**Devops Real time project by Abhishek**

Project Details:

Welcome to the OpenTelemetry Astronomy Shop Demo

This repository contains the OpenTelemetry Astronomy Shop, a microservice-based distributed system intended to illustrate the implementation of OpenTelemetry in a near real-world environment.

Our goals are threefold:

* Provide a realistic example of a distributed system that can be used to demonstrate OpenTelemetry instrumentation and observability.
* Build a base for vendors, tooling authors, and others to extend and demonstrate their OpenTelemetry integrations.
* Create a living example for OpenTelemetry contributors to use for testing new versions of the API, SDK, and other components or enhancements.
* We've already made huge progress, and development is ongoing. We hope to represent the full feature set of OpenTelemetry across its languages in the future.
* If you'd like to help (which we would love), check out our contributing guidance.
* If you'd like to extend this demo or maintain a fork of it, read our fork guidance.

Here are the main steps to undergo the implimentation of this ecommerce project with resume preparation at the end

End to End DevOps Implementation on a E-Commerce project with Resume preparation and Interview Q&A.

The project covers:

1. Introduction to the project
2. A detailed overview of the project
3. AWS Setup and Configuration
4. IAM, IAM role setup for the project
5. EC2 Instance creation
6. Security group and Inbound traffic rule configuration
7. Docker Installation and Configuration
8. Kubectl Installation and Configuration
9. Terraform Installation and Configuration
10. Docker compose setup
11. Run the project locally using Docker compose
12. Containerization of the project
13. Build and Run the Docker cotnainers
14. Terraform lifecycle
15. Configure AWS for Terraform
16. Terraform statefile management
17. Terraform backend configuration
18. Terraform state locking
19. Terraform project for backend implementation
20. Terraform implementation for VPC and EKS
21. Terraform Kubernetes cluster configuration
22. Kubernetes manifest files implementation
23. Kubernetes deployment
24. Kubernetes services
25. Kubernetes Ingress config
26. Kubernetes Ingress controller setup
27. Kubernetes storage class
28. Kubernetes pv and pvc setup
29. Running the project on Kubernetes
30. Verify the project on Kubernetes
31. Setup a custom domain
32. Setup route53 for the custom domain
33. Route 53 configuration for the EKS cluster
34. Ingress setup with the custom domain
35. Gitopsificaiton of the project
36. Argo CD install and config
37. Deploy the project using Argo CD
38. Implement continuous integration for the project
39. GitHub Actions setup for a micro service of the project
40. CI/CD for the project
41. GitHub Action with Argo CD for end to end CI/CD
42. Resume preparation for the project
43. Day to day tasks for the project in the resume
44. Interview questions for the project
45. Key takeaways of the project.