1.3 NodeJS App Deployment



This section will guide you to:

* Create a JavaScript project in your IDE
* Set up GitHub and Heroku

This lab has five subsections, namely:

1.3.1 Signing up on GitHub and Heroku

1.3.2 Integrating Git

1.3.3 Setting up SSH keys

1.3.4 Pushing code to GitHub

1.3.5 Deploying NodeJS to Heroku

*NodeJs and Visual Studio code are already installed in your practice lab. (Refer MEAN: Lab Guide - Phase 3)*

**Step 1.3.1:** Signing up on GitHub and Heroku

* Go to [https://github.com](https://github.com/) and create an account if you don’t already have one.
* Go to <https://signup.heroku.com/> and create an account if you don’t already have one.
* Go to <https://devcenter.heroku.com/articles/heroku-cli> and install Heroku CLI for your operating system.
* Run the following command to make sure that Heroku CLI was installed:

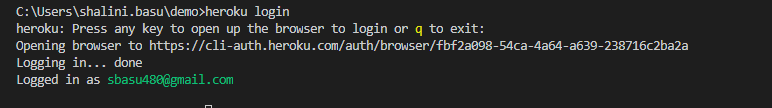
*heroku -v*

You should be able to see the version of Heroku that you have installed.

* Run the following command to open up Heroku CLI login page in the browser:

*heroku login*

* You will be redirected to the login page on the browser. Once you log in, you can close that page and come back to your code editor.
* You will see the following message:



**Step 1.3.2:** Integrating Git

* Go to [https://git-scm.com/download](https://git-scm.com/download/win)/ and install Git installer.
* Check the version installed by running the following command:

*git --version*

* Run the following command to initialize an empty Git repository:

*git init*

* Create a new file named .gitignore in your root directory and add the following code in it:

*node\_modules/*

* Run the following command to add all your files to the staging area:

*git add .ia*

* Run the following command to make sure that you have no file under **untracked files**:

*git status*

* Run the following command to commit all the changes made in your files:

*git commit -m “Initial commit made”*

**Step 1.3.3:** Setting SSH keys

* Go to the Git folder with ssh-keygen.exe application using the following command:

*cd "%LOCALAPPDATA%\Programs\Git\usr\bin\"*

* Create a folder to store your key using the following command:

*mkdir “%HOME%\.ssh”*

* *Generate a new ssh key* using the following command:

*ssh-keygen -t rsa -b 4096 -C "<your email of id>" -f "%HOME%/.ssh/id\_rsa\_<file name>"*

* Run the following command to make sure that SSH is running:

*ssh-agent -s*

You will get the agent PID if SSH is running.

* Run the following command to open a connection:

*ssh-add -K ~/.ssh/id\_rsa*

**Step 1.3.4:** Pushing code to GitHub

* Go to [https://github.com](https://github.com/) and log in to your account.
* Create a new repository by clicking on the plus icon on the top right corner.
* Enter a repository name. For example: *node-website*. Click on *Create repository*.
* Run the following command to push an existing repository from the command line:

*git remote add origin* [*https://github.com/*](https://github.com/)*<username>/<repository name>.git*

* You need to take the public key file and send it to GitHub. To do so, go to your *Settings*. You will find an option *SSH and GPG keys* on the left . When you click on it, you will find an option *New SSH key*.
* After clicking on it, enter a title and the contents of your id\_rsa.pub key. To get the contents, run the following command:

*type ~/.ssh/id\_rsa.pub*

* Copy the entire content and copy it to the clipboard under *Key and click on Add SHH Key.*
* You can test your connection by running the following command:

*ssh -T* [*git@github.com*](mailto:git@github.com)

* Now, run the following command to push your commits.

*git push -u origin master*

**Step 1.3.4:** Deploying NodeJS to Heroku

* Run the following command to set up your SSH public key file with Heroku:

*heroku keys:add*

* Enter *y* when they ask you whether you want to upload the public key to Heroku.
* Run the following command to create your Heroku application:

*heroku create <project\_name>*

* Change the *script* value in package.json to the following:

*node src/app.js*

* Run the following command to start up your application locally:

*npm run start*

This will start your application on the browser successfully.