Mini Project – Set up NodeJS environment

Using the resources and lessons from this week, you are being tasked with setting a development environment for a NodeJS app. You are not expected to know NodeJS and will need to do some researching into it.

You have been asked to setup the following:

- VPC with 3x public subnets, each with 400+ available IP addresses

- MySQL RDS with configured credentials

- 1x Controller EC2 (has Terraform and ansible installed to set up environment)

- 1x CI Server EC2 with ports open for HTTP, MySQL, Jenkins and SSH from controller EC2

- 1x Deployment EC2 with public HTTP and MySQL

- CI Server should have Docker, Jenkins, unzip, wget and curl installed

- CI Server needs to add Jenkins to sudo group and add user to Docker group

- Deployment EC2 should run the app at this repo https://gitlab.com/Reece-Elder/devops-m5-nodeproject/-/tree/main

You will be tasked within groups to do this, and you should be using a version control system to push your code up to. Within your VCS you should take advantage of proper Feature Branch Management and merge requests.

Stretch goal – Use knowledge from Jenkins and Docker to containerise the NodeJS application as part of the Jenkins build.