORT), nil))
14 }

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE JUPYTER
[Running] go run "d:\Documents\Visual Studio Code\Node\Pert5.go"
Server running on port 8081
[Done] exited with code=1 in 40.251 seconds

[Running] go run "d:\Documents\Visual Studio Code\Node\Pert5.go"
Server running on port 8081

Go 1.18 0 0 0 Ln 8, Col 1 Tab Size: 4 UTF-8 CRLF Go Go Update Available Spell
```

→ Kemudian buka localhost:8081 di sebuah web browser.

