

## INSTALL NODE.JS

note :

Dengan Nodejs, kita bisa membuat aplikasi Web, Desktop, Mobile, bahkan IoT (*Internet of Things*).

Awalnya Javascript hanya digunakan untuk membuat web saja.

Namun sekarang, berkat Nodejs... kita bisa membuat aplikasi desktop, web, mobile, CLI, IoT, dll.

Apakah Nodejs itu bahasa pemrograman baru?

Tidak, Nodejs bukan bahasa pemrograman.

Lalu apa donk?

Framework?

Untuk lebih jelasnya, ada baiknya kita menyimak sejarahnya.

Pada tahun 2009, seorang programmer bernama Ryan Dahl menciptakan Nodejs.

Bahasa Pemrograman Javascript awalnya hanya bisa berjalan di atas browser, karena ada *runtime engine* di dalamnya.

Lalu, munculah ide:

"Bagaimana kalau *engine* yang ada di dalam browser, kita keluarkan agar kita bisa mengeksekusi Javascript di luar browser"

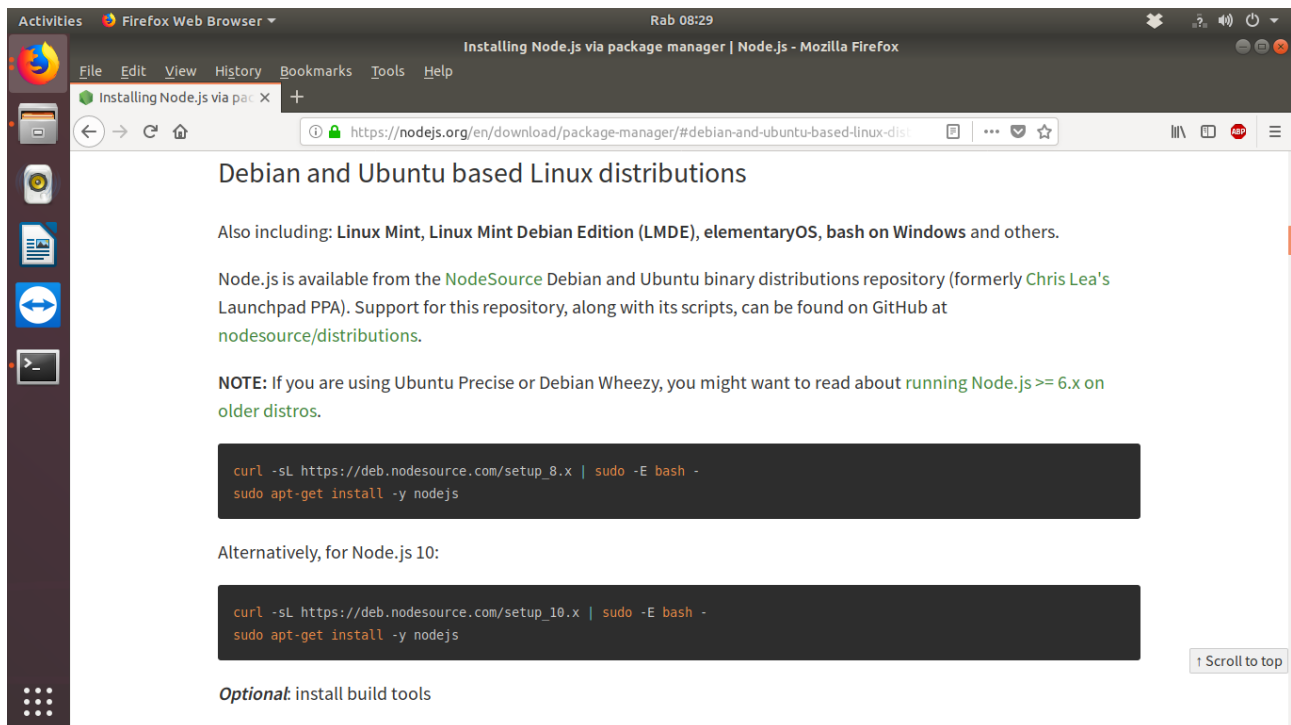
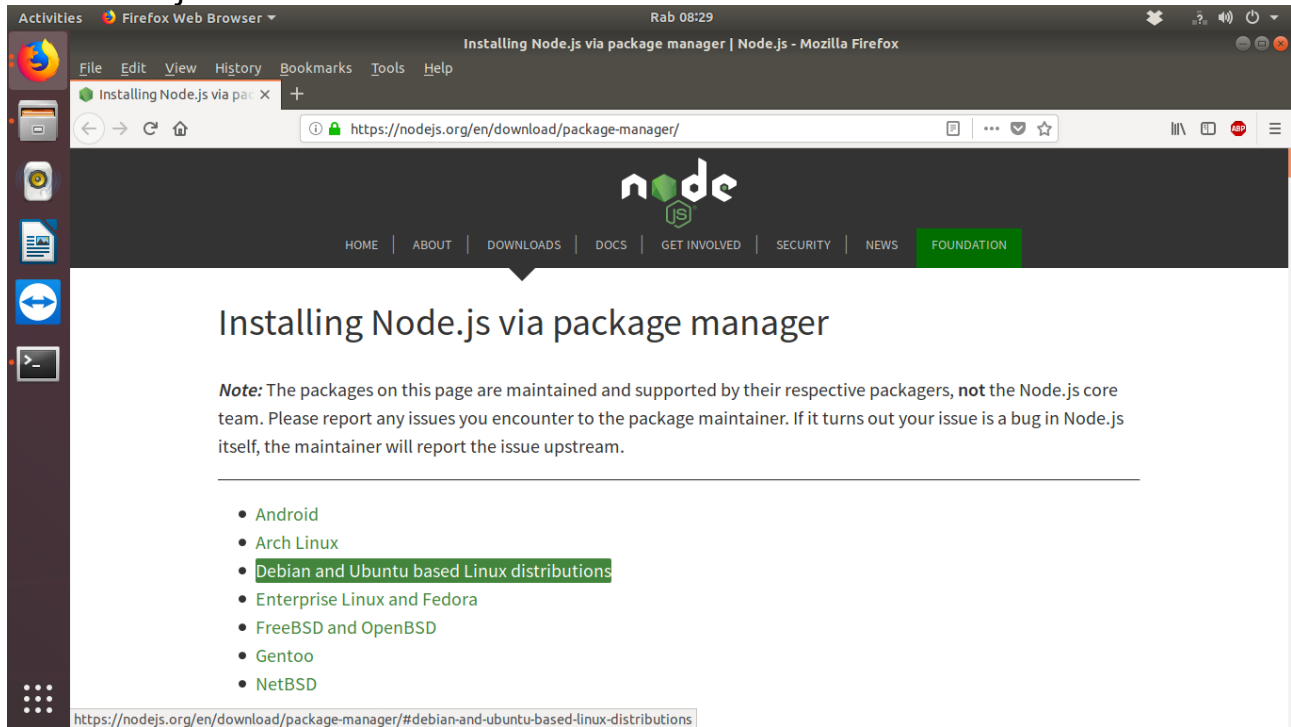
Maka lahirlah Nodejs.

Jadi...

Nodejs adalah sebuah *platform* untuk mengeksekusi program Javascript di luar browser.

Nodejs menggunakan *runtime engine* bernama V8, yang merupakan *javascript runtime engine* dari Google Chrome.

# 1. daftar petunjuk instalasi node.js lewat package manager dapat diakses pada situs resmi node.js



## 2. install curl

```
root@8889fb9ab9bd: /
File Edit View Search Terminal Help
root@8889fb9ab9bd:/# apt-get install curl
```

## 3. install node.js

```
root@8889fb9ab9bd: /
File Edit View Search Terminal Help
root@8889fb9ab9bd:/# curl -sL https://deb.nodesource.com/setup_8.x | sudo -E bash -
## Installing the NodeSource Node.js 8.x LTS Carbon repo...

## Populating apt-get cache...

+ apt-get update
Hit:1 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:2 http://archive.ubuntu.com/ubuntu bionic InRelease
Get:3 http://archive.ubuntu.com/ubuntu bionic-updates InRelease [65.4 kB]
Hit:4 http://archive.ubuntu.com/ubuntu bionic-backports InRelease
Fetched 65.4 kB in 2s (38.9 kB/s)
Reading package lists... Done

## Installing packages required for setup: lsb-release...

+ apt-get install -y lsb-release > /dev/null 2>&1
```

```
root@8889fb9ab9bd: /
File Edit View Search Terminal Help
root@8889fb9ab9bd:/# sudo apt-get install -y nodejs
```

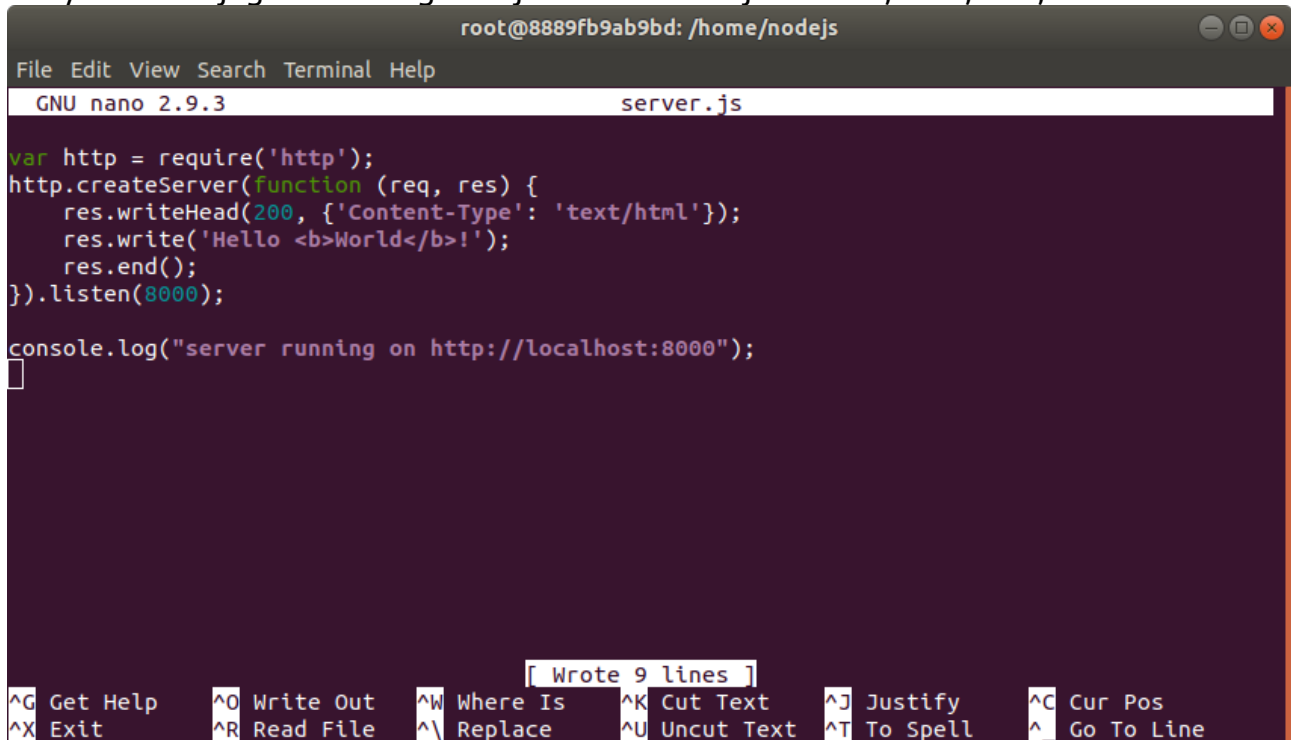
## 4. optional : install build-essential

```
root@8889fb9ab9bd: /
File Edit View Search Terminal Help
root@8889fb9ab9bd:/# apt-get install -y build-essential
```

## 5. cek versi node.js dan npm

```
root@8889fb9ab9bd: /
File Edit View Search Terminal Help
root@8889fb9ab9bd:/# node -v
v8.11.1
root@8889fb9ab9bd:/# npm -v
5.6.0
root@8889fb9ab9bd:/#
```

6. buat folder nodejs dan isi dengan file server.js listen HTML di port 8000, selain text/html Kita juga bisa mengubah jenis koent menjadi JSON, XML, PDF, dll.



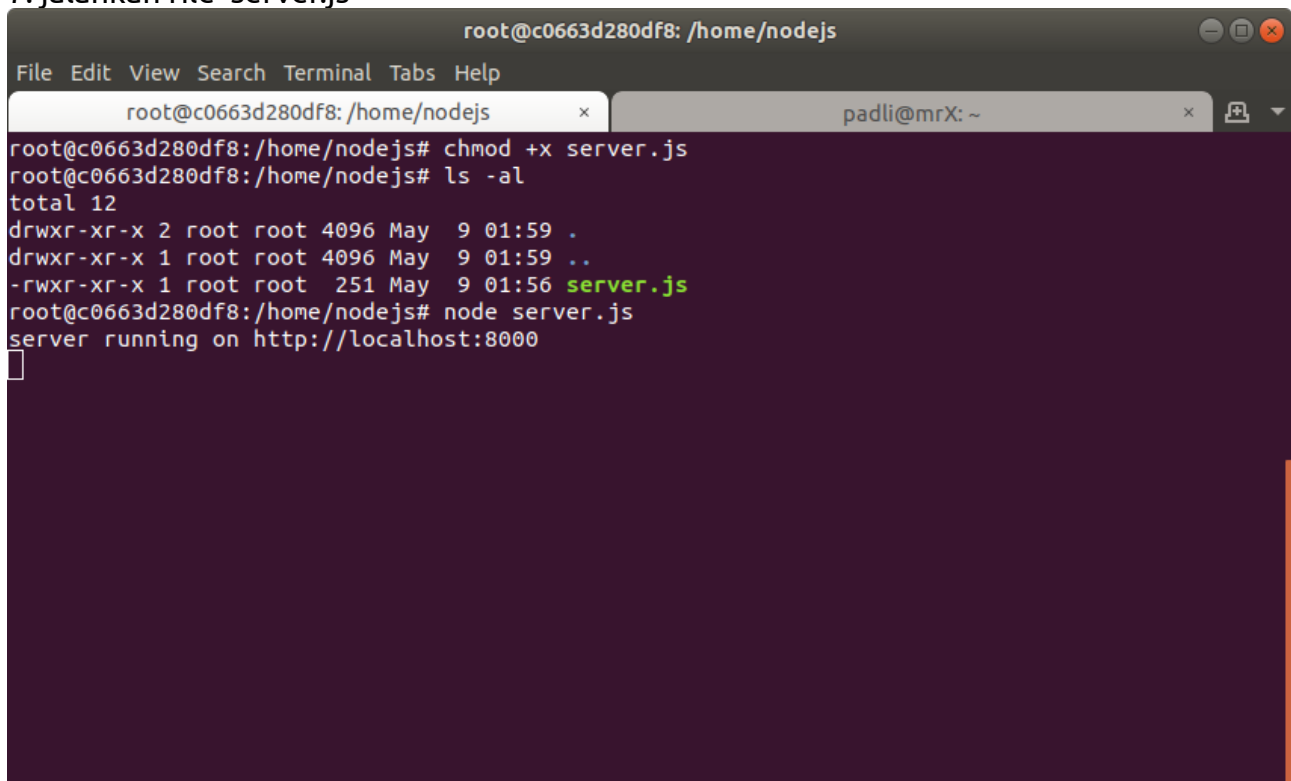
The screenshot shows a terminal window with the nano text editor open. The title bar indicates the user is root at 8889fb9ab9bd in the /home/nodejs directory. The editor's menu bar includes File, Edit, View, Search, Terminal, and Help. The status bar at the top shows 'GNU nano 2.9.3' and the filename 'server.js'. The code in the editor is as follows:

```
var http = require('http');
http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type': 'text/html'});
  res.write('Hello <b>World</b>!');
  res.end();
}).listen(8000);

console.log("server running on http://localhost:8000");
```

The bottom of the screen displays a row of keyboard shortcuts: ^G Get Help, ^O Write Out, ^W Where Is, ^K Cut Text, ^J Justify, ^C Cur Pos, ^X Exit, ^R Read File, ^\ Replace, ^U Uncut Text, ^T To Spell, and ^\_ Go To Line. A status message '[ Wrote 9 lines ]' is also visible.

7. jalankan file server.js

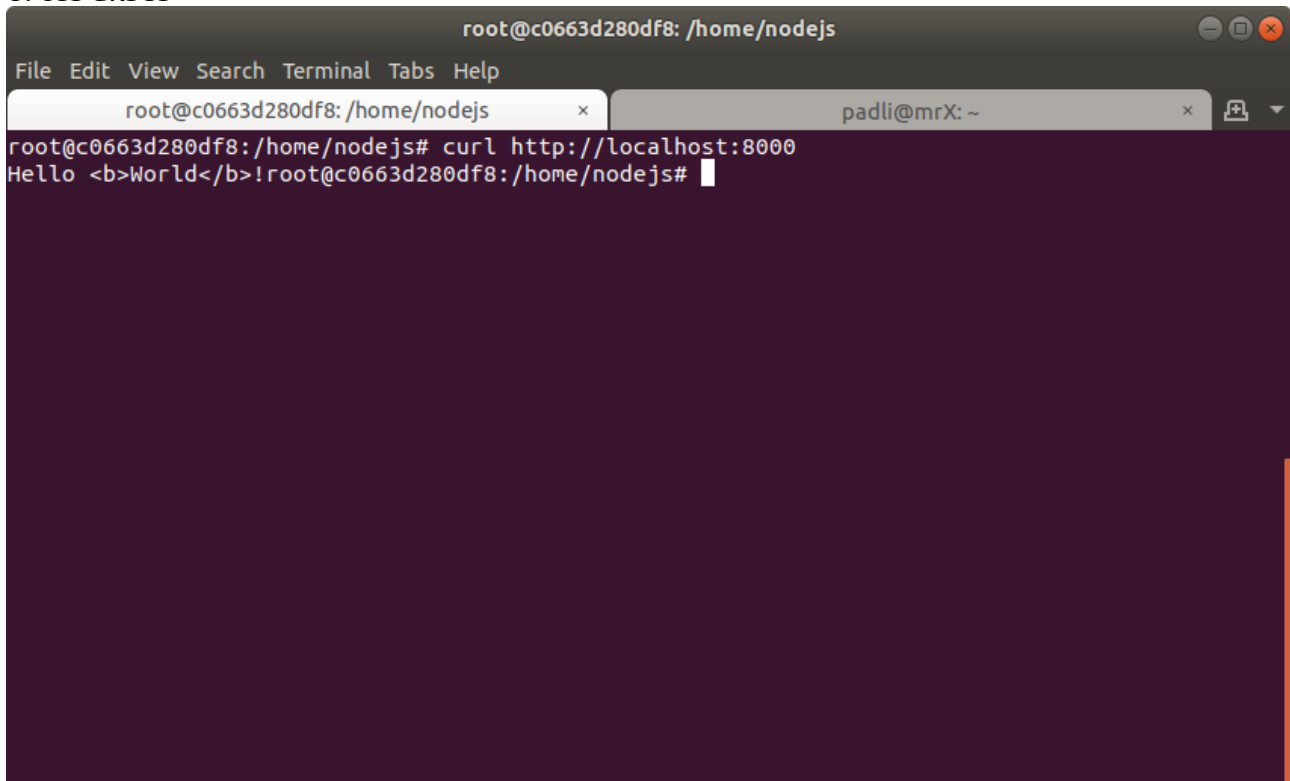


The screenshot shows a terminal window with the user root at c0663d280df8 in the /home/nodejs directory. The terminal has tabs for 'root@c0663d280df8: /home/nodejs' and 'padli@mrX: ~'. The user has executed the following commands:

```
root@c0663d280df8:/home/nodejs# chmod +x server.js
root@c0663d280df8:/home/nodejs# ls -al
total 12
drwxr-xr-x 2 root root 4096 May  9 01:59 .
drwxr-xr-x 1 root root 4096 May  9 01:59 ..
-rwxr-xr-x 1 root root  251 May  9 01:56 server.js
root@c0663d280df8:/home/nodejs# node server.js
server running on http://localhost:8000
```

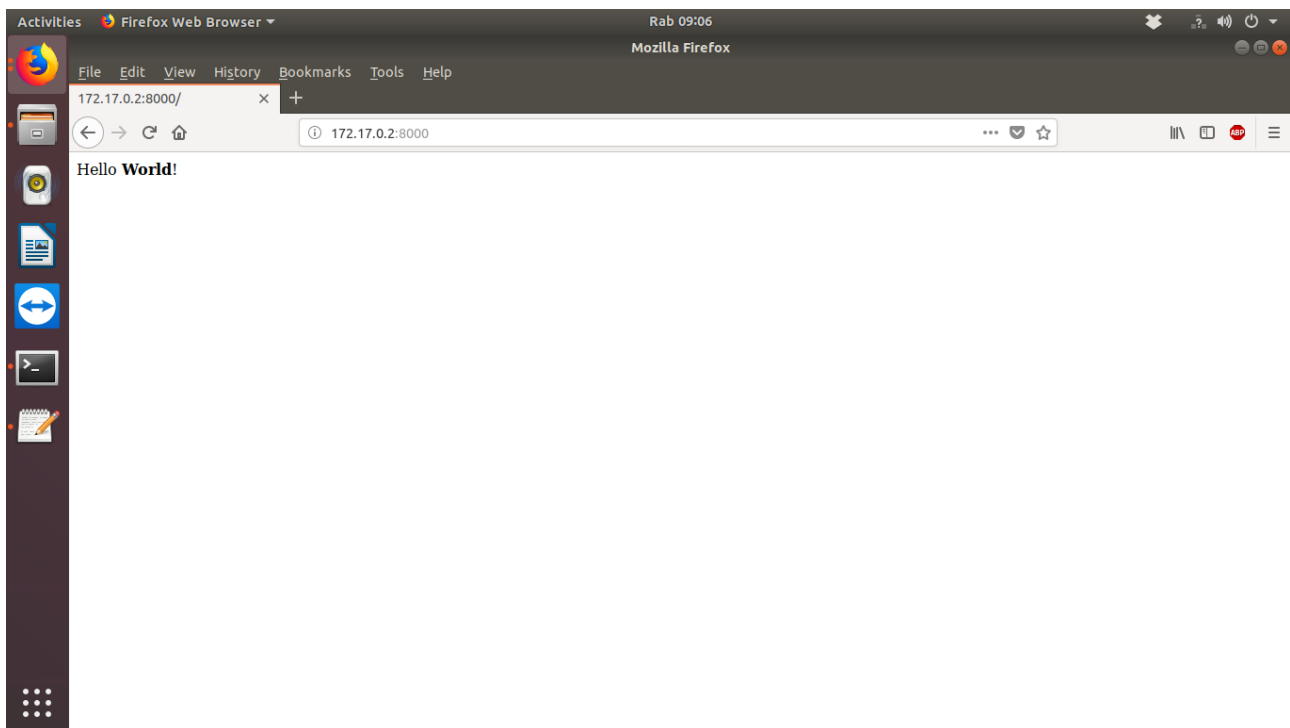
The output of the 'node server.js' command is 'server running on http://localhost:8000'.

## 8. tes akses



A terminal window titled 'root@c0663d280df8: /home/nodejs'. The window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', 'Tabs', and 'Help'. Below the menu bar, there are two tabs: 'root@c0663d280df8: /home/nodejs' and 'padli@mrX: ~'. The terminal content shows the command 'curl http://localhost:8000' being executed, followed by the output 'Hello <b>World</b>!' and the prompt 'root@c0663d280df8: /home/nodejs#'.

```
root@c0663d280df8: /home/nodejs
File Edit View Search Terminal Tabs Help
root@c0663d280df8: /home/nodejs x padli@mrX: ~ x
root@c0663d280df8: /home/nodejs# curl http://localhost:8000
Hello <b>World</b>!root@c0663d280df8: /home/nodejs#
```



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