

Deployment with Heroku

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Apa itu Heroku?

Heroku adalah sebuah cloud platform yang menjalankan bahasa pemrograman tertentu, Heroku mendukung bahasa pemrograman seperti Ruby, Node.js, Python, Java, PHP, dan lain-lain.

Heroku termasuk ke dalam kriteria Platform As A Service (PaaS), sehingga bagi anda yang ingin melakukan deploy aplikasi ke heroku cukup hanya dengan melakukan konfigurasi aplikasi yang ingin di deploy dan menyediakan platform yang memungkinkan pelanggan untuk mengembangkan, menjalankan, dan mengelola aplikasi tanpa kompleksitas membangun dan memelihara infrastruktur yang biasanya terkait dengan pengembangan dan peluncuran aplikasi.

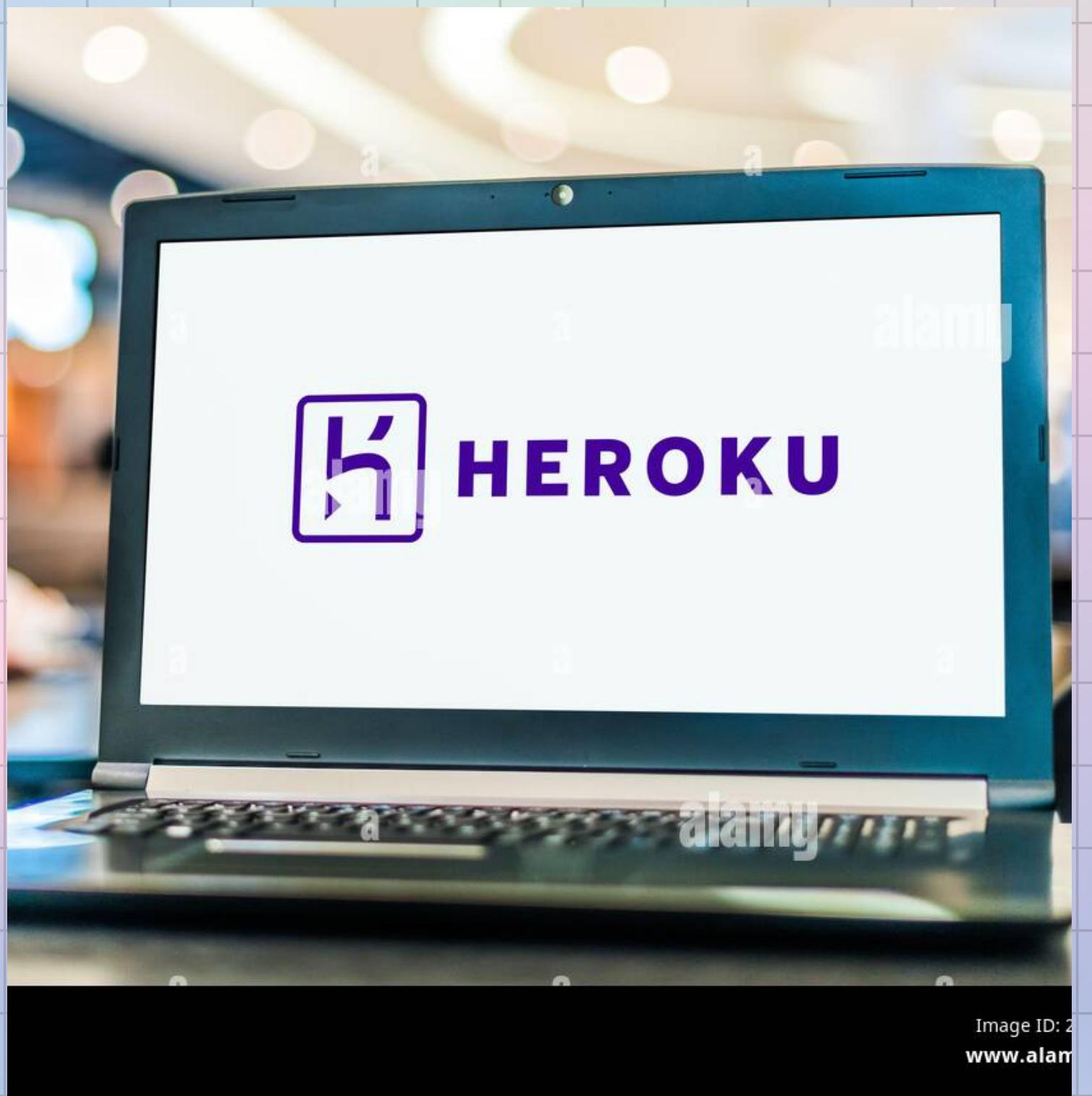


Image ID: 2
www.alamy.com

Kepoin sedikit sejarah Heroku yuk!



Heroku pada awalnya dikembangkan oleh James Lindenbaum, Adam Wiggins, dan Orion Henry untuk proyek-proyek pendukung yang kompatibel dengan platform pemrograman Ruby yang dikenal sebagai Rack. Pengembangan prototipe memakan waktu sekitar enam bulan. Kemudian, Heroku menghadapi kelemahan karena kurangnya pelanggan pasar yang tepat karena banyak pengembang aplikasi menggunakan alat dan lingkungan mereka sendiri. Pada Januari 2009 platform baru diluncurkan yang dibangun hampir dari awal setelah upaya tiga bulan. Pada Oktober 2009, Byron Sebastian bergabung dengan Heroku sebagai CEO. Pada 8 Desember 2010, Salesforce.com mengakuisisi Heroku sebagai anak perusahaan yang sepenuhnya dimiliki oleh Salesforce.com. Pada 12 Juli 2011, Yukihiro "Matz" Matsumoto, kepala desainer bahasa pemrograman Ruby, bergabung dengan perusahaan sebagai Chief Architect, Ruby. Pada bulan yang sama, Heroku menambahkan dukungan untuk Node.js dan Clojure. Pada 15 September 2011, Heroku dan Facebook memperkenalkan Heroku untuk Facebook. Saat ini Heroku mendukung database Redis sebagai tambahan untuk PostgreSQL standarnya.

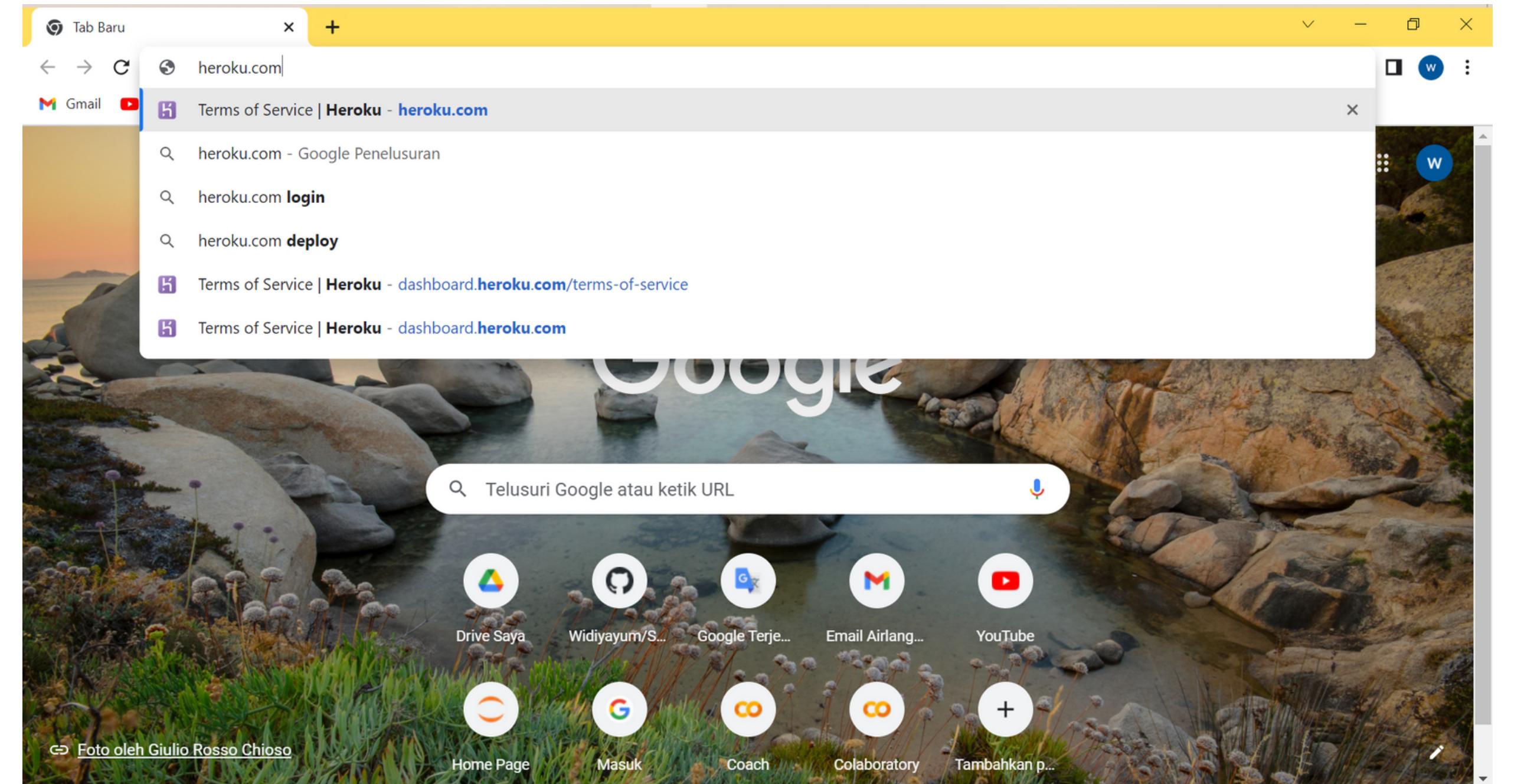
3

Tutorial Deployment dengan Heroku

Baca dan pahami baik – baik yuk!

Step 1

Buka website
Heroku.com



Step 2

Klik "Sign Up For Free"
untuk membuat akun
pada Heroku

The screenshot shows the Heroku homepage with a large, stylized blue and purple illustration of a city skyline with clouds and circuit board patterns. At the top, the Heroku logo is visible along with navigation links for Products, Marketplace, Pricing, Documentation, Support, COVID-19, and More. A search bar and 'Log in or Sign up' buttons are on the right. A prominent purple button labeled 'Sign Up for Free' is highlighted with a red arrow pointing to it. To the left of the button, there is descriptive text about Salesforce Functions with Heroku Data, mentioning Heroku Postgres, Heroku Connect, Apache Kafka, and Heroku Redis.

heroku.com

Salesforce Developers / Heroku

HEROKU Products Marketplace Pricing Documentation Support COVID-19 More

Log in or Sign up

NEW

Salesforce Functions with Heroku Data

Access Heroku Postgres and leverage Salesforce data via Heroku Connect. Publish events with Apache Kafka on Heroku and optimize data access overheads with Heroku Redis.

Learn More

Sign Up for Free

Isi biodata diri Anda lalu klik
"Create Free Account"

Step 3

The screenshot shows the Heroku sign-up interface at signup.heroku.com. The page is titled "Step 3". On the left, there's a sidebar with three colored circles (red, orange, green) and sections for "Your app platform" and "Deploy now". The main form on the right requires the following information:

- Email address *
- Company name
- Role *
- Country/Region *
- Primary development language *

A reCAPTCHA checkbox labeled "I'm not a robot" is present. At the bottom is a large blue "CREATE FREE ACCOUNT" button, which has a red arrow pointing to it from the top-left text.

Step 4



Thanks for signing up with Heroku! You must follow this link within 30 days of registration to activate your account:

[https://id.heroku.com/account/accept/11833389/
04ea25308066270cd243bff4c23c18f7](https://id.heroku.com/account/accept/11833389/04ea25308066270cd243bff4c23c18f7)

Have fun, and don't hesitate to contact us with your feedback.

The Heroku Team
<https://heroku.com>

Pergi ke email dan buka email dari heroku untuk mengaktifkan akun Anda!

Step 5



Setelah Anda berhasil verifikasi akun,
langkah kelima yaitu membuat password
jika sudah klik "Set Password and Log In"

Set your password

Create your password and log in to your Heroku account.

Create a new password *

.....

Password confirmation *

.....

Password requirements

- ✓ Must be a minimum of 8 characters.
- ✓ Must contain letters, numbers, and symbols.
- ✓ Passwords must match.

SET PASSWORD AND LOG IN

Step 6

Jika step 5 sudah berhasil
maka Anda akan
menemukan halaman
seperti gambar di samping,
klik saja "Accept"

The screenshot shows a web browser window with a purple header bar. On the left, there are three small circular icons: red, orange, and green. The main content area has a white background. At the top left is the Heroku logo. To its right is a search bar with the placeholder "Jump to Favorites, Apps, Pipelines, Spaces...". On the far right of the header are three small icons: a grid, a person, and a gear.

In the center-left, there's a section titled "Heroku Marketplace Providers". In the center-right, there's a note about Heroku Elements Marketplace Providers and a link to the "Salesforce License and Distribution Agreement for the Heroku Elements Marketplace".

Below these, there are two sections: "Italian Customers" on the left and "Are you domiciled in Italy?" on the right. The "Italian Customers" section has a blue switch button set to "Yes". The "Are you domiciled in Italy?" section has a blue switch button set to "No".

At the bottom center is a purple "Accept" button. At the very bottom of the page, there's a footer bar with links to "heroku.com", "Blogs", "Careers", "Documentation", "Support" (which is highlighted in purple), and "Terms of Service", "Privacy", "Cookies", and "© 2022 Salesforce.com".

Step 7



HEROKU

Jump to Favorites, Apps, Pipelines, Spaces...

Personal

Welcome to Heroku
Now that your account has been set up, here's how to get started.

Show next steps

Filter apps and pipelines

widiyayum

New

Create new app

Create new pipeline

DISMISS

Setelah itu kita
buat aplikasi
dengan
klik
"Create New App"

Isi nama dan choose a region
lalu klik "Create App"

Step 8

The screenshot shows the Heroku web interface for creating a new application. At the top, there is a navigation bar with links to Gmail, YouTube, Maps, Terjemahkan, Google Buku, and a user profile. Below the navigation bar, the Heroku logo is visible. A search bar contains the placeholder text "Jump to Favorites, Apps, Pipelines, Spaces...". A prominent "Create New App" button is centered at the top of the main content area. The form fields for creating the app are displayed below:

- App name:** An input field containing the text "app-name".
- Choose a region:** A dropdown menu showing "United States" with a small USA flag icon.
- Add to pipeline...**: A purple button.
- Create app**: A purple button at the bottom of the form.

At the very bottom of the page, there are links for heroku.com, Blogs, Careers, Documentation, Support, Terms of Service, Privacy, Cookies, and a copyright notice for © 2022 Salesforce.com.

Step 9

Langkah ini Anda harus mengunduh software heroku dengan klik "Heroku CLI."

The screenshot shows a web browser window with the URL `dashboard.heroku.com/apps/widiyayum/deploy/heroku-git`. The browser's address bar and various icons are visible at the top. The main content area displays deployment options:

- Deployment method:** Options include Heroku Git (selected), GitHub, and Container Registry.
- Deploy using Heroku Git:** Instructions: "Use git in the command line or a GUI tool to deploy this app."
- Install the Heroku CLI:** Instructions: "Download and install the [Heroku CLI](#). If you haven't already, log in to your Heroku account and follow the prompts to create a new SSH public key." A red arrow points to the "Heroku CLI" link.
- Clone the repository:** Instructions: "Use Git to clone widiyayum's source code to your local machine."
- Code snippets:** \$ `heroku login`, \$ `heroku git:clone -a widiyayum`, \$ `cd widiyayum`

At the bottom of the browser window, the URL `https://devcenter.heroku.com/articles/heroku-command-line` is visible in the address bar.

Step 10



Akan muncul seperti ini, pilih sesuai spec laptop Anda. Setelah berhasil download, lakukan install sampai berhasil (saat proses instalasi pilih next saja dan disarankan tidak mengubah apapun pada proses tersebut")



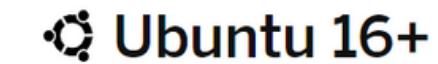
```
$ brew tap heroku/brew && brew install heroku
```



Download the appropriate installer for your Windows installation:

64-bit installer

32-bit installer



Run the following from your terminal:

```
$ sudo snap install --classic heroku
```

[Snap is available on other Linux OS's as well.](#)

Step 11

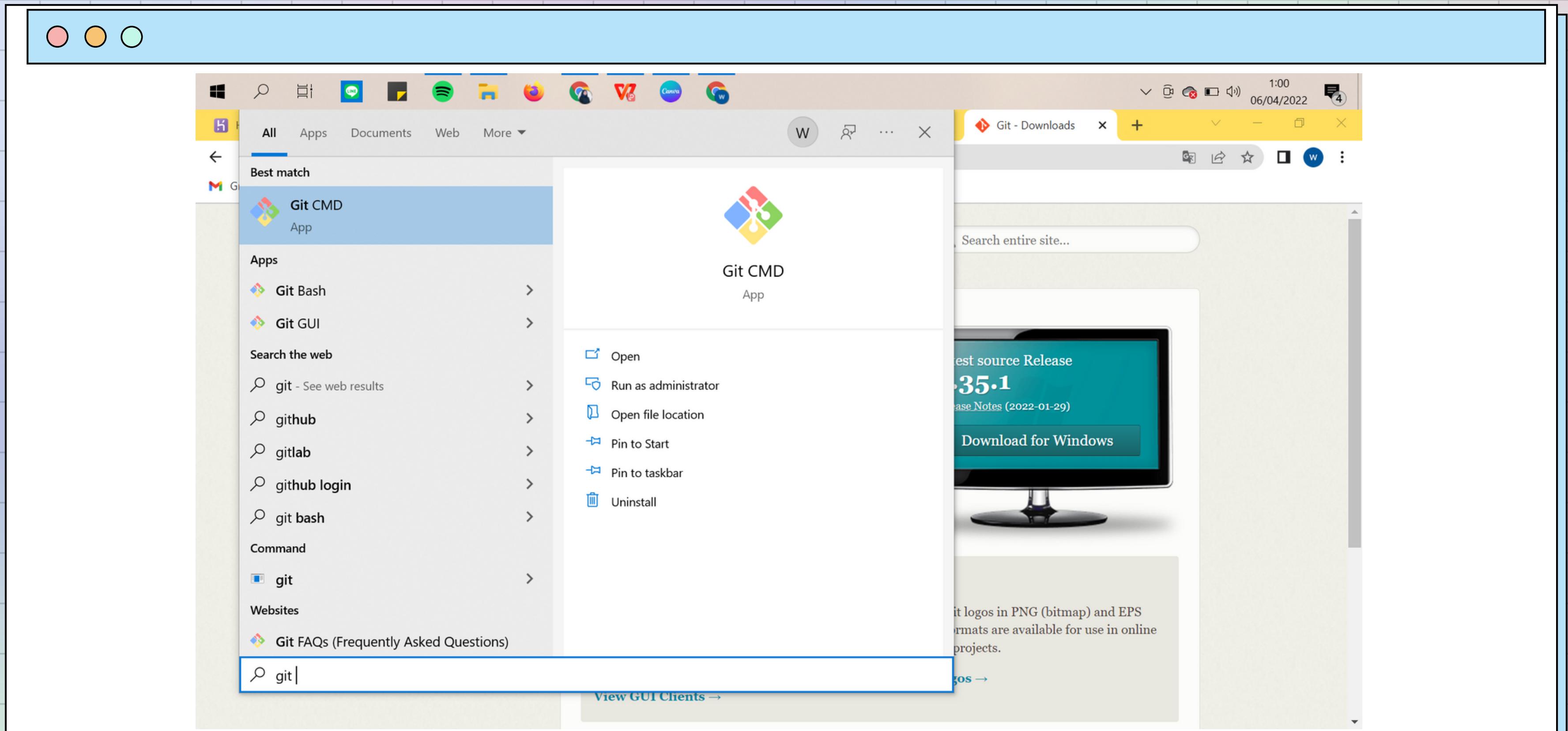
Download sesuai laptop Anda Windows/macOS setelah download selesai, yaitu proses instalasi disarankan tidak mengubah apapun jadi klik next saja

The screenshot shows a web browser displaying the official Git website at git-scm.com/downloads. The page features a large 'Downloads' section with three main options: 'macOS', 'Windows', and 'Linux/Unix'. A prominent call-to-action button says 'Download for Windows'. To the right, there's a section for 'Logos' with a link to 'View Logos →'. On the left side of the main content area, there's a sidebar with links for 'About', 'Documentation', 'Downloads' (which is currently selected), and 'Community'. Below this is a promotional box for the 'Pro Git book'. The top of the browser window shows the address bar and various Google search results.

Anda harus download git bash yang digunakan untuk menjalankan Git dari command line atau baris perintah. Download Git Bash pada link berikut : [**https://git-scm.com/downloads**](https://git-scm.com/downloads)

Klik "Start" dan ketikkan
Git Cmd lalu klik.

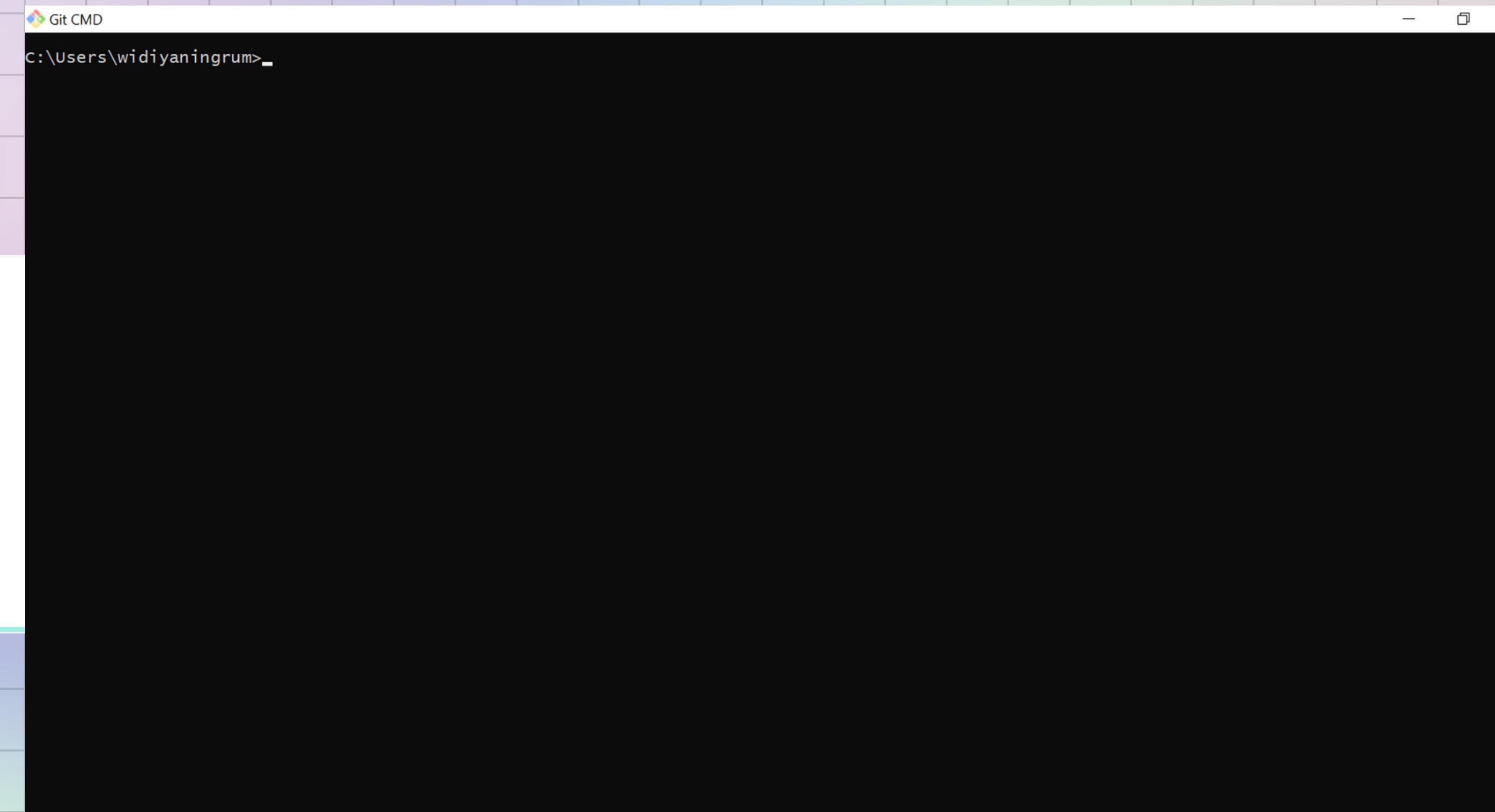
Step 12





Step 13

Setelah berhasil maka akan muncul seperti gambar di samping



Git CMD

c:\Users\widiyaningrum>_

Step 14



Langkah selanjutnya, ketikkan perintah
– perintah berikut ini :

1. git clone

**[https://github.com/jumadi-
cloud/dts-linreg](https://github.com/jumadi-cloud/dts-linreg)**

2. git config -- global user.name

“username github Anda”

3. git config --global user.email

4. heroku login

satu persatu dari perintah tersebut klik
enter sampai perintah terakhir enter dan
tunggu akan di bawa ke browser untuk login

The screenshot shows a terminal window titled "Git CMD". The command prompt is "C:\Users\widiyaningrum>". The terminal is mostly black, indicating it is a standard Windows Command Prompt window.

Step 15



Browser tersebut
tampilannya akan
seperti ini, And klik
log in .
Jika sudah maka
kembali ke
dashboard heroku

The screenshot shows a dark purple Heroku login page. At the top, there is a cookie consent banner with text about using cookies for interactions and advertising, and links to 'read more' and 'make your cookie choices here'. A close button 'X' is in the top right corner of the banner. Below the banner is the Heroku logo, which consists of a stylized white 'h' inside a square frame, with the word 'HEROKU' in white capital letters below it. In the center of the page is a white rectangular box containing the text 'Log in to the Heroku CLI' in purple, followed by a purple 'Log In' button. At the bottom of the page, there is a footer note: 'Heroku is a  company' next to the Salesforce logo, and links for 'Terms of Service', 'Privacy', 'Cookies', and '© 2022 Salesforce.com'.

Step 16

Tampilan dashboard,
pilih Deployment Method
lalu akan muncul perintah
selanjutnya, cukup Anda
scroll ke bawah

The screenshot shows the Heroku dashboard for the app 'widiayum'. The 'Deploy' tab is selected. On the left, there's a section titled 'Add this app to a pipeline' with instructions to create or choose a pipeline. On the right, there's a section titled 'Add this app to a stage in a pipeline to enable additional features' with information about pipelines connecting multiple apps and promoting code. Below these sections is a dropdown menu labeled 'Choose a pipeline'. At the bottom, there are three deployment method options: 'Heroku Git Use Heroku CLI' (with a red arrow pointing to it), 'GitHub Connect to GitHub', and 'Container Registry Use Heroku CLI'.

← → C dashboard.heroku.com/apps/widiayum/deploy/heroku-git

Gmail YouTube Maps Terjemahkan Google Buku Widiayum/Studi-I...

Salesforce Platform

HEROKU

Jump to Favorites, Apps, Pipelines, Spaces...

Personal > widiayum

Open app More

Overview Resources Deploy Metrics Activity Access Settings

Add this app to a pipeline

Create a new pipeline or choose an existing one and add this app to a stage in it.

Add this app to a stage in a pipeline to enable additional features

Pipelines let you connect multiple apps together and **promote code** between them. [Learn more.](#)

Pipelines connected to GitHub can enable **review apps**, and create apps for new pull requests. [Learn more.](#)

Choose a pipeline

Deployment method

Heroku Git Use Heroku CLI

GitHub Connect to GitHub

Container Registry Use Heroku CLI

akan muncul seperti di bawah ini,
perintah codingan tersebut ketikkan
pada git cmd tadi

Step 17

The screenshot shows the Heroku Git interface. At the top, there are three colored circles (red, orange, green) and the Heroku logo. A navigation bar includes links for 'Jump to Favorites, Apps, Pipelines, Spaces...'. On the right, there's a user icon and a grid icon.

Create a new Git repository
Initialize a git repository in a new or existing directory

```
$ cd my-project/  
$ git init  
$ heroku git:remote -a widiyayum
```

Deploy your application
Commit your code to the repository and deploy it to Heroku using Git.

```
$ git add .  
$ git commit -am "make it better"  
$ git push heroku master
```

Existing Git repository
For existing repositories, simply add the `heroku` remote

```
$ heroku git:remote -a dikiwahyu
```

A blue callout box contains the text: "You can now change your main deploy branch from "master" to "main" for both manual and automatic deploys, please follow the instructions [here](#)".

Step 18



ketikkan perintah tersebut seperti gambar di samping.

Jika pada "git push heroku master" eror maka "master" ganti menjadi "main"

The screenshot shows a terminal window titled "MINGW64:/c/Users/widiyaningrum/dts-linreg". The user has navigated to the directory and initialized a Git repository. They then added the current changes to the staging area, committed them with the message "make it better", and attempted to push the changes to the Heroku remote. The output indicates that the local branch is ahead of the origin by one commit, suggesting a merge conflict or unpushed changes.

```
widiyaningrum@LAPTOP-VLQ82TML MINGW64 ~
$ cd dts-linreg

widiyaningrum@LAPTOP-VLQ82TML MINGW64 ~/dts-linreg (main)
$ git init
Reinitialized existing Git repository in C:/Users/widiyaningrum/dts-linreg/.git/

widiyaningrum@LAPTOP-VLQ82TML MINGW64 ~/dts-linreg (main)
$ heroku git:remote -a widiyayum
set git remote heroku to https://git.heroku.com/widiyayum.git

widiyaningrum@LAPTOP-VLQ82TML MINGW64 ~/dts-linreg (main)
$ git add .

widiyaningrum@LAPTOP-VLQ82TML MINGW64 ~/dts-linreg (main)
$ git commit -am "make it better"
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

widiyaningrum@LAPTOP-VLQ82TML MINGW64 ~/dts-linreg (main)
$ git push heroku master
```

Step 19

Setelah berhasil deployment pergi ke dashboard heroku lagi untuk melihat apakah deployment Anda berhasil atau tidak dengan berhasil menuju ke Aplikasi. Caranya klik "Open App"

The screenshot shows the Heroku dashboard at dashboard.heroku.com/apps/widiayum/deploy/heroku-git. The page title is "widiayum". The navigation bar includes links for Overview, Resources, Deploy (which is selected), Metrics, Activity, Access, and Settings. On the right, there are buttons for "Open app" and "More". A red arrow points to the "Open Application" button under the "More" dropdown. Below the navigation, there are sections for adding the app to a pipeline and a stage in a pipeline. At the bottom, there are options for Deployment method (Heroku Git, GitHub, Container Registry), and a yellow button with the URL <https://widiayum.herokuapp.com>.

Step 20

Jika sudah berhasil maka akan menampilkan aplikasi, contohnya seperti gambar di bawah ini. Artinya Anda berhasil melakukan deployment aplikasi menggunakan heroku.

The screenshot shows a web browser window with the URL widiayum.herokuapp.com in the address bar. The page content is as follows:

Prediksi Biaya Asuransi Anda:

Usia: [Input field]

Jenis Kelamin: [Dropdown menu showing "Laki-laki"]

Perokok: [Dropdown menu showing "Ya"]

PREDIKSI SEKARANG →

Estimasi biaya asuransi Anda adalah
USD 0

A yellow lightbulb icon with the text "KELAS AWAN PINTAR" is located at the bottom right of the main content area.

Reference

- <https://heroku.com/apps>
- <https://git-scm.com/downloads>
- <https://github.com/jumadi-cloud/dts-linreg>
- <https://insight.wellcode.io/intern-wellcode-io-mengenal-heroku>

<https://github.com/Widiyayum>

Terima kasih

Good luck!