

MANAGING A CI/CD PIPELINE WITH AWS CODE FAMILY

PROJECT 1/6

SETTING UP A WEB APP AND IDE IN THE CLOUD



M. Waqar Rehman



@wrehman1

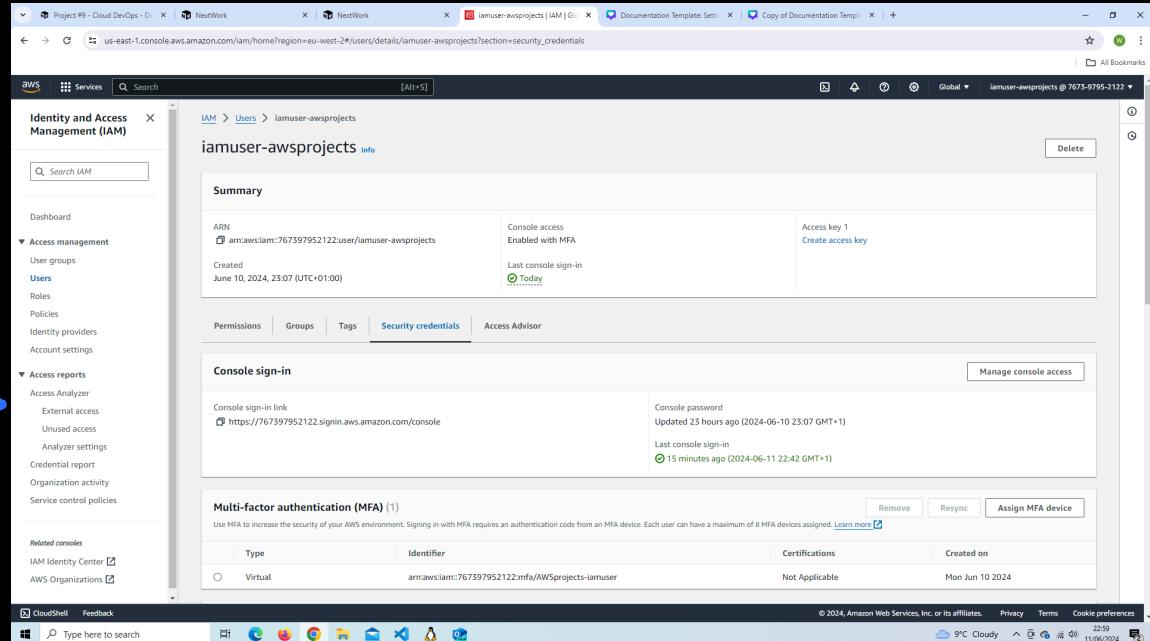


01

SET UP AN IAM USER

- An IAM user is a person or a computer that can do things on the AWS cloud.
- It's important to create IAM users because to prevent security breaches from arising in the root user account as that contains personal and billing information.
- I created an IAM user with Administrator Access.

A new IAM user set up for my AWS Account



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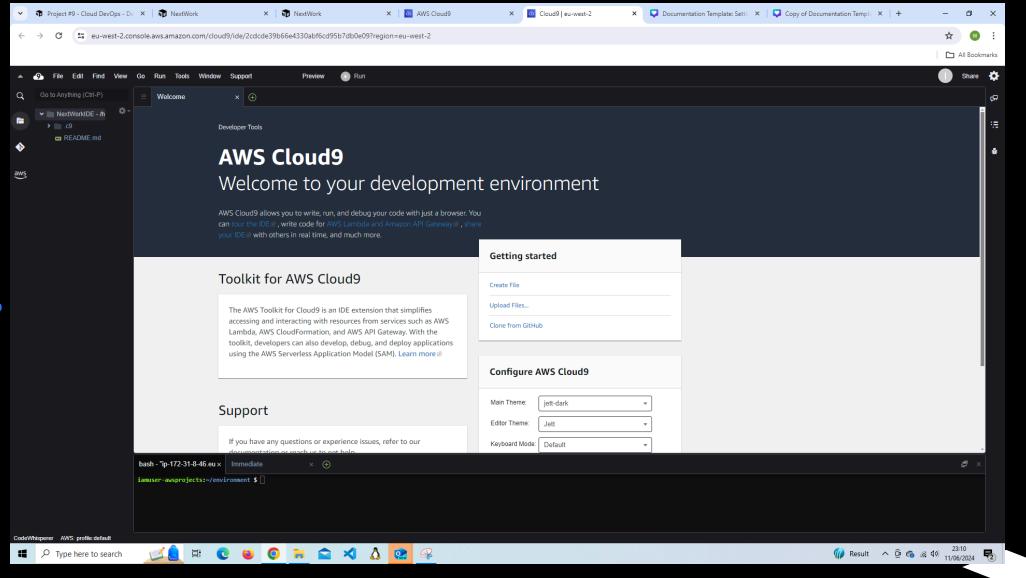


02

LAUNCH A CLOUD9 IDE

- An IDE is a general term for software that help developers write, debug, and manage code efficiently. It's like a toolkit that includes everything you need to build software, such as a text editor, tools for running and testing your code, and often much more.
- I used AWS Cloud9 to launch an environment. An environment means a set of requirements/resources required to run and build your software application.
- Using Cloud9 meant that this type of IDE can accessed through a web browser from anywhere, without needing to install heavy software on the compute.

My Cloud9 IDE!



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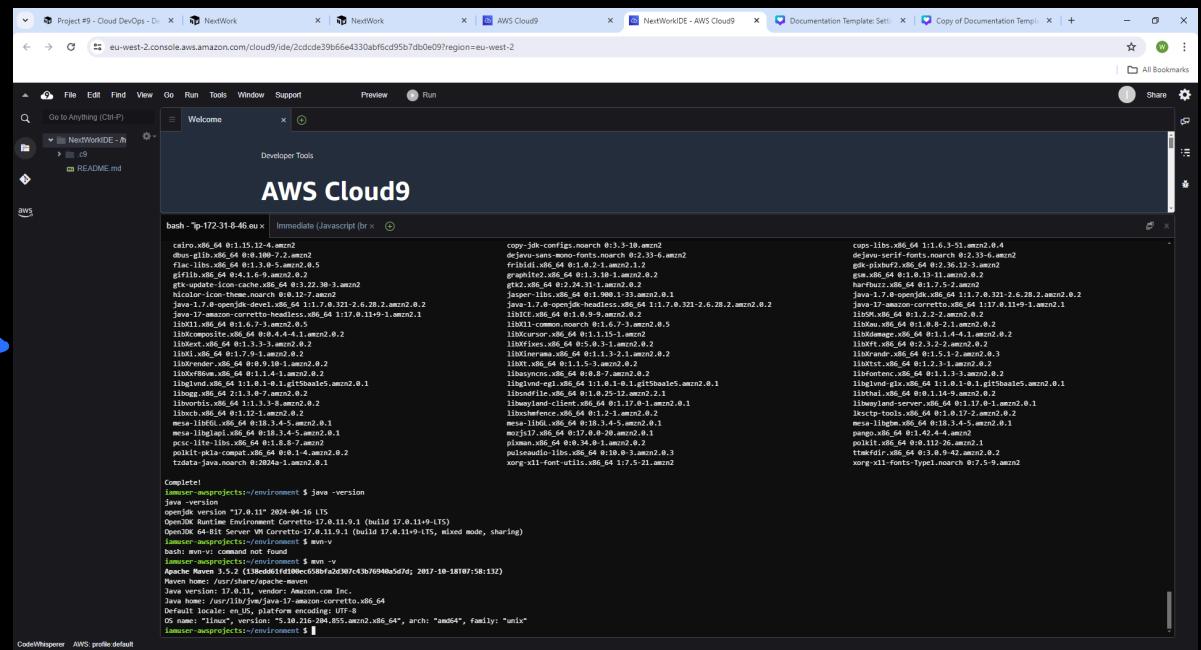


INSTALL MAVEN & JAVA

03

- Maven is a powerful tool that automates the building of software.
- Maven is required in this project because it transforms code written by developers into a final product. Maven automates this process.
- 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 Java is used in creating an application.
- The Java version I'm using for this project is 1.8.0.

I used terminal commands to install Maven and Java



```
bash -> ip-172-31-8-46 ~ xterm1 bash -> cd NextWork bash -> mvn -v Apache Maven 3.5.2 (5bed06f8d1ec6588c2a390743b769bb5d7d; 2017-10-18T07:56:13Z) Maven home: /usr/share/apache-maven Java home: /usr/lib/jvm/java-1.8.0-amazon-2017-09-19-17:45:43 UTC Java home: /usr/lib/jvm/java-1.8.0-amazon-2017-09-19-17:45:43 UTC Default locale: en_US, platform encoding: UTF-8 OS name: "Linux", version: "5.10.216.204.855.amzn2.x86_64", arch: "x86_64", Family: "unix" bash -> mvn -v [REDACTED]
```



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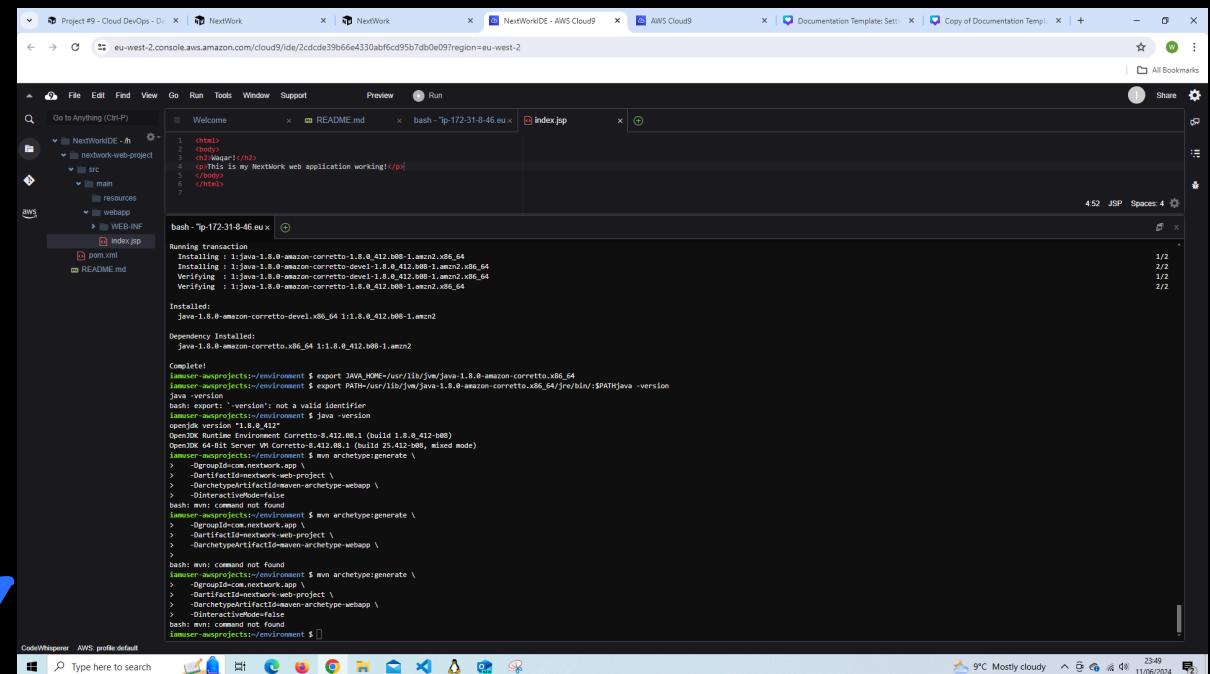
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CREATE THE APPLICATION

- To create a simple Java web app, I ran the command mvn archetype:generate.
 - Once the web app was created, my IDE's file explorer created a folder called nextwork-web-project.
 - To customise this web app's display, I updated index.jsp file to customize the HTML code to make it my own.

Web App structure set up by Maver



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MY KEY LEARNINGS

01

It's recommended to use an IAM user instead of the root user to do my projects because it prevents security from breached, this way your personal information is kept secured.

02

IDEs are useful for help developers write, debug, and manage code efficiently.

The service I used to set up an IDE was Cloud9 on AWS.

03

The benefit of using this service over traditional IDEs is can accessed through a web browser from anywhere, without needing to install heavy software on the compute.

04

Apache Maven is used in my project to transforms code written by developers into a final product. Maven automates this process.

05

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



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FINAL THOUGHTS...

- This project took me under 60 minutes.
- Delete **EVERYTHING** at the end! Let's keep this project free :)
- One thing I didn't expect was how easy it was easy and simple it was to use AWS Cloud9.
- In the next project of this DevOps series, I will use **AWS CodeCommit** to set up a repository for my web app's code.



M. Waqar Rehman

 @wrehman1

