

**LAPORAN HASIL PRAKTIKUM
PEMROGRAMAN WEB DAN MOBILE I**



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**JURUSAN TEKNIK INFORMATIKA
FAKULTAS TEKNIK
UNIVERSITAS PALANGKA RAYA
2021**

BAB I

TUJUAN DAN LANDASAN TEORI

1.1. TUJUAN

1.1.1. Mahasiswa mampu membuat program dengan menggabungkan fitur PHP dan JavaScript.

1.1.2. Mahasiswa mampu membuat program web yang dinamis.

1.2. LANDASAN TEORI

React Native adalah kerangka kerja JavaScript untuk menulis aplikasi seluler rendering asli dan asli untuk iOS dan Android. Ini didasarkan pada React, pustaka JavaScript Facebook untuk membangun antarmuka pengguna, tetapi alih-alih menargetkan browser, ini menargetkan platform seluler. Dengan kata lain: pengembang web sekarang dapat membuat aplikasi seluler yang terlihat dan terasa benar-benar "asli", semuanya dari kenyamanan pustaka JavaScript yang sudah kita kenal dan sukai. Selain itu, karena sebagian besar kode yang Anda tulis dapat dibagikan antar platform, React Native memudahkan pengembangan secara bersamaan untuk Android dan iOS.

Mirip dengan React for the Web, aplikasi React Native ditulis menggunakan campuran JavaScript dan markup XML-esque, yang dikenal sebagai JSX. Kemudian, di bawah tenda, "jembatan" React Native memanggil API rendering asli di Objective-C (untuk iOS) atau Java (untuk Android). Dengan demikian, aplikasi Anda akan dirender menggunakan komponen UI seluler yang sebenarnya, bukan tampilan web, dan akan terlihat serta terasa seperti aplikasi seluler lainnya. React Native juga mengekspos antarmuka JavaScript untuk API platform, sehingga aplikasi React Native Anda dapat mengakses fitur platform seperti kamera ponsel, atau lokasi pengguna.

React Native saat ini mendukung iOS dan Android, dan juga berpotensi untuk berkembang ke platform masa depan. Dalam buku ini, kami akan membahas iOS dan Android. Sebagian besar kode yang kami tulis akan bersifat lintas platform. Dan ya: Anda benar-benar dapat menggunakan React Native untuk membangun aplikasi seluler yang siap produksi! Beberapa anekdota: Facebook, Palantir, dan TaskRabbit sudah menggunakannya dalam produksi untuk aplikasi yang menghadap pengguna.



Gambar 1.1 react native

Fakta bahwa React Native benar-benar merender menggunakan API rendering standar platform host-nya memungkinkannya menonjol dari sebagian besar metode pengembangan aplikasi lintas platform yang ada, seperti Cordova atau Ionic. Metode penulisan aplikasi seluler yang ada menggunakan kombinasi JavaScript, HTML, dan CSS biasanya dirender menggunakan tampilan web. Meskipun pendekatan ini bisa berhasil, ia juga memiliki kekurangan, terutama seputar kinerja. Selain itu, mereka biasanya tidak memiliki akses ke kumpulan elemen UI asli platform host. Saat framework ini mencoba meniru elemen UI asli, hasilnya biasanya "terasa" sedikit; merekayasa balik semua detail halus dari hal-hal seperti animasi membutuhkan banyak upaya, dan dapat dengan cepat menjadi usang.

Untuk pengembang yang terbiasa bekerja di Web dengan React, ini berarti Anda dapat membuat aplikasi seluler dengan kinerja dan tampilan serta nuansa aplikasi asli, sambil menggunakan alat yang sudah dikenal.

React Native juga mewakili peningkatan atas pengembangan seluler normal di dua area lainnya: pengalaman pengembang dan potensi pengembangan lintas platform.

BAB II

PEMBAHASAN

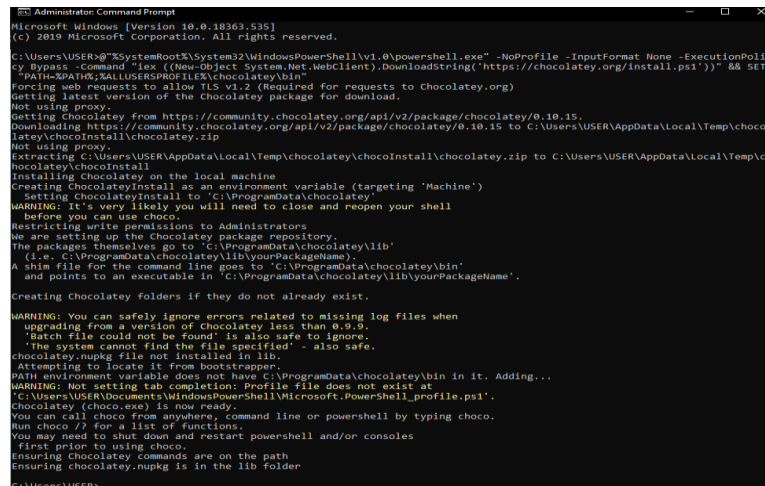
Berikut ini adalah cara menginstall react native dalam Microsoft windows 10.

1. Menginstall Chocolatey

Cara menginstall chocolatey yaitu dengan cara membuka command prompt yang ada dalam windows 10, kemudian menjalankan perintah di bawah ini.

```
@ "%SystemRoot%\System32\WindowsPowerShell\v1.0\powershell.exe" -NoProfile -InputFormat None -ExecutionPolicy Bypass -Command "iex ((New-Object System.Net.WebClient).DownloadString('https://chocolatey.org/install.ps1'))" && SET "PATH=%PATH%;%ALLUSERSPROFILE%\chocolatey\bin"
```

Berikut adalah gambarnya.



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.18363.595]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\USER>@ "%SystemRoot%\System32\WindowsPowerShell\v1.0\powershell.exe" -NoProfile -InputFormat None -ExecutionPolicy Bypass -Command "iex ((New-Object System.Net.WebClient).DownloadString('https://chocolatey.org/install.ps1'))" && SET "PATH=%PATH%;%ALLUSERSPROFILE%\chocolatey\bin"
Getting latest version of the Chocolatey package for download.
Not using proxy.
Getting Chocolatey from https://community.chocolatey.org/api/v2/package/chocolatey/0.10.15.
Downloading https://community.chocolatey.org/api/v2/package/chocolatey/0.10.15 to C:\Users\USER\AppData\Local\Temp\chocolatey\chocoinstall\chocolatey.zip
Extracting C:\Users\USER\AppData\Local\Temp\chocolatey\chocoinstall\chocolatey.zip to C:\Users\USER\AppData\Local\Temp\chocolatey\chocoinstall
Installing Chocolatey on the local machine
Creating ChocolateyInstall as an environment variable (targeting 'Machine')
Setting ChocolateyInstall to 'C:\ProgramData\chocolatey'
WARNING: It's very likely you will need to close and reopen your shell
before you can use choco.
Restricting write permissions to Administrators
We are setting up the Chocolatey package repository.
The packages themselves go to 'C:\ProgramData\chocolatey\lib'
(i.e. C:\ProgramData\chocolatey\lib\yourPackageName).
A shim file for the command line goes to 'C:\ProgramData\chocolatey\bin'
and points to an executable in 'C:\ProgramData\chocolatey\lib\yourPackageName'.
Creating Chocolatey folders if they do not already exist.

WARNING: You can safely ignore errors related to missing log files when
upgrading from a version of Chocolatey less than 0.9.9.
'Batch file could not be found' is also safe to ignore.
'The system cannot find the file specified' - also safe.
chocolatey.nupkg file not installed in lib.
Attempting to locate it from bootstrapper.
PATH environment variable does not have C:\ProgramData\chocolatey\bin in it. Adding...
WARNING: Not setting tab completion: Profile file does not exist at
'C:\Users\USER\Documents\WindowsPowerShell\Microsoft.PowerShell_profile.ps1'.
Chocolatey (choco.exe) is now ready.
You can call choco from anywhere, command line or powershell by typing choco.
Run choco /? for a list of functions.
You may need to shut down and restart powershell and/or consoles
first prior to using choco.
Ensuring Chocolatey commands are on the path
Ensuring chocolatey.nupkg is in the lib folder

C:\Users\USER>
```

Gambar 2.1 chocolatey

2. Menginstall JDK, Node.js, dan Phyton

Untuk menginstall JDK, Node.js, dan Phyton ini juga melalui Command Prompt dan mengisikan perintah di bawah ini.

```
choco install -y nodejs.install python2 jdk8
```

Dan gambar di bawah ini adalah proses penginstallannya.

```
python2 v2.7.18 [Approved]
python2 package files install completed. Performing other installation steps.
Installing 64-bit python2...
python2 has been installed.
Installed to 'C:\Python27'
Adding C:\Python27 to PATH if needed
python2 may be able to be automatically uninstalled.
Environment Vars (like PATH) have changed. Close/reopen your shell to
see the changes (or in powershell/cmd.exe just type 'refreshenv').
The install of python2 was successful.
Software installed to 'C:\Program Files (x86)\Hotspot Shield\10.3.1\'
Progress: Downloading jdk8 8.0.211... 100%

jdk8 v8.0.211 [Approved]
jdk8 package files install completed. Performing other installation steps.
Downloading JDK from https://javadl.oracle.com/webapps/download/GetFile/1.8.0_211-b12/478a62b7d4e34b78b671
Installing jdk8...
jdk8 has been installed.
PATH environment variable does not have C:\Program Files\Java\jdk1.8.0_211\bin in it. Adding...
jdk8 may be able to be automatically uninstalled.
Environment Vars (like PATH) have changed. Close/reopen your shell to
see the changes (or in powershell/cmd.exe just type 'refreshenv').
The install of jdk8 was successful.
Software installed to 'C:\Program Files\Java\jdk1.8.0_211\'

Chocolatey installed 3/3 packages.
See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).

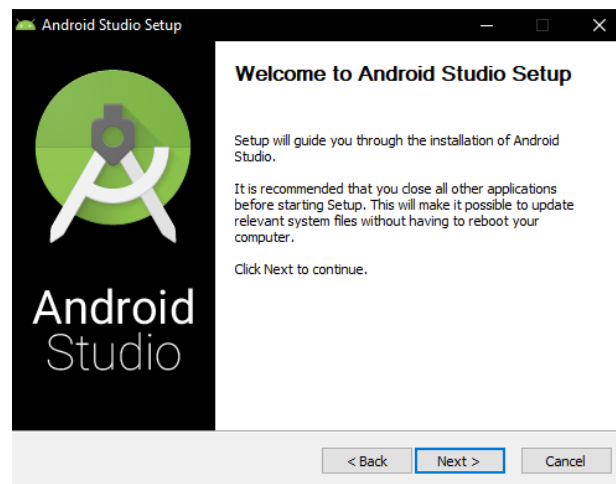
Did you know the proceeds of Pro (and some proceeds from other
licensed editions) go into bettering the community infrastructure?
Your support ensures an active community, keeps Chocolatey tip top,
plus it nets you some awesome features!
https://chocolatey.org/compare

C:\Users\USER>
```

Gambar 2.2 JDK, node.jes, dan phyton

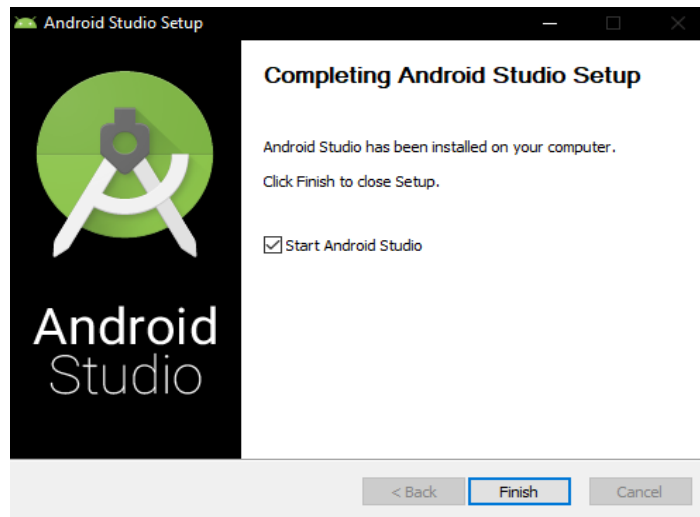
3. Install Android Studio

Kemudian untuk cara download pada halaman android.com. Jika sudah berikut adalah langkah-langkahnya:



Gambar 2.3 halaman utama installer

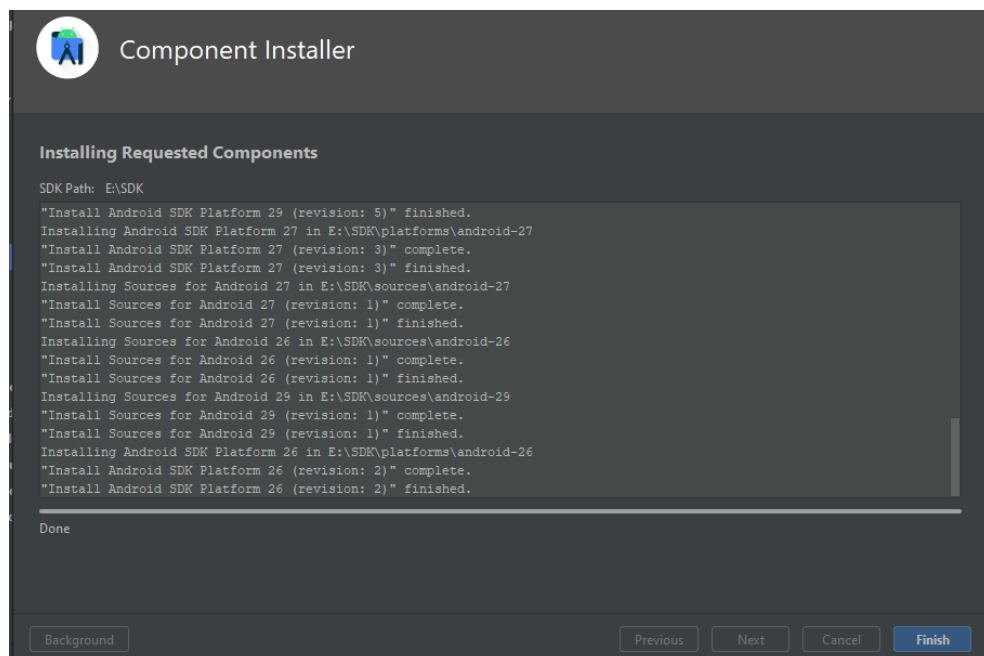
Pertama klik next, selanjutnya klik next, klik next lagi (jika tidak ingin mengganti lokasi penginstalan), klik install, tunggu proses penginstalan selesai, klik next, dan ayng terakhir klik finish.



Gambar 2.4 selesai proses instalasi android studio

4. Install Android SDK

Untuk menginstall android sdk bisa dengan cara pada saat awal instalasi akan muncul SDK components setup yang akan menginstall atau mendownload komponen-komponen dalam android studio ini.

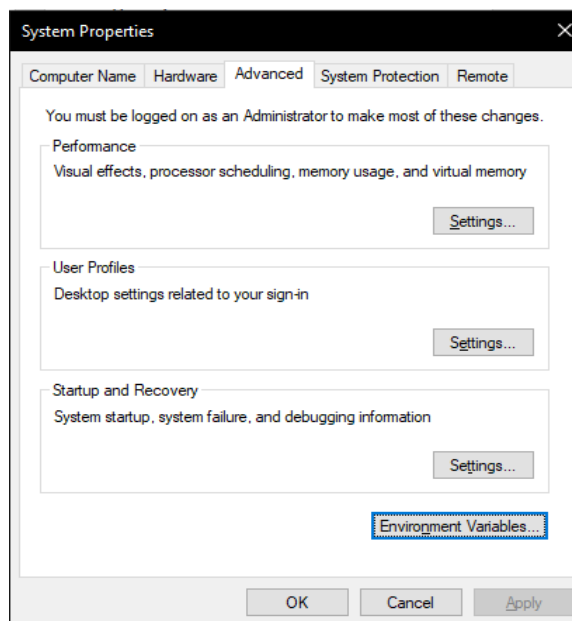


Gambar 2.5 SDK

Tunggu proses download, dan setup tersebut akan berhasil terpasang pada android studio tadi.

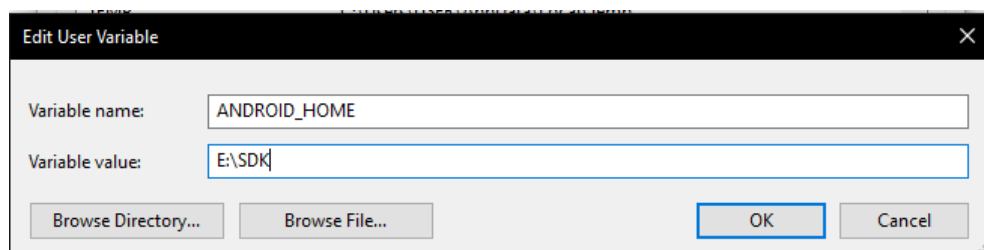
5. Men-setup PATH environment Variabel

Untuk mensetup path pada environment variable dapat dilakukan dengan cara pada menu search, ketik “path”, kemudian klik “edit the system environment variables”. Lalu Pada tab “advanced” klik “environment variable” di bawah kanan.

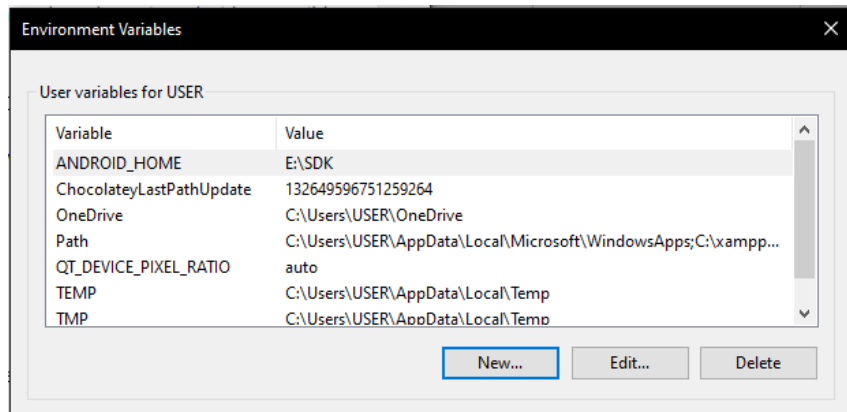


Gambar 2.6 environment variable

Selanjutnya pada “user variables”, klik “new” dan isikan sesuai pada gambar di bawah ini

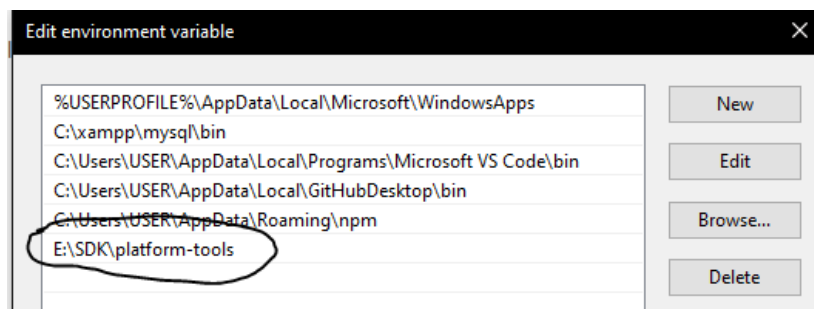


Gambar 2.7 user variable



Gambar 2.8 selesai menambahkan variable

Kemudian, klik pada variable “path”, pilih button edit. Kemudian tambahkan path platform-tools. Klik OK dan OK.



Gambar 2.9 platform-tools

6. Install React Native CLI

Untuk menginstall React Native CLI ini dapat dilakukan dengan cara menginstall melalui command prompt yang berisikan.

```
npm install -g react-native-cli
```

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.18363.535]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\USER>npm install -g react-native-cli
npm notice
npm notice New minor version of npm available! 7.11.2 -> 7.12.0
npm notice Changelog: https://github.com/npm/cli/releases/tag/v7.12.0
npm notice Run npm install -g npm@7.12.0 to update!
npm notice

added 81 packages, and audited 82 packages in 5s

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

found 0 vulnerabilities

C:\Users\USER>
```

Gambar 2.10 CLI

7. Buat Aplikasi Pertama-mu

Untuk membuat aplikasi ini menggunakan cmd dengan cara

react-native init ProjectSaya

```
C:\Users\USER>react-native init ProjectSaya
This will walk you through creating a new React Native project in C:\Users\USER\ProjectSaya
'yarn' is not recognized as an internal or external command,
operable program or batch file.
Installing react-native...
Consider installing yarn to make this faster: https://yarnpkg.com
npm WARN deprecated urix@0.1.0: Please see https://github.com/lydell/urix#deprecated
npm WARN deprecated resolve-url@0.2.1: https://github.com/lydell/resolve-url#deprecated
npm WARN deprecated uglify-es@3.3.9: support for ECMAScript is superseded by 'uglify-js' as of v3.13.0

added 718 packages, and audited 719 packages in 2m

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

found 0 vulnerabilities
info Setting up new React Native app in C:\Users\USER\ProjectSaya
(node:2192) Warning: Accessing non-existent property 'padLevels' of module exports inside circular dependency
(Use `node --trace-warnings ...` to show where the warning was created)
info Adding required dependencies
npm WARN deprecated har-validator@5.1.5: this library is no longer supported
npm WARN deprecated request-promise-native@1.0.9: request-promise-native has been deprecated because it extends the now deprecated
2
npm WARN deprecated request@2.88.2: request has been deprecated, see https://github.com/request/request/issues/3142
npm WARN deprecated babel-eslint@10.1.0: babel-eslint is now @babel/eslint-parser. This package will no longer receive updates.

added 458 packages, and audited 1177 packages in 59s

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

found 0 vulnerabilities
info Adding required dev dependencies
up to date, audited 1177 packages in 4s

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

found 0 vulnerabilities

Run instructions for Android:
  • Have an Android emulator running (quickest way to get started), or a device connected.
  • cd "C:\Users\USER\ProjectSaya" && npx react-native run-android

Run instructions for Windows:
  • See https://aka.ms/ReactNativeGuideWindows for the latest up-to-date instructions.
```

Gambar 2.11 hasil

8. Setting device/emulator kamu

Untuk mensetting device, dengan cara menghubungkan komputer dengan handphone melalui kabel usb(sebelumnya harus aktifkan USB Debungging). Kemudian ketik pada cmd

react-native init ProjectSaya

9. Menjalankan react native app di HandPhone

Untuk langkah ini ketik pada command prompt

```
cd ProjectSaya
```

react-native run-android

10. Edit Codingan App

Dan yang terakhir adalah tampilan dari Node.js

[illegible]

Gambar 2.12 metro

BAB III

KESIMPULAN

Berdasarkan pemaparan dalam modul ini dapat disimpulkan bagaimana proses untuk menginstall react native pada Microsoft windows 10 yang terdapat sepuluh cara.

React Native adalah framework mobile app development yang memungkinkan pengembangan aplikasi secara multi-platform yaitu Android dan iOS.

LAMPIRAN

Rasupe. (2019). *Cara install react native di windows 10*. 1 Maret 2019.
<https://rasupe.com/cara-install-react-native-di-windows-10/> Diakses
pada tanggal 9 Mei 2021.

DAFTAR PUSTAKA



Gambar 1.1 react native

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.18363.535]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\USER>cd %SystemRoot%\System32\WindowsPowerShell\v1.0\powershell.exe -NoProfile -InputFormat None -ExecutionPolicy Bypass -Command "iex ((New-Object System.Net.WebClient).DownloadString('https://chocolatey.org/install.ps1'))" && SET "PATH=%PATH%;%ALLUSERSPROFILE%\chocolatey\bin"
Forcing web requests to allow TLS v1.2 (Required for requests to Chocolatey.org)
Getting latest version of the Chocolatey package for download.
Not using proxy.
Getting Chocolatey from https://community.chocolatey.org/api/v2/package/chocolatey/0.10.15.
Downloading https://community.chocolatey.org/api/v2/package/chocolatey/0.10.15 to C:\Users\USER\AppData\Local\Temp\chocolatey\chocolatey\chocolatey.zip
Not using proxy.
Extracting C:\Users\USER\AppData\Local\Temp\chocolatey\chocoInstall\chocolatey.zip to C:\Users\USER\AppData\Local\Temp\chocolatey\chocoInstall
Installing Chocolatey on the local machine
Creating ChocolateyInstall as an environment variable (targeting 'Machine')
Setting ChocolateyInstall to 'C:\ProgramData\chocolatey'
WARNING: It's very likely you will need to close and reopen your shell
Before you can use choco.
Restricting write permissions to Administrators
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PATH environment variable does not have C:\ProgramData\chocolatey\bin in it. Adding...
WARNING: Not setting tab completion: Profile file does not exist at
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Gambar 2.1 chocolatey

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python2 may be able to be automatically uninstalled.
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see the changes (or in powershell/cmd.exe just type 'refreshenv').
The install of python2 was successful.
Software installed to 'C:\Program Files (x86)\Hotspot Shield\10.3.1\'
Progress: Downloading jdk8 8.0.211... 100%

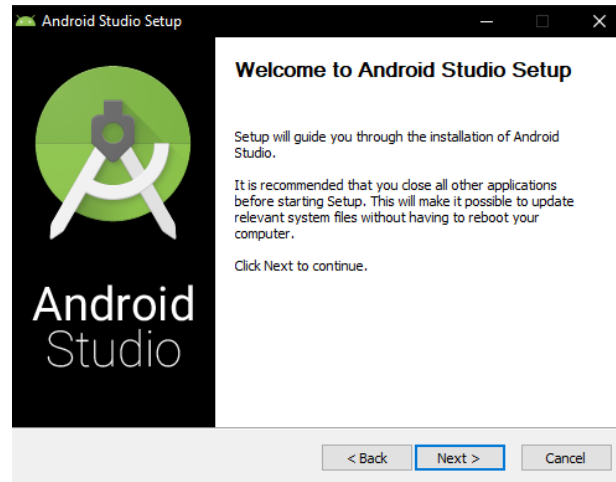
jdk8 v8.0.211 [Approved]
jdk8 package files install completed. Performing other installation steps.
Downloading JDK from https://java8.oracle.com/webapps/download/GetFile/1.8_0_211-b12/478a62b7d4e34b78b671
Installing jdk8...
jdk8 has been installed.
PATH environment variable does not have C:\Program Files\Java\jdk1.8.0_211\bin in it. Adding...
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Environment Vars (like PATH) have changed. Close/reopen your shell to
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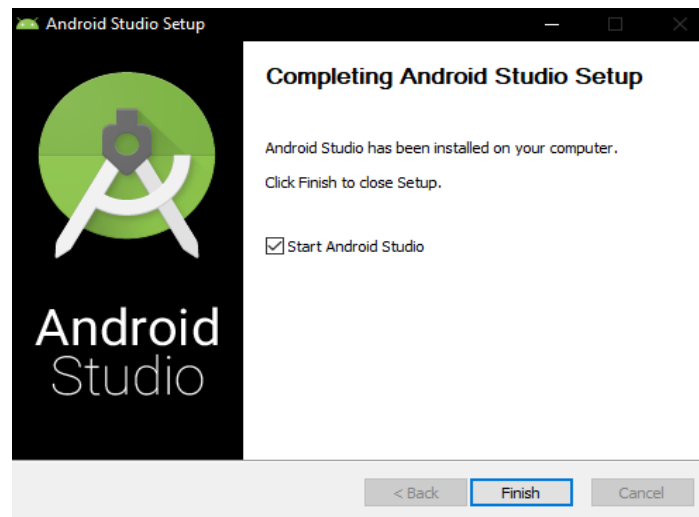
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Your support ensures an active community, keeps Chocolatey tip top,
plus it nets you some awesome features!
https://chocolatey.org/compare

C:\Users\USER>
```

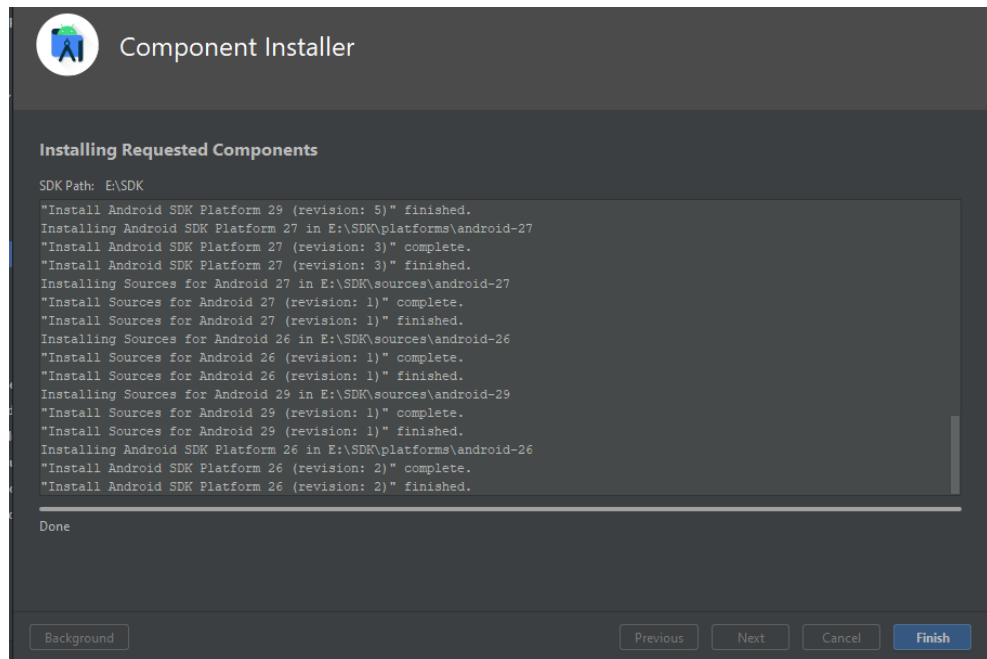
Gambar 2.2 JDK, node.jes, dan phyton



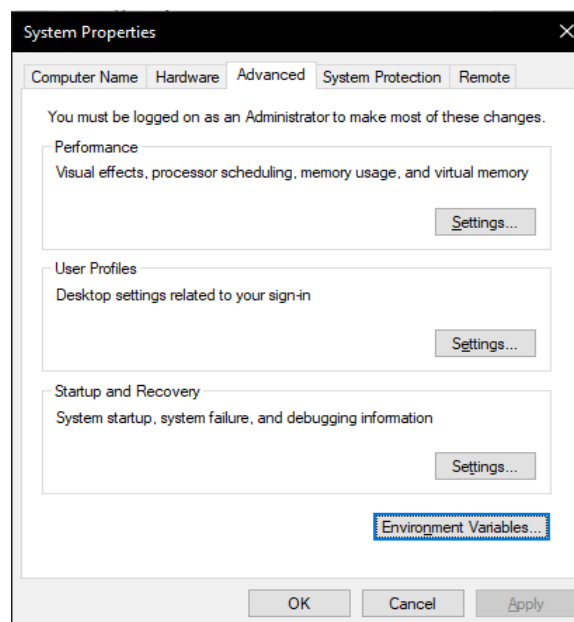
Gambar 2.3 halaman utama installer



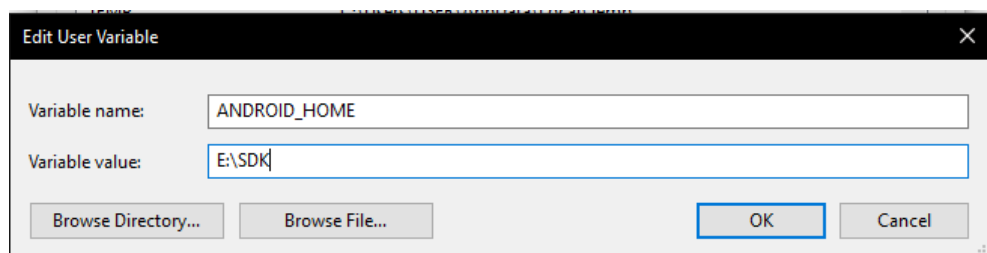
Gambar 2.4 selesai proses instalasi android studio



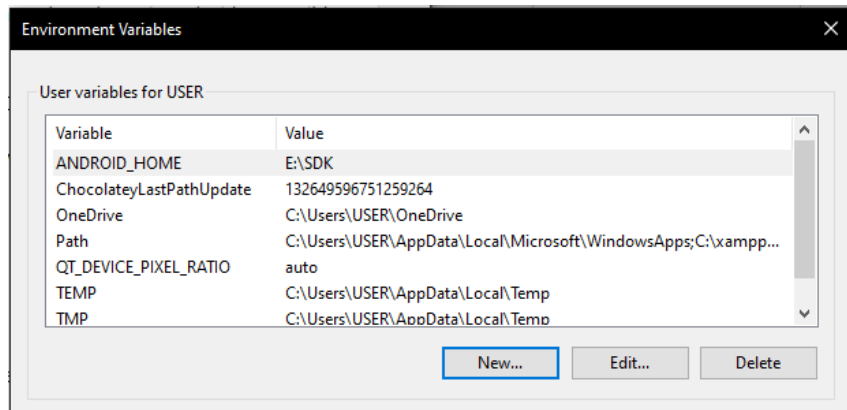
Gambar 2.5 SDK



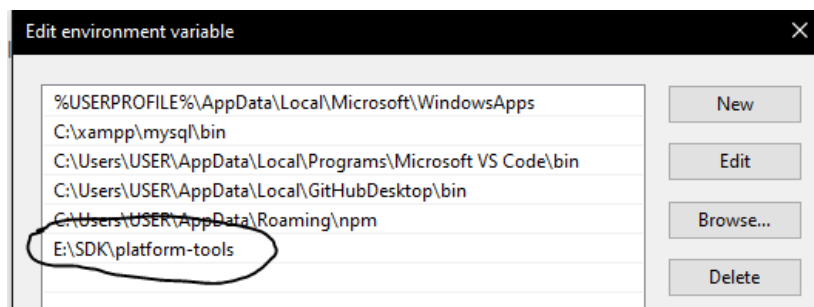
Gambar 2.6 environment variable



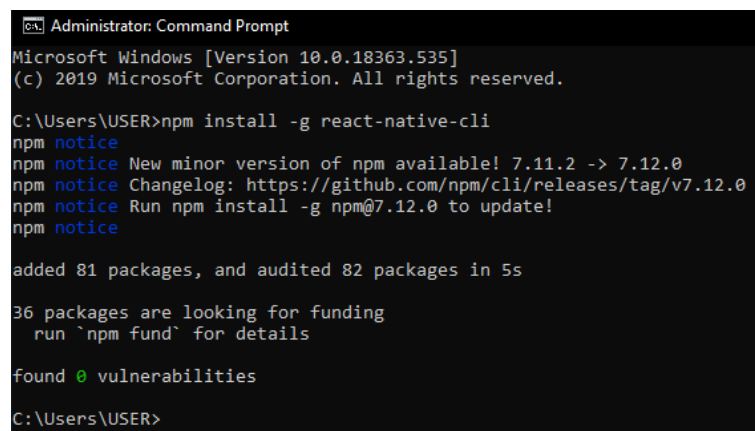
Gambar 2.7 user variable



Gambar 2.8 selesai menambahkan variable



Gambar 2.9 platform-tools



Gambar 2.10 CLI

```

C:\Users\USER>react-native init ProjectSaya
This will walk you through creating a new React Native project in C:\Users\USER\ProjectSaya
[yarn] not recognized as an internal or external command,
operable program or batch file.
Installing react-native...
Consider installing yarn to make this faster: https://yarnpkg.com
npm WARN deprecated @babel/core@7.18.0: Please see https://github.com/babel/babel/issues/13687 for deprecation
npm WARN deprecated resolve-url@0.2.1: https://github.com/lydell/resolve-url#deprecated
npm WARN deprecated uglify-es@3.3.0: support for ECMAScript is superseded by 'uglify-js' as of v3.13.0

added 718 packages, and audited 719 packages in 2m

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

found 0 vulnerabilities

Info Setting up new React Native app in C:\Users\USER\ProjectSaya
(node:2192) Warning: Accessing non-existent property 'padLevels' of module exports inside circular dependency
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Run instructions for Windows:
  • See https://aka.ms/ReactNativeGuideWindows for the latest up-to-date instructions.

```

Gambar 2.11 hasil

[illegible]

Gambar 2.12 metro

Android