GOLANG FOR BEGINER PERTEMUAN 5

Team.Kumal

webkumal.com

link in description

ACT

Mata Praktikum	: 2BGGR181630K - GOLANG FOR BEGINNER
Kelas	: 2IA20
Praktikum ke-	: 5
Tanggal	: 31 Maret 2022
Materi	: golang
NPM	: 50420900
Nama	: Muhammad Reza Hidayat
Ketua Asisten	: Abadi Suryo
Nama Asisten	:
Paraf Asisten	:
Jumlah Lembar	:

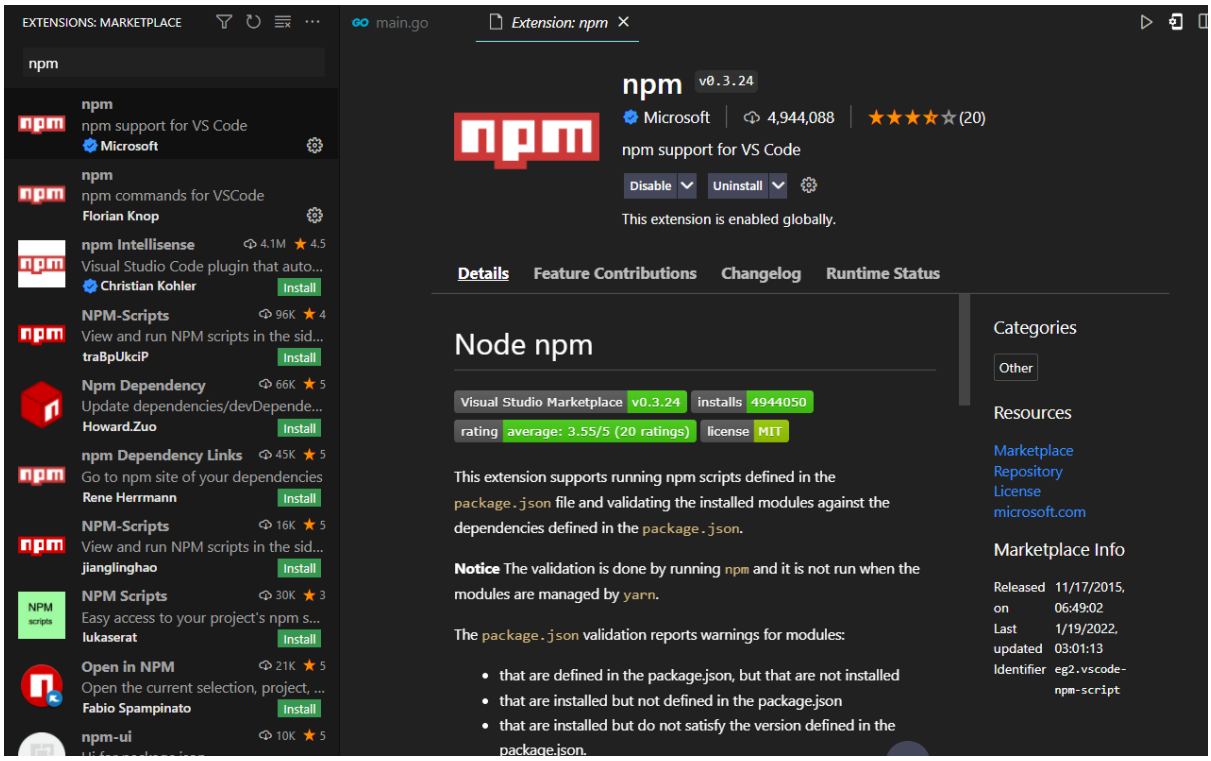
LABORATORIUM TEKNIK INFORMATIKA

UNIVERSITAS GUNADARMA

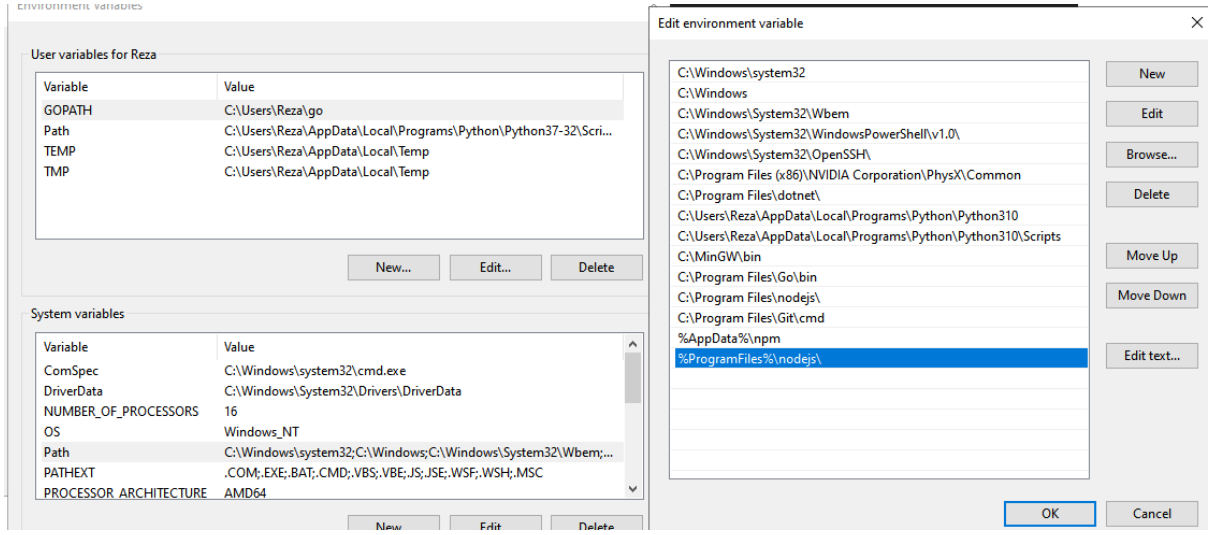
2021

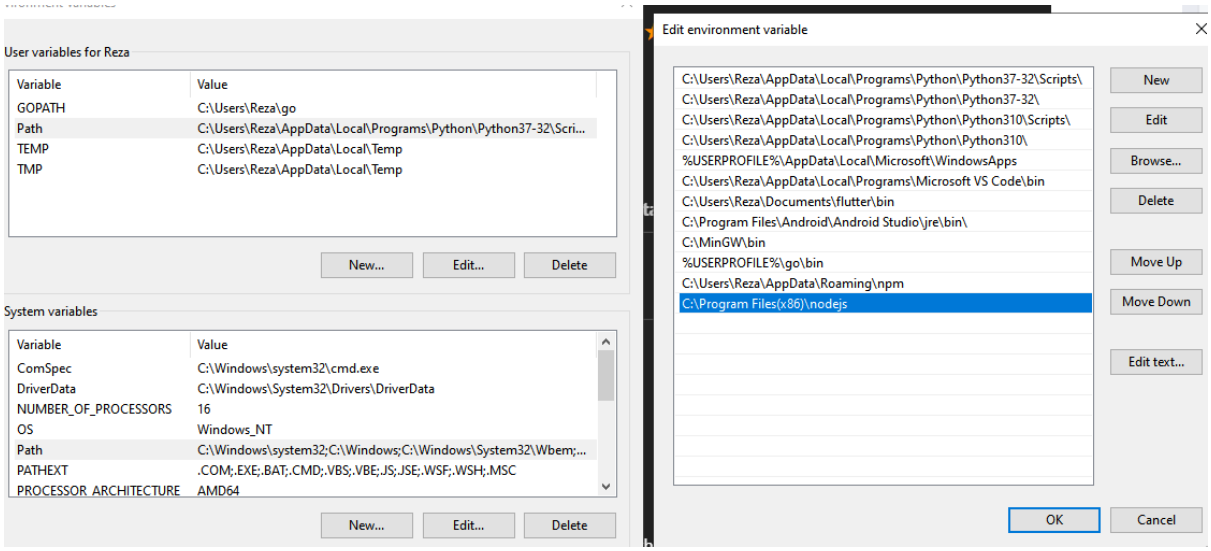
1. Jelaskan instalasi Polymer versi 2.0 dengan menggunakan bower (Poin : 30)
Jawab:

Sebelum menginstall Polymer dengan menggunakan bower dibutuhkan NodeJS dan git yang dihubungkan untuk proses installasi. Jadi disarankan untuk menginstalasi NodeJs dan git terlebih dahulu.
Download NodeJS disini https://nodejs.org/en/download/ (Harap Sesuaikan dengan OS)
Download Git disini https://git-scm.com/download/ (Harap Sesuaikan dengan OS)
Untuk di Visual Studio Code perlu menginstall extensions dibawah ini

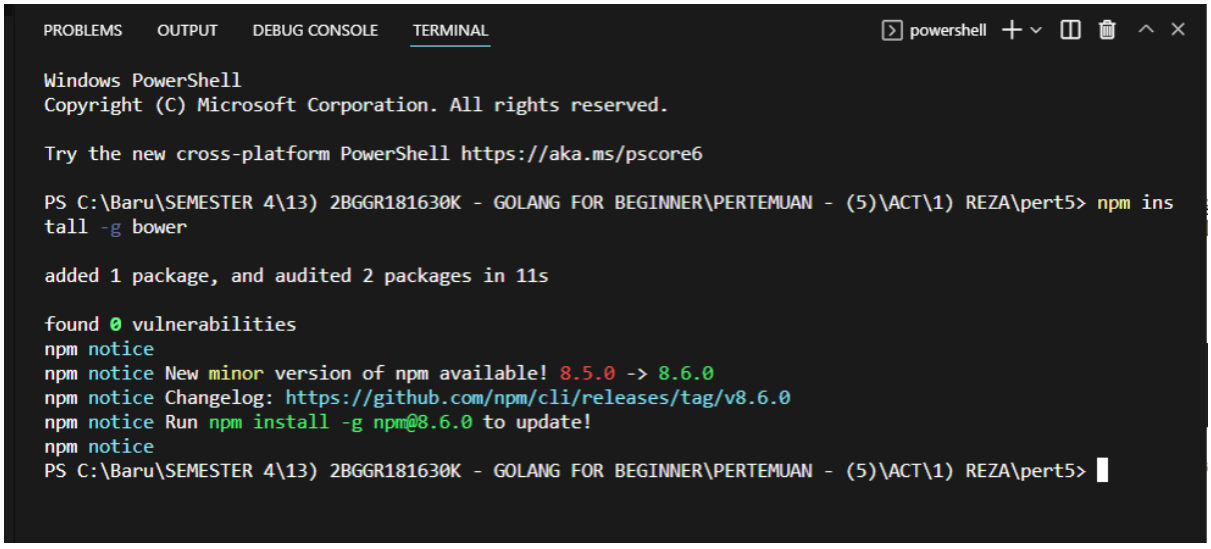


Jika sudah install node js dan git nyam aka tinggal masuk ke enviormen variable dan tambah kan file node js nya





Jika sudah menginstall maka kita bisa menginstall Polymer versi 2.0 dengan menggunakan bower.
Tahap Pertama yaitu :
- Membuat Folder Baru dengan **"Pert 5"**
- Membuka Visual Studio Code dan klik CTRL + `
- Lalu Install bower (mengetikkan pada terminal VSCODE **"npm install -g bower"**) bisa dilihat
dibawah ini



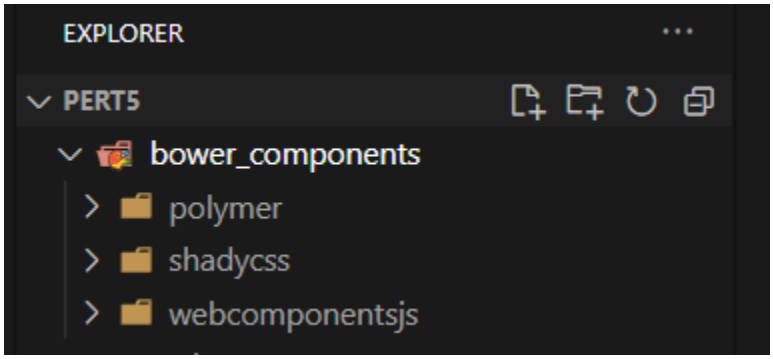
Tahap Kedua yaitu :
- Menginstall polymer dengan mengetikkan (**"npm install -g polymer-cli"**)

```
package main
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL                    powershell

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Baru\SEMESTER 4\13) 2BGGR181630K - GOLANG FOR BEGINNER\PERTEMUAN - (5)\ACT\1) REZA\pert5> npm ins
tall -g polymer-cli

added 1281 packages, changed 4 packages, and audited 1286 packages in 25s

88 vulnerabilities (4 low, 19 moderate, 51 high, 14 critical)

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

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

Some issues need review, and may require choosing
a different dependency.

Run `npm audit` for details.
PS C:\Baru\SEMESTER 4\13) 2BGGR181630K - GOLANG FOR BEGINNER\PERTEMUAN - (5)\ACT\1) REZA\pert5>
```

Tahap Ketiga yaitu :
- Menginstall Polymer versi 2.0.0 dengan cara mengetikkan seperti ini
“bower install Polymer/polymer#^2.0.0”

```
PS C:\Baru\SEMESTER 4\13) 2BGGR181630K - GOLANG FOR BEGINNER\PERTEMUAN - (5)\ACT\1) REZA\pert5> bower i
nstall Polymer/polymer#^2.0.0
bower not-cached    https://github.com/Polymer/polymer.git#^2.0.0
bower resolve       https://github.com/Polymer/polymer.git#^2.0.0
bower download      https://github.com/Polymer/polymer/archive/v2.8.0.tar.gz
bower extract       polymer#^2.0.0 archive.tar.gz
bower invalid-meta  for:C:\Users\Reza\AppData\Local\Temp\DESKTOP-FQF2UA1-Reza\bower\6ac9fb6e69374501bea
0bcad9749c0a7-15076-B8kde3\bower.json
bower invalid-meta  The "main" field has to contain only 1 file per filetype; found multiple .html file
s: ["lib/elements/array-selector.html","lib/elements/custom-style.html","lib/elements/dom-bind.html","l
ib/elements/dom-if.html","lib/elements/dom-module.html","lib/elements/dom-repeat.html","lib/legacy/clas
s.html","lib/legacy/legacy-element-mixin.html","lib/legacy/mutable-data-behavior.html","lib/legacy/poly
mer-fn.html","lib/legacy/polymer.dom.html","lib/legacy/templatizer-behavior.html","lib/mixins/dir-mixin
.html","lib/mixins/disable-upgrade-mixin.html","lib/mixins/element-mixin.html","lib/mixins/gesture-even
t-listeners.html","lib/mixins/mutable-data.html","lib/mixins/properties-changed.html","lib/mixins/prope
rties-mixin.html","lib/mixins/property-accessors.html","lib/mixins/property-effects.html","lib/mixins/s
trict-binding-parser.html","lib/mixins/template-stamp.html","lib/utils/array-splice.html","lib/utils/as
ync.html","lib/utils/boot.html","lib/utils/case-map.html","lib/utils/debounce.html","lib/utils/flattene
d-nodes-observer.html","lib/utils/flush.html","lib/utils/gestures.html","lib/utils/html-tag.html","lib/
utils/import-href.html","lib/utils/mixin.html","lib/utils/path.html","lib/utils/render-status.html","li
b/utils/resolve-url.html","lib/utils/settings.html","lib/utils/style-gather.html","lib/utils/templatize
.html","lib/utils/unresolved.html","polymer-element.html","polymer.html"]
bower resolved      https://github.com/Polymer/polymer.git#2.8.0
bower not-cached    https://github.com/webcomponents/webcomponentsjs.git#^v1.1.0
bower resolve       https://github.com/webcomponents/webcomponentsjs.git#^v1.1.0
bower not-cached    https://github.com/webcomponents/shadycss.git#^v1.1.0
bower resolve       https://github.com/webcomponents/shadycss.git#^v1.1.0
bower download      https://github.com/webcomponents/shadycss/archive/v1.9.1.tar.gz
bower download      https://github.com/webcomponents/webcomponentsjs/archive/v1.3.3.tar.gz
bower extract       shadycss#^v1.1.0 archive.tar.gz
bower resolved      https://github.com/webcomponents/shadycss.git#1.9.1
bower progress      webcomponentsjs#^v1.1.0 received 0.8MB
bower progress      webcomponentsjs#^v1.1.0 received 0.8MB
bower extract       webcomponentsjs#^v1.1.0 archive.tar.gz
bower resolved      https://github.com/webcomponents/webcomponentsjs.git#1.3.3
bower install       polymer#2.8.0
bower install       shadycss#1.9.1
bower install       webcomponentsjs#1.3.3

polymer#2.8.0 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
Ln 4, Col 10  Tab Size: 4  UTF-8  CRLF  Go  Prettier
```

Sampe file nya kaya gini



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

Jawab:
Setelah semua berhasil di install, Lalu kita mengetikkan **"polymer init"** untuk mengunduh template
polymer yang akan digunakan. Let's Go!

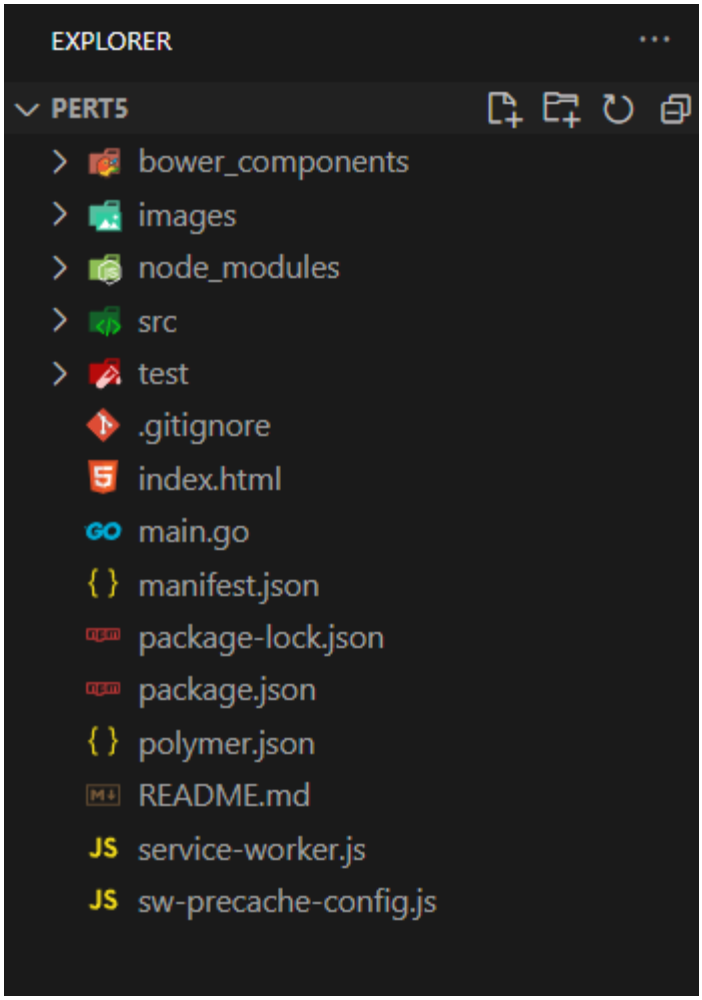
```
PS C:\Baru\SEMESTER 4\13) 2BGGR181630K - GOLANG FOR BEGINNER\PERTEMUAN - (5)\ACT\1) REZA\pert5> polymer
 init
'uname' is not recognized as an internal or external command,
operable program or batch file.
? Which starter template would you like to use? (Use arrow keys)
> polymer-3-element - A simple Polymer 3.0 element template
  polymer-3-application - A simple Polymer 3.0 application
  polymer-3-starter-kit - A Polymer 3.x starter application template, with navigation and "PRPL patter
n" loading
  polymer-2-element - A simple Polymer 2.0 element template
  polymer-2-application - A simple Polymer 2.0 application
  polymer-2-starter-kit - A Polymer 2.x starter application template, with navigation and "PRPL patter
n" loading
  shop - The "Shop" Progressive Web App demo (node:6632) Warning: Accessing non-existent property 'cat'
 of module exports inside circular dependency
(Use `node --trace-warnings ...` to show where the warning was created)
(node:6632) Warning: Accessing non-existent property 'cd' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'chmod' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'cp' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'dirs' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'pushd' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'popd' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'echo' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'tempdir' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'pwd' of module exports inside circular dependency(node:6632) War
ning: Accessing non-existent property 'exec' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'ls' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'find' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'grep' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'head' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'ln' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'mkdir' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'rm' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'mv' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'sed' of module exports inside circular dependency(node:6632) War
ning: Accessing non-existent property 'set' of module exports inside circular dependency(node:6632) Warning: Accessing
 non-existent property 'sort' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'tail' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'test' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'to' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'toEnd' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'touch' of module exports inside circular dependency
(node:6632) Warning: Accessing non-existent property 'uniq' of module exports inside circular dependency
```

```
(node:5468) Warning: Accessing non-existent property 'grep' of module exports inside circular dependency
(node:5468) Warning: Accessing non-existent property 'head' of module exports inside circular dependency
(node:5468) Warning: Accessing non-existent property 'ln' of module exports inside circular dependency
(node:5468) Warning: Accessing non-existent property 'mkdir' of module exports inside circular dependency
(node:5468) Warning: Accessing non-existent property 'rm' of module exports inside circular dependency
(node:5468) Warning: Accessing non-existent property 'mv' of module exports inside circular dependency
(node:5468) Warning: Accessing non-existent property 'sed' of module exports inside circular dependency
(node:5468) Warning: Accessing non-existent property 'set' of module exports inside circular dependency
(node:5468) Warning: Accessing non-existent property 'sort' of module exports inside circular dependency
? Which starter template would you like to use?
  polymer-3-element - A simple Polymer 3.0 element template
  polymer-3-application - A simple Polymer 3.0 application
> polymer-3-starter-kit - A Polymer 3.x starter application template, with navigation and "PRPL pattern" loading
  polymer-2-element - A simple Polymer 2.0 element template
  polymer-2-application - A simple Polymer 2.0 application
  polymer-2-starter-kit - A Polymer 2.x starter application template, with navigation and "PRPL pattern" loading
  shop - The "Shop" Progressive Web App demo
```

Seperti gambar di atas jika kita sudah mengetikkan **"polymer init"** Maka akan muncul tampilan untuk
memilih template, Pada materi ini Polymer yang digunakan adalah versi 2 dan template yang akan
digunakan adalah **Polymer Starter Kit.** Lalu jika kita sudah memilih **Polymer Starter Kit,** maka akan
otomatis men-download template tersebut.

```
npm WARN deprecated samsam@1.3.0: This package has been deprecated in favour of @sinonjs/samsam
npm WARN deprecated hawk@6.0.2: This module moved to @hapi/hawk. Please make sure to switch over as this distribution is no longer supported and may contain bugs and critical sec
urity issues.
npm WARN deprecated nomnom@1.8.1: Package no longer supported. Contact support@npmjs.com for more info.
npm WARN deprecated text-encoding@0.6.4: no longer maintained
npm WARN deprecated source-map-resolve@0.5.1: See https://github.com/lydell/source-map-resolve#deprecated
npm WARN deprecated hoek@2.16.3: This version has been deprecated in accordance with the hapi support policy (hapi.im/support). Please upgrade to the latest version to get the be
st features, bug fixes, and security patches. If you are unable to upgrade at this time, paid support is available for older versions (hapi.im/commercial).
npm WARN deprecated uuid@2.0.3: Please upgrade  to version 7 or higher.  Older versions may use Math.random() in certain circumstances, which is known to be problematic.  See htt
ps://v8.dev/blog/math-random for details.
npm WARN deprecated uuid@2.0.3: Please upgrade  to version 7 or higher.  Older versions may use Math.random() in certain circumstances, which is known to be problematic.  See htt
ps://v8.dev/blog/math-random for details.
npm WARN deprecated request@2.85.0: request has been deprecated, see https://github.com/request/request/issues/3142
npm WARN deprecated request@2.79.0: request has been deprecated, see https://github.com/request/request/issues/3142
npm WARN deprecated uuid@3.2.1: Please upgrade  to version 7 or higher.  Older versions may use Math.random() in certain circumstances, which is known to be problematic.  See htt
ps://v8.dev/blog/math-random for details.
npm WARN deprecated sw-toolbox@3.6.0: Please migrate to Workbox: https://developers.google.com/web/tools/workbox/guides/migrations/migrate-from-sw
npm WARN deprecated mkdirp@0.5.1: Legacy versions of mkdirp are no longer supported. Please update to mkdirp 1.x. (Note that the API surface has changed to use Promises in 1.x.)
npm WARN deprecated mkdirp@0.5.1: Legacy versions of mkdirp are no longer supported. Please update to mkdirp 1.x. (Note that the API surface has changed to use Promises in 1.x.)
npm WARN deprecated har-validator@2.0.6: this library is no longer supported
npm WARN deprecated hawk@3.1.3: This module moved to @hapi/hawk. Please make sure to switch over as this distribution is no longer supported and may contain bugs and critical sec
urity issues.
npm WARN deprecated github@7.3.2: 'github' has been renamed to '@octokit/rest' (https://git.io/vNB11)
npm WARN deprecated core-js@2.5.6: core-js@<3.4 is no longer maintained and not recommended for usage due to the number of issues. Because of the V8 engine whims, feature detecti
on in old core-js versions could cause a slowdown up to 100x even if nothing is polyfilled. Please, upgrade your dependencies to the actual version of core-js.
npm WARN deprecated bower@1.8.2: This Bower version has SECURITY BUG THAT ALLOWS TO WRITE TO ARBITRARY FILE ON YOUR COMPUTER when you install malicious package. Please upgrade Bo
wer to at least version 1.8.8 if you don't want to get hacked. More info: https://snyk.io/blog/severe-security-vulnerability-in-bowers-zip-archive-extraction/

added 1385 packages, changed 5 packages, and audited 1391 packages in 2m

138 vulnerabilities (36 low, 22 moderate, 52 high, 28 critical)

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

Some issues need review, and may require choosing
a different dependency.

Run `npm audit` for details.
PS C:\Baru\SEMESTER 4\13) 2BGGR181630K - GOLANG FOR BEGINNER\PERTEMUAN - (5)\ACT\1) REZA\pert5>
```

Secara otomatis akan men-download file dan package ke dalam directory **Pert 5.** Seluruh komponen
web yang telah di unduh akan tersimpan dalam direktori bower_components. Berikut dibawah ini sudah
tersimpan dalam directory **Pert 5.**



3. Jalankan dan integrasikan Polymer Starter Kit dengan Golang (Poin : 40)
Jawab:
Untuk Menjalankan dan mengintegrasikan **Polymer Stater Kit,** Kita harus membuat file **main.go**
terlebih dahulu seperti gambar dibawah ini.

main.go

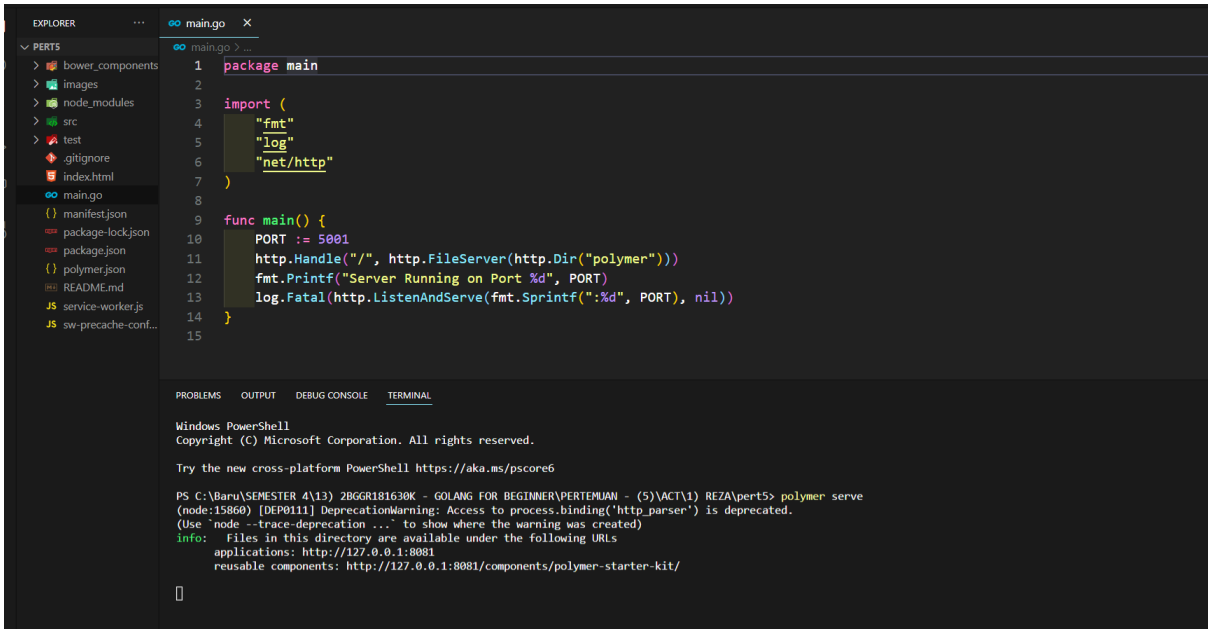
```go
package main

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

func main() {
    PORT := 5001
    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 ketik **go build** dan jalan an exe nya mengunakan perintah **./pert_5.exe**

```
PS F:\GUNDAR\Semester 3\LEPKOM\GOLANG\Pert 5> go build
PS F:\GUNDAR\Semester 3\LEPKOM\GOLANG\Pert 5> ./Pert_5.exe
Server Running on Port 5001
```

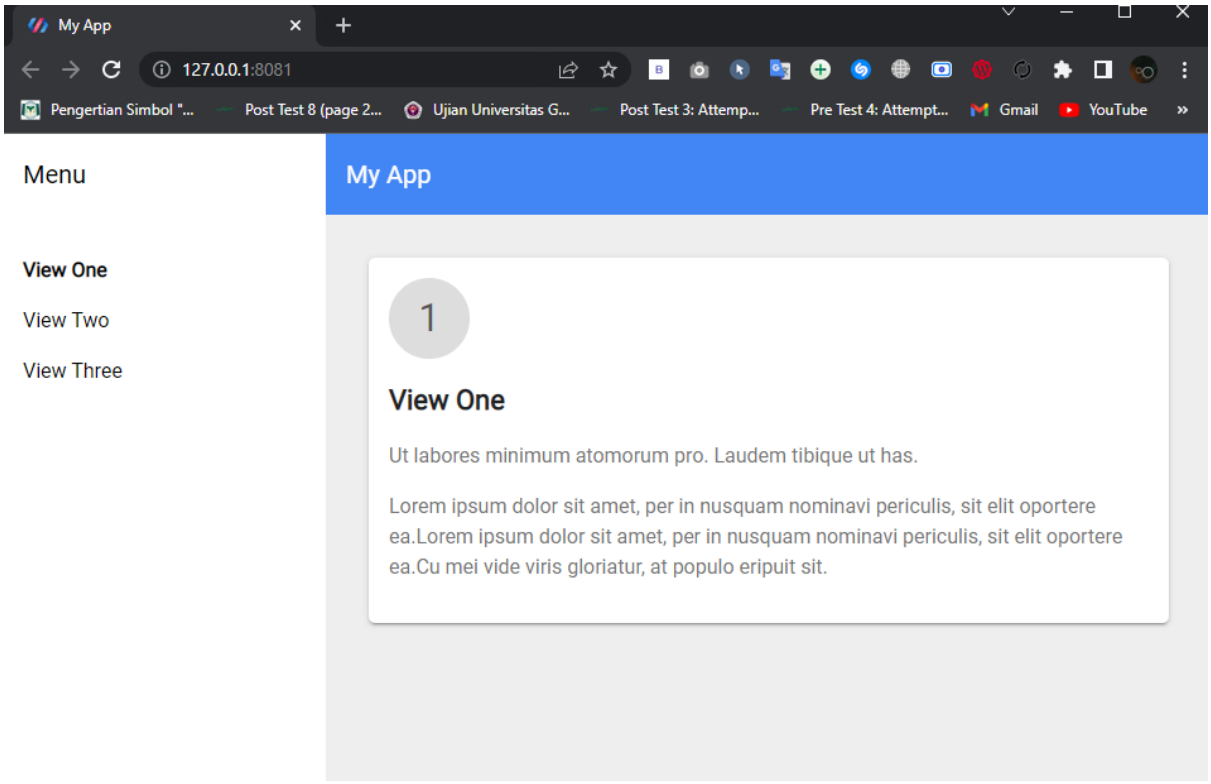
```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Baru\SEMESTER 4\13) 2BGGR181630K - GOLANG FOR BEGINNER\PERTEMUAN - (5)\ACT\1) REZA\pert5> go run "c:\Baru\SEMESTER 4\13) 2BGGR181630K - GOLANG FOR BEGINNER\
PERTEMUAN - (5)\ACT\1) REZA\pert5\main.go"
Server Running on Port 5001
```

Lalu ketikan **polymer serve**



Jika muncul seperti di atas tinggal buka http://127.0.0.1:8081

Maka akan muncul seperti


My App
127.0.0.1:8081
Pengertian Simbol "...
Post Test 8 (page 2...
Ujian Universitas G...
Post Test 3: Attemp...
Pre Test 4: Attempt...
Gmail
YouTube
Menu
View One
View Two
View Three
My App
1
View One
Ut labores minimum atomorum pro. Laudem tibique ut has.
Lorem ipsum dolor sit amet, per in nusquam nominavi periculis, sit elit oportere ea.Lorem ipsum dolor sit amet, per in nusquam nominavi periculis, sit elit oportere ea.Cu mei vide viris gloriatur, at populo eripuit sit.