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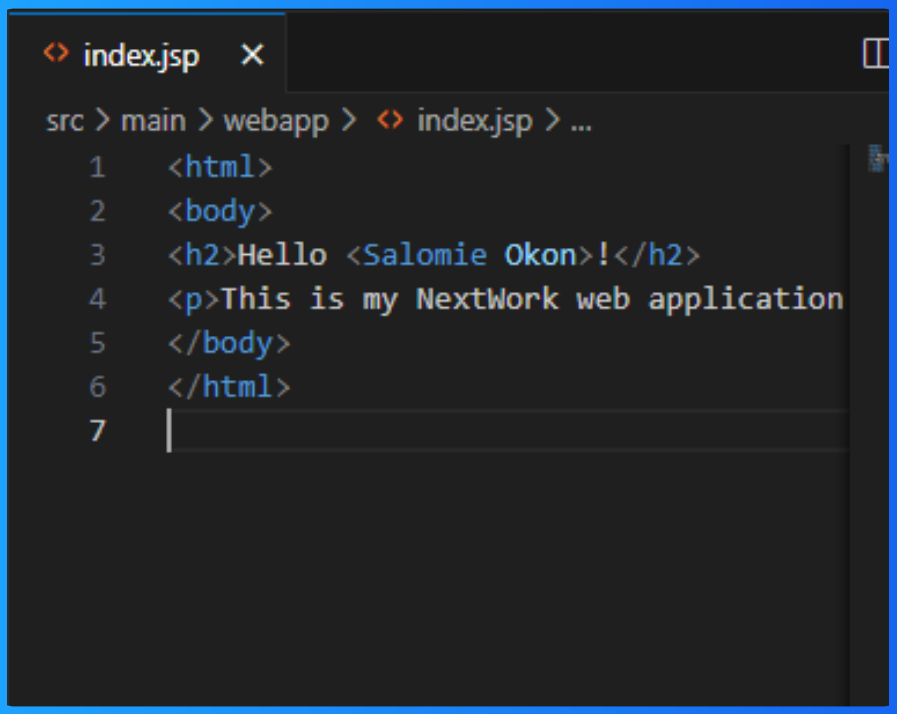
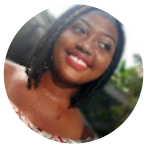
Set Up a Web App in the Cloud

Salomie Okon





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Introducing Today's Project!

What is VSCode and why is it useful?

I used it to connect remotely and securely to my EC2 Instance.

How I'm using VSCode in this project

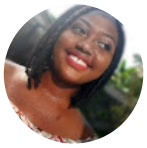
I used it to connect remotely and securely to my EC2 Instance.

One thing I didn't expect...

I didnt expect the break down of every single command to my understanding

This project took me...

1 day, I started this Project since yesterday, Lost count of the hours.



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Launching an EC2 instance

I started this project by launching an EC2 instance because I needed a virtual computer to compute my data and store my app files.

I also enabled SSH

SSH is a secure shell protocol that ensures that only authorized users have access to a server. I enabled SSH so that my data transferred between my virtual server and computer will be encrypted. It's safe and secure.

Key pairs

A key Pair is a key to your virtual computer that gives you access when needed. It is a set of security credentials that consists of a public key and a private key

Once I set up my key pair, AWS automatically downloaded a Network key Pair.

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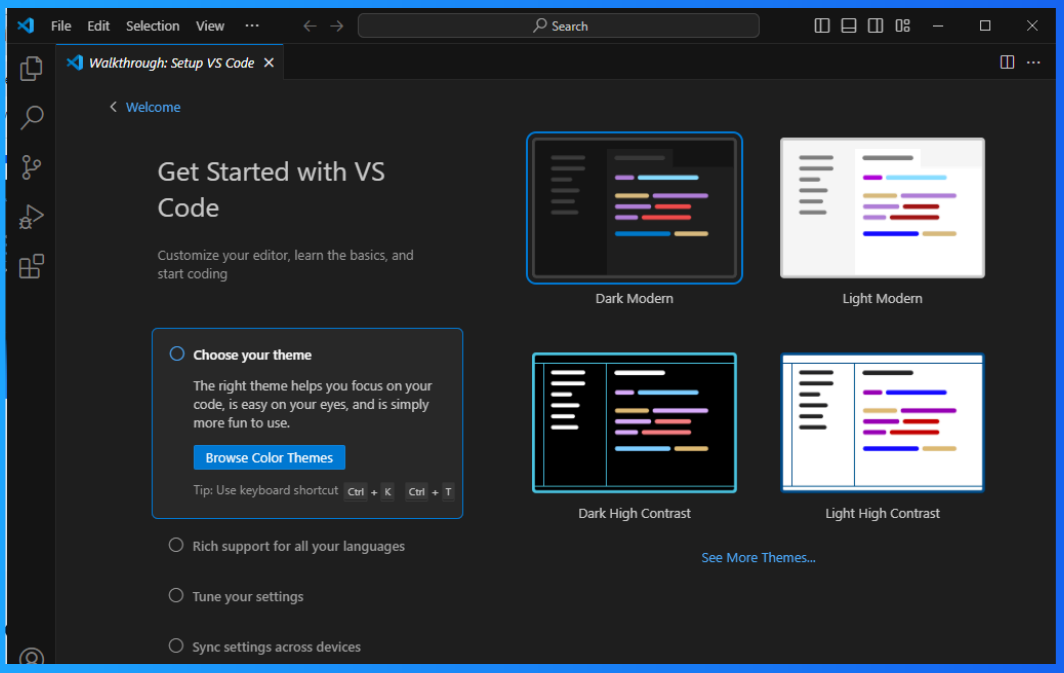
Set up VSCode

VSCode is a software that is used to write and edit code

I installed VSCode to connect to the EC2 Instance I earlier created.



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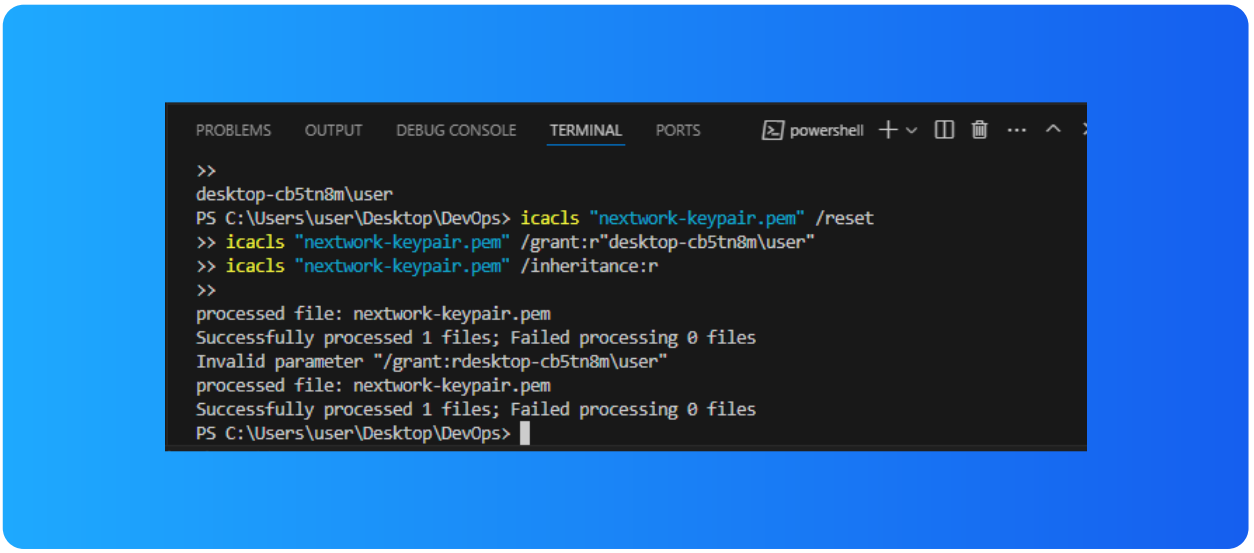
My first terminal commands

A terminal is a place where you can send commands to your computer.The first command I ran for this project was "cd ~/Desktop/Devops" meaning the command Directory,movement between folders,home directory and tells my terminal how to get to my folders

I also updated my private key's permissions by using my VScode Terminal . I ran the command below icacls "nextwork-keypair.pem" /reset >> icacls "nextwork-keypair.pem" /grant:r"desktop-cb5tn8m\user" >> icacls "nextwork-keypair.pem" /inheritance:r



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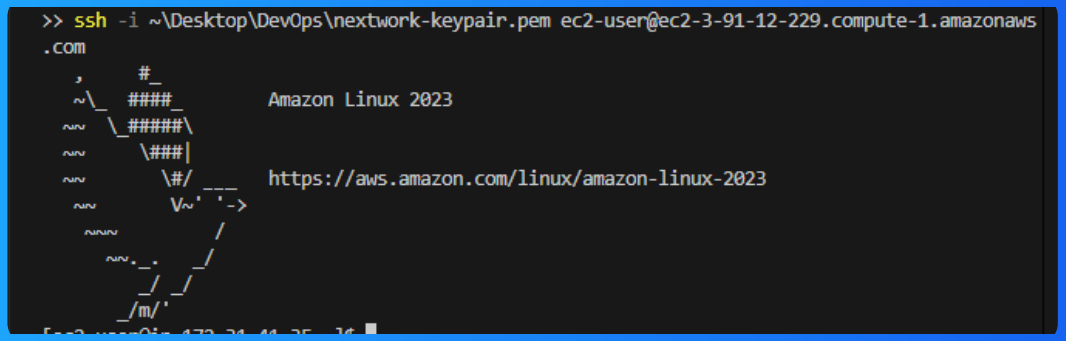
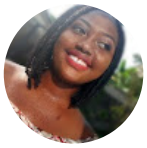
SSH connection to EC2 instance

To connect to my EC2 instance, I ran the command " >> ssh -i ~\Desktop\DevOps\nextwork-keypair.pem ec2-user@ec2-3-91-12-229.compute-1.amazonaws.com"

This command required an IPv4 address

A server's IPV4 DNS Internet Protocol Version 4 Domain Name Service, is the public address of your server over the internet.





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Maven & Java

What is Apache Maven?Apache Maven is a tool that helps developers build and organize Java software projects. It's also a package manager, which means it automatically download any external pieces of code your project depends on to work.

Maven is required in this project because,We'll use Maven to help us set up all the necessary web files to create a web app structure.

Java is a popular programming language used to build different types of applications, from mobile apps to large enterprise systems.

Java is required in this project because it will be used to generate/build our web app today

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Create the Application

I generated a Java web app using the command "mvn archetype:generate \ -DgroupId=com.nextwork.app \ -DartifactId=nextwork-web-project \ -DarchetypeArtifactId=maven-archetype-webapp \ -DinteractiveMode=false "

SSH, which is a secure way of conectinh I installed it to

Configuration details required to set up a remote connection include /Users/username/.ssh/config

```
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[INFO] project created from Old (1.x) Archetype in dir: /home/ec2-user/nextwork-web-project
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time: 9.107 s
[INFO] Finished at: 2024-11-21T12:53:52Z
[INFO] Final Memory: 18M/81M
[INFO] ------------------------------------------------------------------------
```

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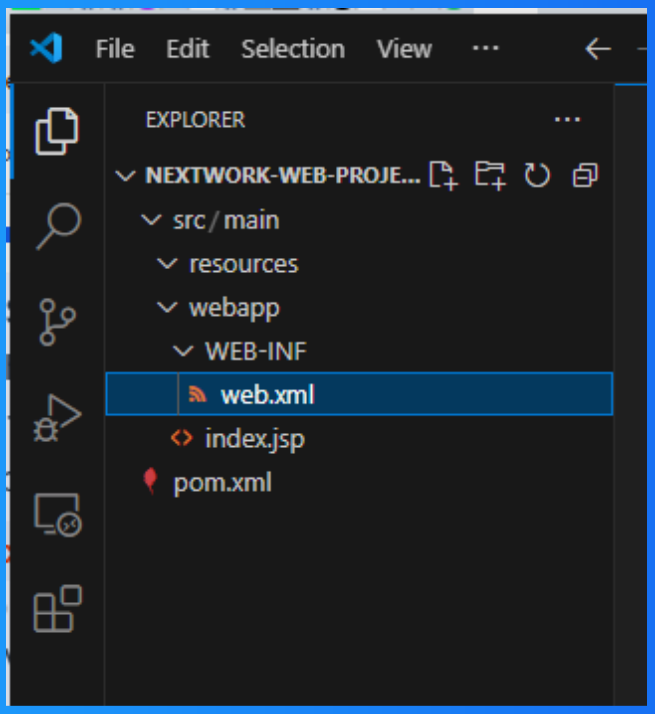
Create the Application

Using VSCode's file explorer, I could see the Source folder, Web app's files ,Javer script and JPS files and resources and Project Object Model File.

You can start your answer with 'Two of the project folders created by Maven are src and web app, which stores the Source Files and Web Apps files.



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Using Remote - SSH

index.jsp is a file used in Java web apps. It's similar to an HTML file because it contains markup to display web pages.

I edited index.jsp by simply typing my command on the file and saving with "Ctrl S".

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Everyone should be in a job they love.

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