

Deploy Aplikasi wayshub-frontend menggunakan Node.js

Langkah pertama, kita perlu menginstall sebuah tool yang berfungsi untuk mengunduh dan menginstall Node.js, yaitu nvm (Node Version Manager). kita dapat menggunakan perintah:

```
curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.38.0/install.sh | bash
```

lalu ketikkan perintah `exec bash` untuk melakukan soft restart ubuntu:

```
exec bash
```

Pada kasus ini, kita akan menggunakan Node.js versi 16 terbaru, kita dapat mengetikkan perintah:

```
nvm install 16
```

```
devops@DESKTOP-17R0QNP:~$ curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.38.0/install.sh | bash
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
100 14926  100 14926    0     0  35867      0 --:--:-- --:--:-- --:--:-- 35966
=> Downloading nvm from git to '/home/devops/.nvm'
=> Cloning into '/home/devops/.nvm'...
remote: Enumerating objects: 356, done.
remote: Counting objects: 100% (356/356), done.
remote: Compressing objects: 100% (303/303), done.
remote: Total 356 (delta 39), reused 164 (delta 27), pack-reused 0
Receiving objects: 100% (356/356), 222.15 KiB | 218.00 KiB/s, done.
Resolving deltas: 100% (39/39), done.
* (HEAD detached at FETCH_HEAD)
  master
=> Compressing and cleaning up git repository

=> Appending nvm source string to /home/devops/.bashrc
=> Appending bash_completion source string to /home/devops/.bashrc
/usr/bin/node: 1: ELF: not found
/usr/bin/node: 2: : not found
/usr/bin/node: 4: Syntax error: Unterminated quoted string
=> Close and reopen your terminal to start using nvm or run the following to use it now:

export NVM_DIR="$HOME/.nvm"
[ -s "$NVM_DIR/nvm.sh" ] && \. "$NVM_DIR/nvm.sh" # This loads nvm
[ -s "$NVM_DIR/bash_completion" ] && \. "$NVM_DIR/bash_completion" # This loads nvm bash_completion
devops@DESKTOP-17R0QNP:~$ exec bash
devops@DESKTOP-17R0QNP:~$ nvm install 16
```

Secara default kita seharusnya langsung menggunakan nvm 16, Tapi jika kita berada dalam nvm versi lain dan ingin berpindah menggunakan nvm versi 16 kita dapat menggunakan perintah:

```
nvm use 16
```

Sebelum melanjutkan ke step selanjutnya, kita perlu berkenalan terlebih dahulu dengan npm (Node Package Manager), Npm merupakan sebuah package manager, namun lebih difokuskan untuk kebutuhan instalasi dependensi untuk Node.js

untuk mengecek versi nvm, kita dapat mengetikkan perintah:

```
nvm -v
```

untuk mengecek versi Node.js, kita dapat mengetikkan perintah:

```
node -v
```

untuk mengecek versi npm, kita dapat mengetikkan perintah:

```
npm -v
```

Pada kasus kali ini, karena kita akan mendeploy aplikasi yang sudah ada di dalam repository github, kita perlu melakukan proses cloning terlebih dahulu menggunakan perintah

```
git clone https://github.com/dumbwaysdev/wayshub-frontend
```

Ganti link tersebut sesuai dengan kebutuhan anda

setelah proses cloning berhasil, kita perlu melihat apakah repository yang kita clone sudah tercloning dengan perintah

```
ls
```

lalu masuk ke direktori yang sudah kita unduh dengan mengetik

```
cd wayshub-frontend
```

untuk menambahkan package dependensi yang diperlukan, kita bisa mengetikkan perintah:

```
npm install
```

```
devops@DESKTOP-17R0QNP: X + v - □ X
#####
#####
#####
#####
#####
#####
#####
##### 100.0%
Computing checksum with sha256sum
Checksums matched!
Now using node v16.18.1 (npm v8.19.2)
Creating default alias: default -> 16 (-> v16.18.1)
devops@DESKTOP-17R0QNP:~$ nvm use 16
Now using node v16.18.1 (npm v8.19.2)
devops@DESKTOP-17R0QNP:~$ nvm -v
0.38.0
devops@DESKTOP-17R0QNP:~$ node -v
v16.18.1
devops@DESKTOP-17R0QNP:~$ npm -v
8.19.2
devops@DESKTOP-17R0QNP:~$ git clone https://github.com/dumbwaysdev/wayshub-frontend
Cloning into 'wayshub-frontend'...
remote: Enumerating objects: 153, done.
remote: Counting objects: 100% (9/9), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 153 (delta 3), reused 2 (delta 2), pack-reused 144
Receiving objects: 100% (153/153), 1.98 MiB | 135.00 KiB/s, done.
Resolving deltas: 100% (17/17), done.
devops@DESKTOP-17R0QNP:~$ ls
' '$'\001'' taskweek1 wayshub-frontend
devops@DESKTOP-17R0QNP:~$ cd wayshub-frontend/
devops@DESKTOP-17R0QNP:~/wayshub-frontend$ npm install
[redacted]

devops@DESKTOP-17R0QNP:~/wayshub-frontend$ npm install

added 13 packages, changed 1 package, and audited 1918 packages in 3m

126 packages are looking for funding
  run `npm fund` for details

56 vulnerabilities (10 moderate, 31 high, 15 critical)

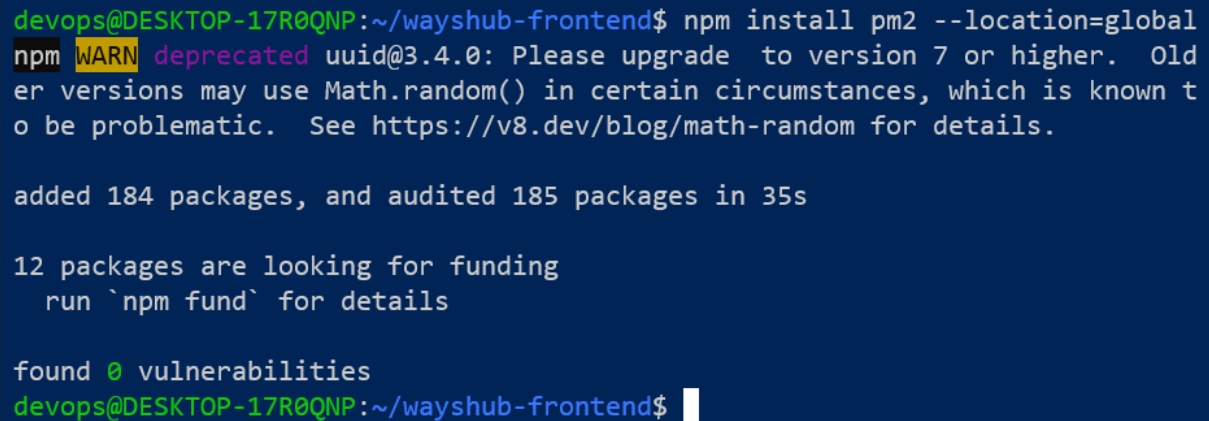
To address issues that do not require attention, run:
  npm audit fix

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

Run `npm audit` for details.
devops@DESKTOP-17R0QNP:~/wayshub-frontend$
```

kita akan mendeploy aplikasi kita menggunakan pm2, maka sebelum itu, kita harus menginstallnya terlebih dahulu kita dapat menginstallnya melalui npm, cukup ketikkan perintah

```
npm install pm2 --location=global
```



```
devops@DESKTOP-17R0QNP:~/wayshub-frontend$ npm install pm2 --location=global
npm WARN deprecated uuid@3.4.0: Please upgrade to version 7 or higher. Older versions may use Math.random() in certain circumstances, which is known to be problematic. See https://v8.dev/blog/math-random for details.

added 184 packages, and audited 185 packages in 35s

12 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
devops@DESKTOP-17R0QNP:~/wayshub-frontend$
```

setelah itu, kita akan menjalankan npm diatas pm2

```
pm2 start npm -- start
```

jika berjalan dengan benar, maka akan muncul tampilan website sebagai berikut

[illegible]

```
devops@DESKTOP-17R0QNP: X + v

with a built-in Load Balancer.

Start and Daemonize any application:
$ pm2 start app.js

Load Balance 4 instances of api.js:
$ pm2 start api.js -i 4

Monitor in production:
$ pm2 monitor

Make pm2 auto-boot at server restart:
$ pm2 startup

To go further checkout:
http://pm2.io/

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[PM2] Spawning PM2 daemon with pm2_home=/home/devops/.pm2
[PM2] PM2 Successfully daemonized
[PM2] Starting /home/devops/.nvm/versions/node/v16.18.1/bin/npm in fork_mode (1 instance)
[PM2] Done.
```

id	name	mode	u	status	cpu	memory
0	npm	fork	0	online	0%	22.6mb

```
devops@DESKTOP-17R0QNP:~/wayshub-frontend$
```

```
devops@DESKTOP-17R0QNP: X + v

devops@DESKTOP-17R0QNP:~/wayshub-frontend$ pm2 start npm -- start
[PM2] Applying action restartProcessId on app [npm](ids: [ 0 ])
[PM2] [npm](0) ✓
[PM2] Process successfully started
```

id	name	mode	u	status	cpu	memory
0	npm	fork	1	online	0%	6.9mb

```
devops@DESKTOP-17R0QNP:~/wayshub-frontend$
```

