DEVOPS TASK 4

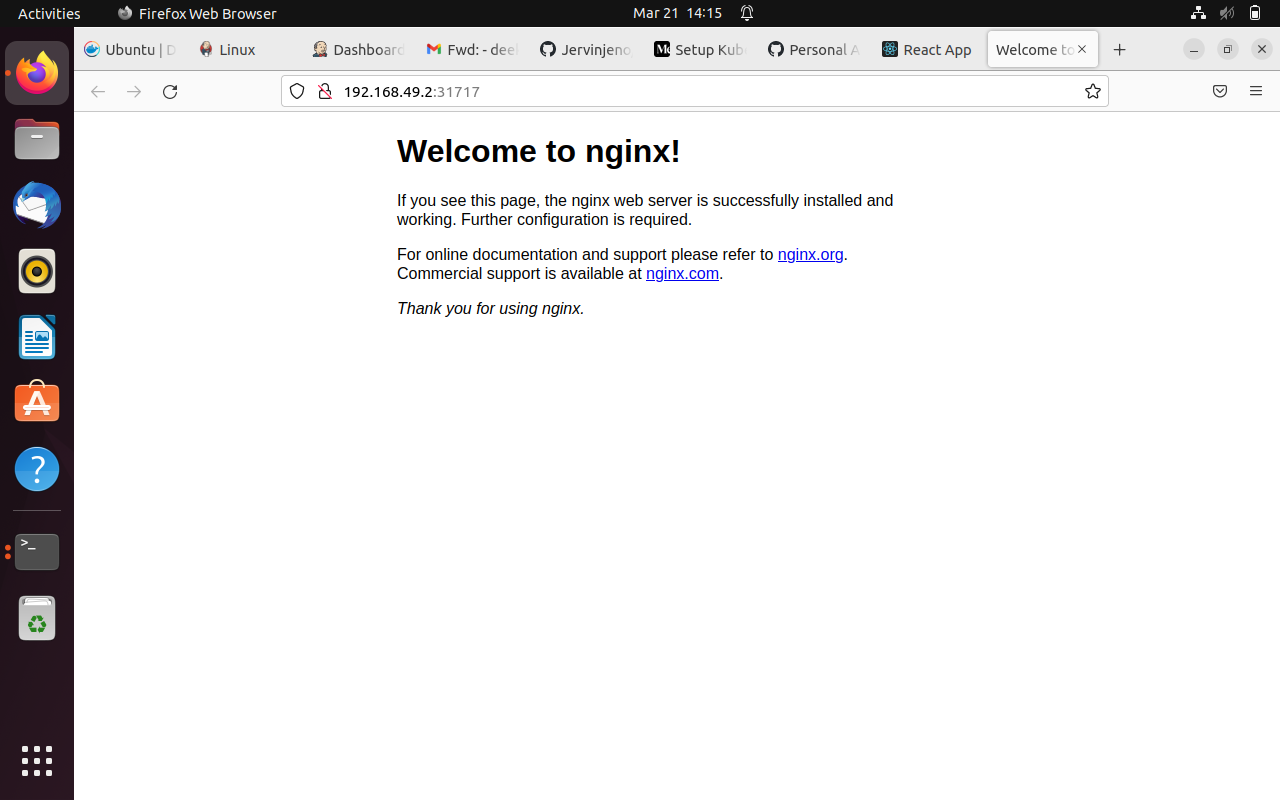
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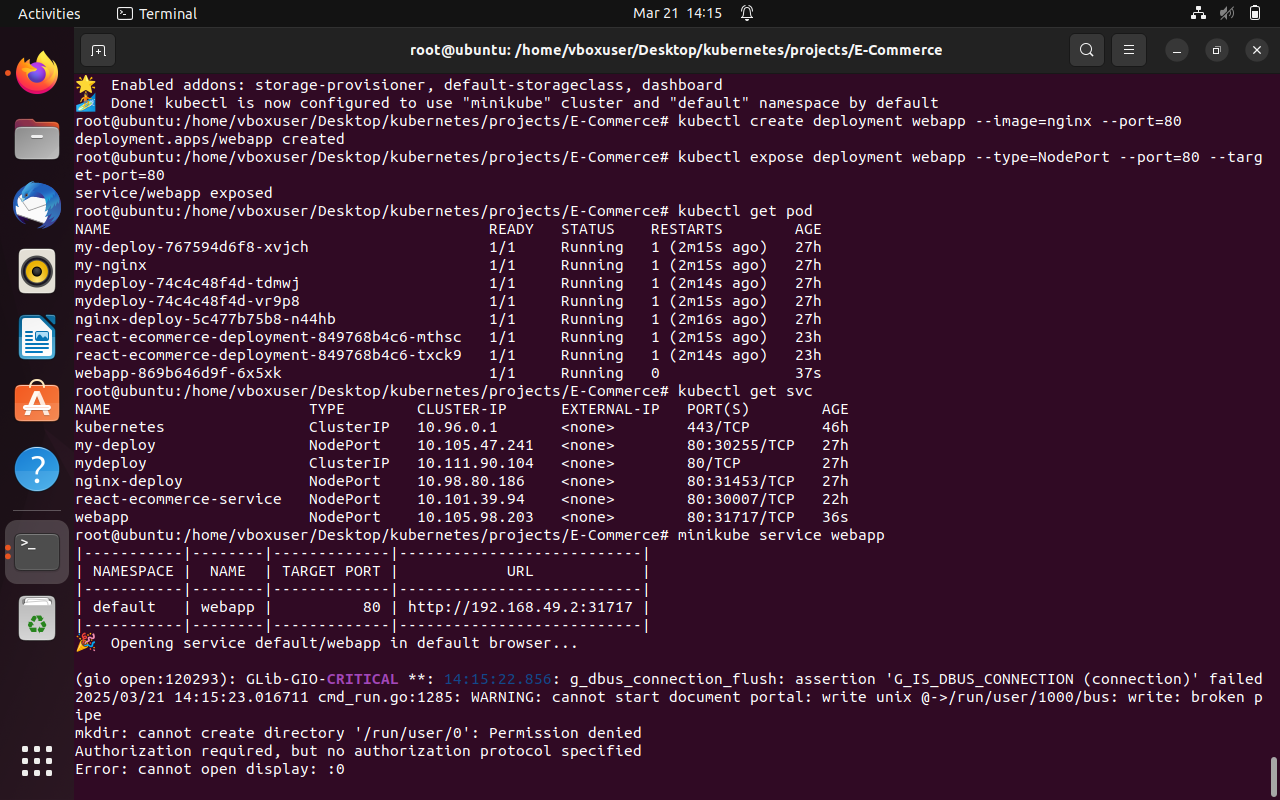
22CDR013

**PROCEDURE:**

* Start Minikube
  + Minikube is a lightweight Kubernetes tool that runs on your local machine.
  + It is initialized using the Docker driver, allowing Kubernetes to run as containers inside Docker.
* Deploy the Application
  + A Kubernetes deployment is created to manage an nginx application.
  + This ensures the app is running with the desired number of replicas.
* Expose via NodePort
  + By default, Kubernetes pods are not accessible externally.
  + The NodePort service is used to assign a specific port, making the application accessible from outside the cluster.
* Check Pods
  + After deploying the application, verifying the running pods ensures that the deployment was successful.
  + If pods are in a Running state, the app is correctly deployed.
* Get Service Details
  + Kubernetes assigns a NodePort, which is needed to access the application.
  + Checking the service details helps find the correct port number.
* Access the App
  + The application can be accessed via Minikube service URL or using curl in the command line.
  + This confirms that the deployment is working properly.
* Monitor Pods
  + Continuously monitoring the pod status ensures stability.
  + If a pod crashes or restarts frequently, further troubleshooting is needed.
* View Logs
  + Application logs provide detailed information about errors or issues.
  + Checking logs helps in debugging any failures.
* Review Commands
  + Keeping track of executed commands allows easy troubleshooting.
  + It helps in reproducing the steps in future deployments.

**SCREENSHOTS:**



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