



Figure 1.1 Jenkins CI/CD Pipeline for Serverless Application

#### Workflow:

1. The Jenkins Job will be triggered by GitHub when we push the code into the GitHub. The GitHub account should be linked to the AWS .
2. Jenkins will always get triggered whenever we push any update on the Lambda function, this pipeline and follow the workflow until it is deployed to the AWS>
3. AWS Service Roles is also needed to be created and permissions to make each service access each other. The services roles would be for Lambda,API Gateway,S3 Bucket, IAM and CloudFormation
4. AWS can provide Dynamo DB Functionality to host the database details depending on the workflow implementation.

The Five (5) Metrics to build this serverless function product on depends on the visualization tools e.g . Kibana and Grafana. The metrics to look at are :

1. Error rates / Count
2. Failed Deployments
3. Deployment time
4. Availability of products
5. Application usage, traffic and Performance