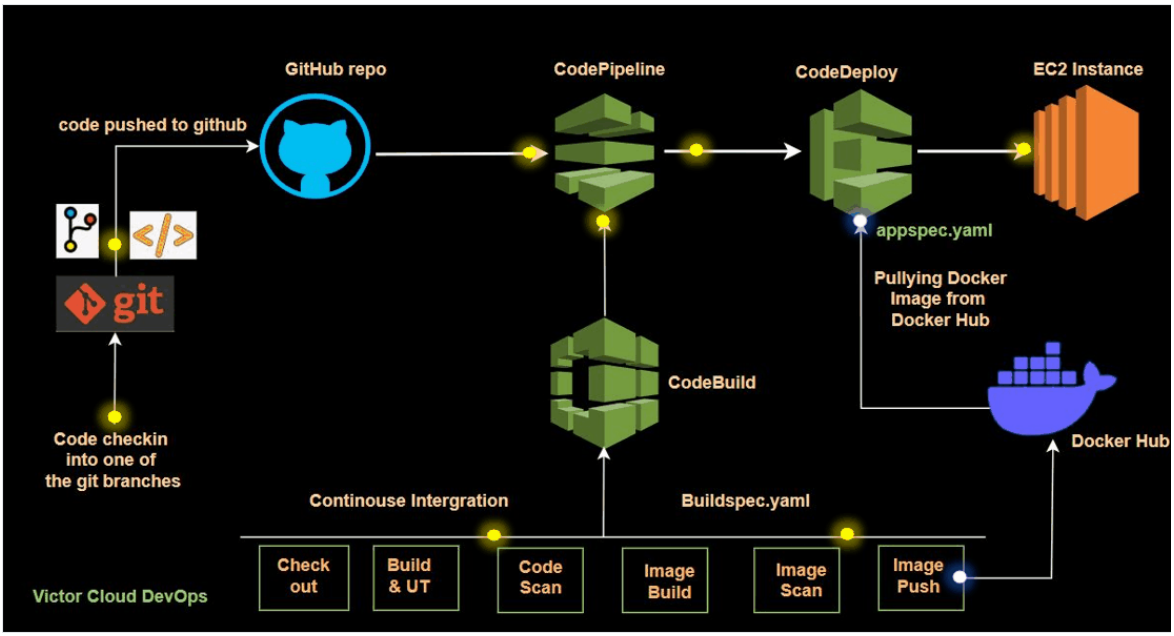
Deploy Java Project using Codepipeline



What is CodePipeline..??

AWS CodePipeline is a continuous delivery service provided by Amazon Web Services (AWS) that helps you automate the software release process for your applications.
with AWS codepipeline , you can model, Visualize, and automate the different stages of your software delivery process, from building and testing to deplotying and monitoring
It enables you to rapidly and reliably deliver features and updates to your custmores, while reducing the risk of errors and downtime.

First of all, what is the CI/CD? Following definition is this

A CI/CD pipeline is a series of automated steps that software development teams use to create, test, and deploy applications. CI/CD stands for continuous integration and continuous delivery or deployment.

- **continuous integration (CI)**:

  Continuous integration is the practice of frequently merging code changes into a central repository. This allows developers to identify issues early.

- **Continuous delivery (CD)**:

Automatically releases the application to its intended environment.

CI/CD pipelines help software development teams:

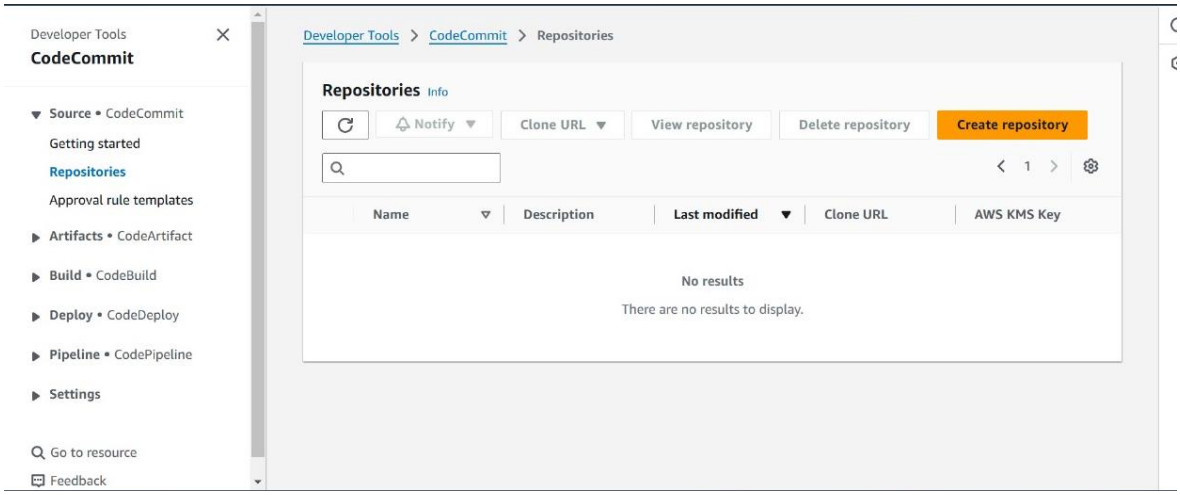
- Improve software quality
- Speed up delivery
- Reduce the risk of errors
- Detect bugs early
- Fix bugs promptly

Maintain a continuous cycle of software development and updates

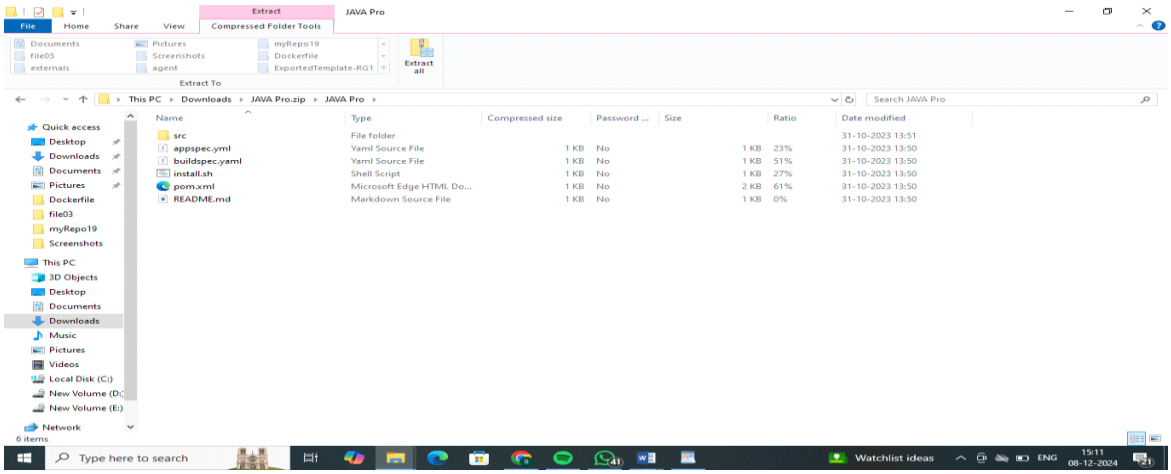
CI/CD is a foundational part of DevOps, which helps shorten the software development lifecycle.

Step1:

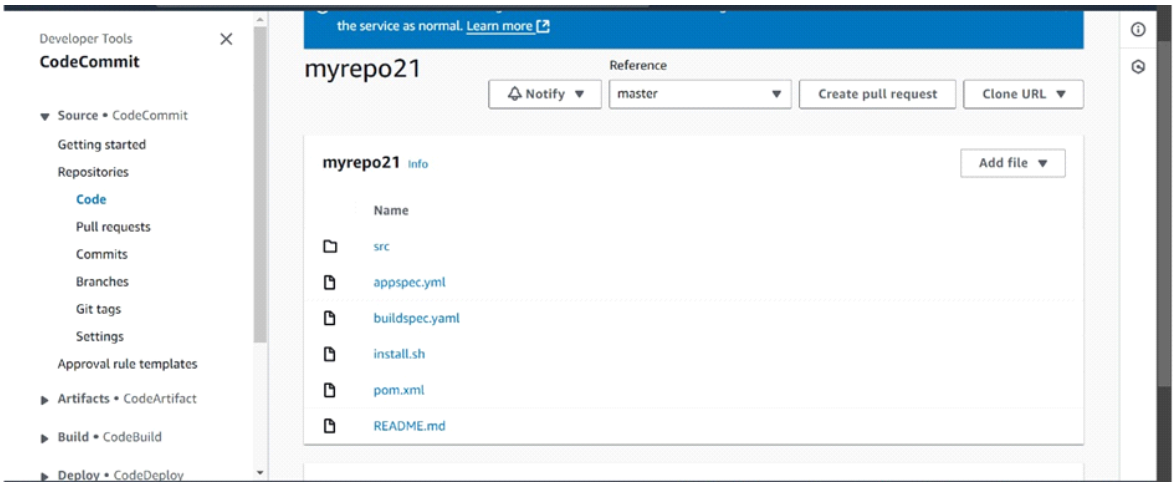
Create repository in code commit



- Create folder on desktop and clone the repo here
- Open the repo and paste the java project inside it

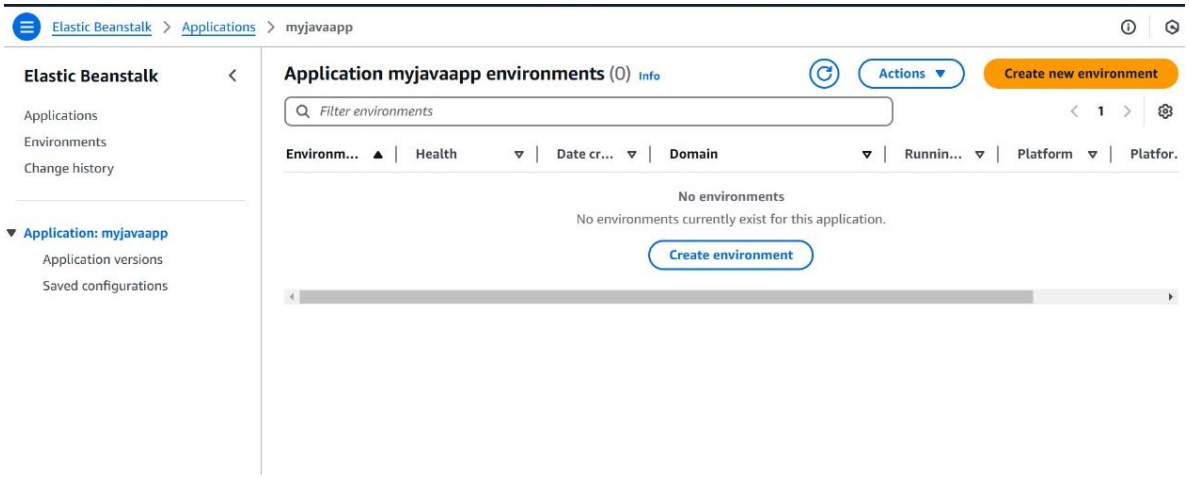


- cd repo
- git add .
- git commit –m “msg”
- git push

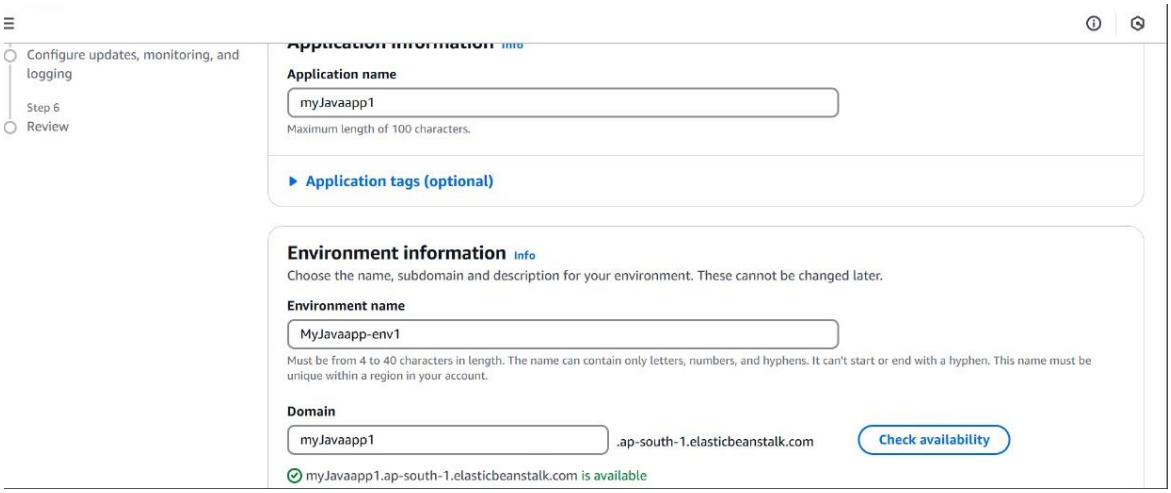


Step:2

now serach Elastic Beanstallk in services



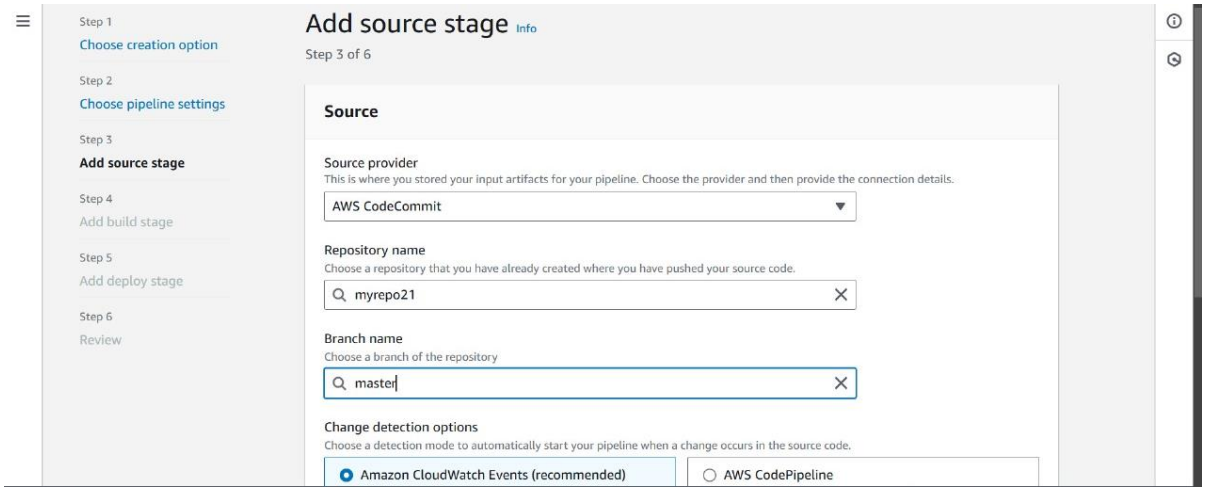
Create application – provide app name – myjavaapp—give enviroment name – domain as myjavaapp (check availability)-- choose platform as tomcat – choose platform number latest (tomacat) –next—



in services access choose create and new service role – select Default VPC -- tick the activated checkbox – tick all availability zone –next – under EC2 instance profile – next—select Default vpc—tick the activated checkbox – tick all availability zone – next—Under EC2 security group select Linux security group – remove the default instance type and t2.micro –(Note if t2.micro is not available then select t3.micro)—Next—select enhanced in monitoring – under cloudwatch custom matrices—select “instance health”—under cloudwatch custom matrices select ApplicationRequestTotal—Next—submit

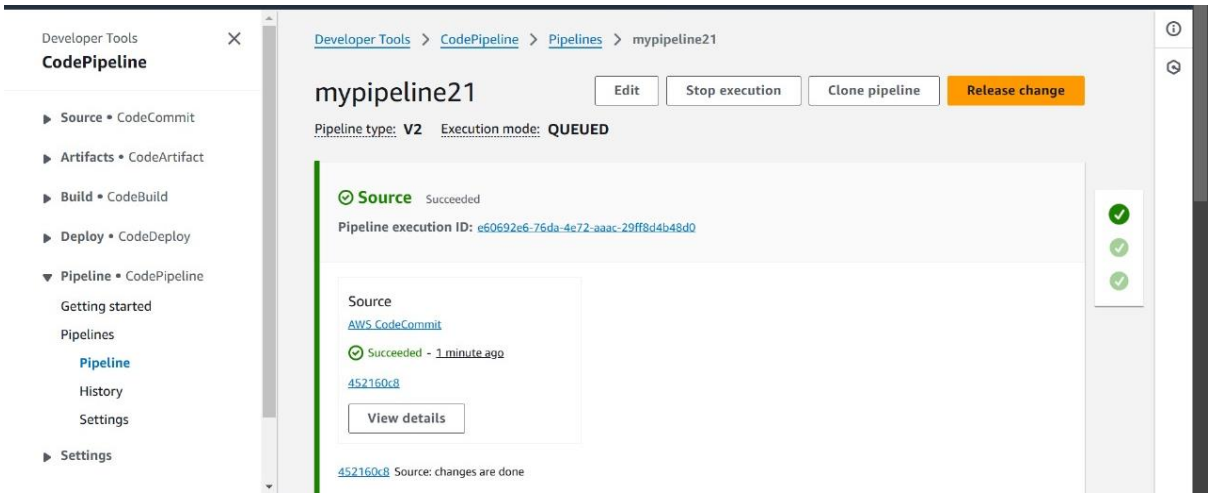
Step:3

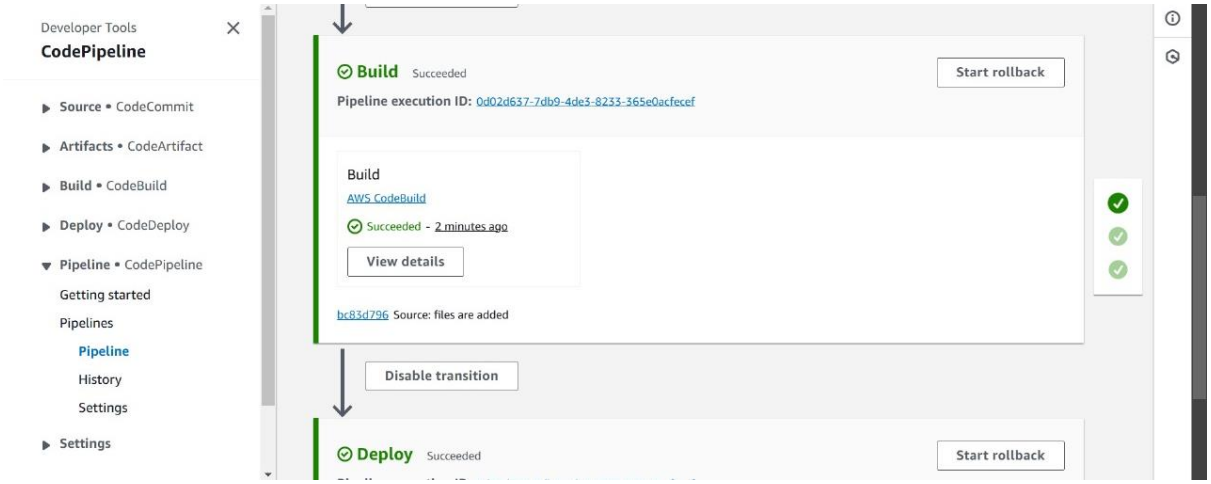
Search code pipeline—create pipeline –provide name – next—select repository name and branch name as master – next—



under build provider AWS code build—click on create project—under new open window provide the project name – os as Linux –under build spec select us build spec file—untick the cloud watch logs—continue to code pipeline – next—under deploy provide – select AWS elastic beanstalk – select application name and enviorment name—next.

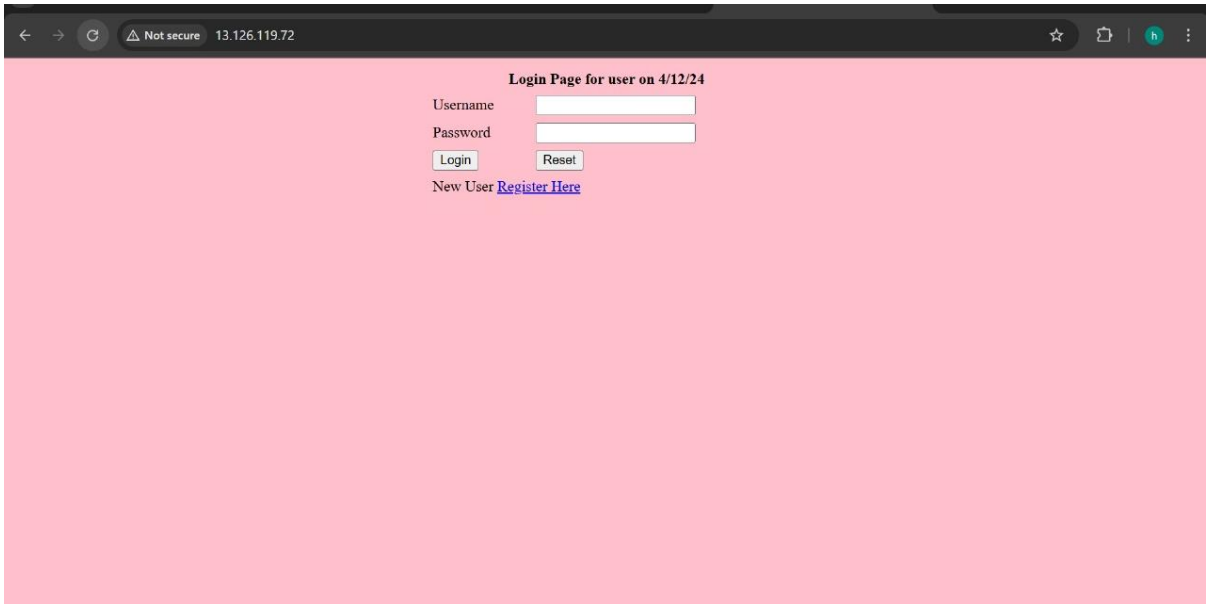
This is not actually a step. Just shows us all the settings we selected previously in each stage. Make sure everything is okay and click on create pipeline
Now you can see your pipeline and it starts automatically when we create.





now search ec2 under services and copy paste the public IP of instance in new tab

edit the index file in remote repo – go in repo name /src/main/webapp/index.jsp—select/edit and changes something – provide author name and email address and message –commit changes—after success refresh the index page – now date will be updated — Your web application should live now.


Not secure
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Login Page for user on 4/12/24
Username
Password
Login
Reset
New User Register Here