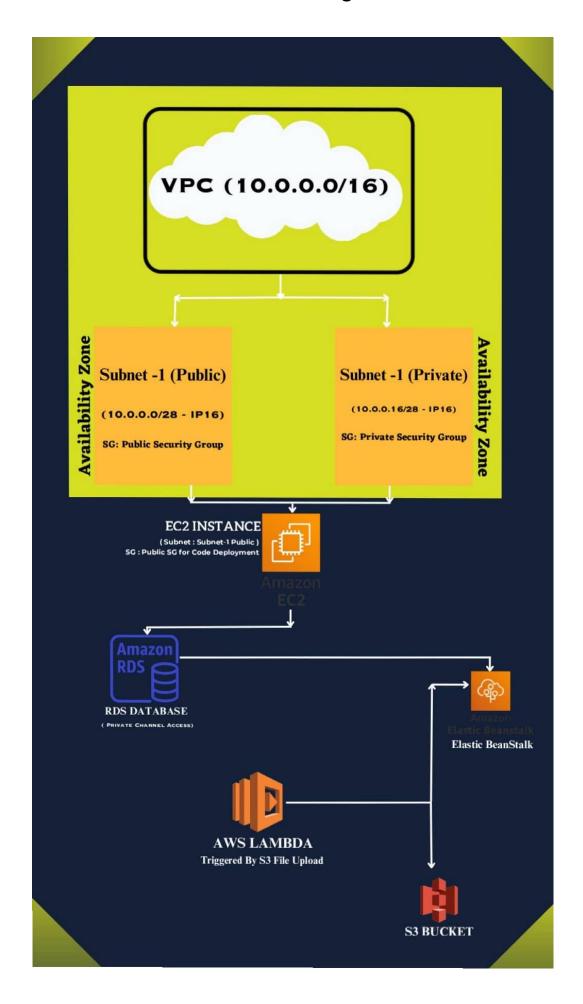
Architecture Diagram



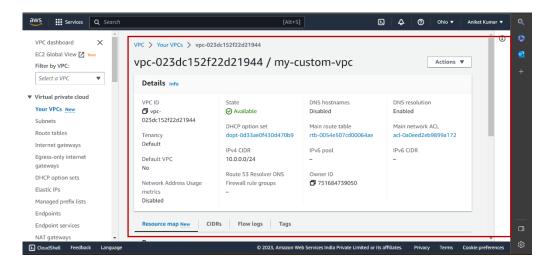
The provided architecture diagram showcases the various components and their relationships within an AWS infrastructure:

- 1. AWS Account: This represents the AWS account used for the project. An AWS account is a unique identifier associated with an individual or organization and serves as the foundation for provisioning and managing AWS resources.
- 2. Virtual Private Cloud (VPC): The VPC is a logically isolated virtual network environment within AWS. It allows you to define your own IP address range, subnets, route tables, and network gateways. The VPC acts as the networking foundation for the project, providing secure and isolated connectivity for the other components.
- 3. Subnet 1 (Public): This is a public subnet within the VPC, identified by the IP range 10.0.1.0/28. Public subnets are associated with a route table that has an internet gateway attached, enabling inbound and outbound internet traffic for the resources deployed within this subnet.
- 4. Subnet 2 (Private): This is a private subnet within the VPC, identified by the IP range 10.0.2.0/28. Private subnets are associated with a route table that does not have an internet gateway attached, restricting inbound internet traffic. This subnet is typically used for resources that require limited or no direct access from the internet.
- 5. EC2 Instance: An EC2 (Elastic Compute Cloud) instance is a virtual machine running within the AWS cloud. In this architecture, an EC2 instance is deployed in Subnet 1 (Public) and hosts the application code. It has access to the internet and can communicate with the RDS database instance via a private channel.
- 6. RDS Database: RDS (Relational Database Service) is a managed database service provided by AWS. It represents the database instance used by the application code. In this architecture, the RDS database instance is deployed in a private subnet (Subnet 2) to restrict direct internet access. The EC2 instance communicates with the RDS database via a private channel, ensuring secure and controlled access to the database.
- 7. Elastic Beanstalk: AWS Elastic Beanstalk is a platform-as-a-service (PaaS) offering that simplifies the deployment and management of applications. In this architecture, Elastic Beanstalk is used to deploy the application code. It provides an auto-scaling environment, automatically handling capacity provisioning and load balancing for the application.
- 8. Lambda: Lambda is a serverless computing service provided by AWS. It allows you to run code without provisioning or managing servers. In this architecture, a Lambda function is

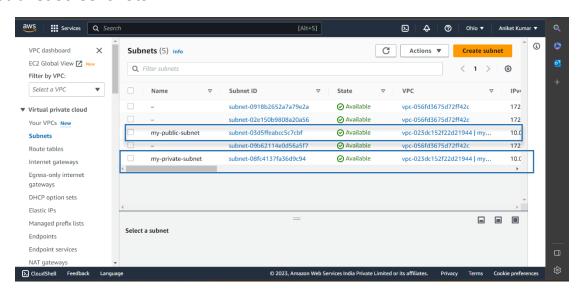
- 9. triggered by file uploads to the S3 bucket. Upon trigger, the Lambda function executes and performs a specific action, such as printing the name of the uploaded file. Lambda functions are typically used for event-driven and compute-intensive tasks.
- 10. S3 Bucket: Amazon S3 (Simple Storage Service) is a scalable object storage service provided by AWS. It is used for storing and retrieving large amounts of data. In this architecture, an S3 bucket is utilized for file storage. Whenever a file is uploaded to the S3 bucket, it triggers the Lambda function, initiating the desired action.

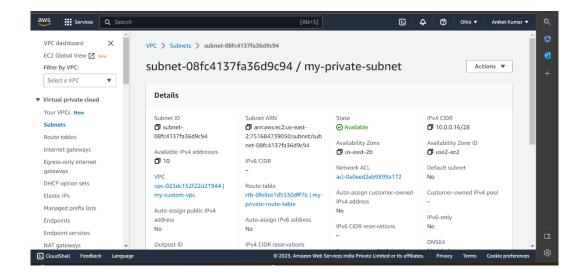
The following screenshots illustrate the above diagram.

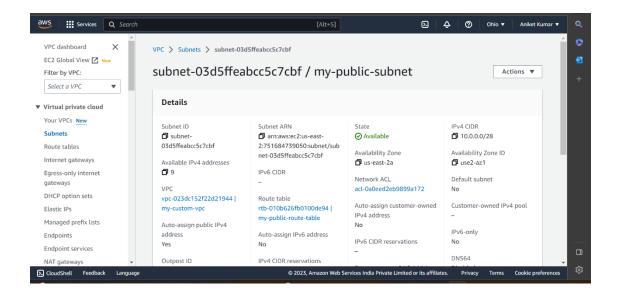
VPC screenshots:



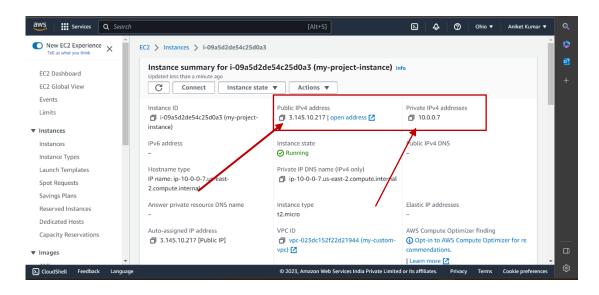
Subnet Screenshots



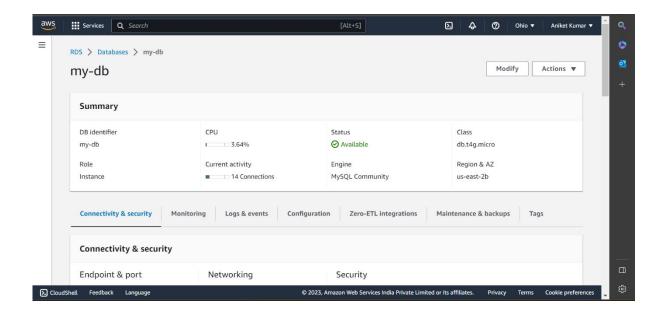


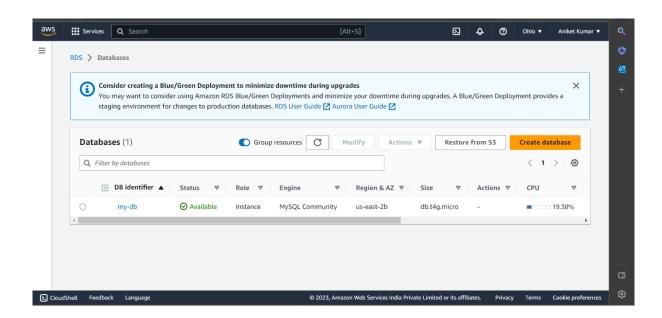


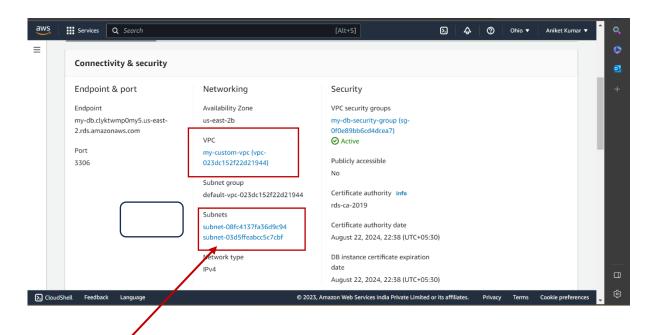
EC2 Screenshots:

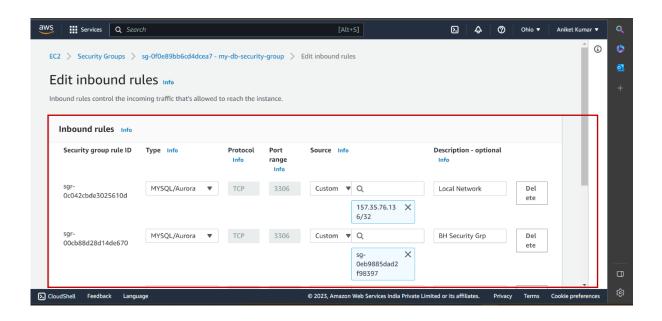


RDS Screenshots:



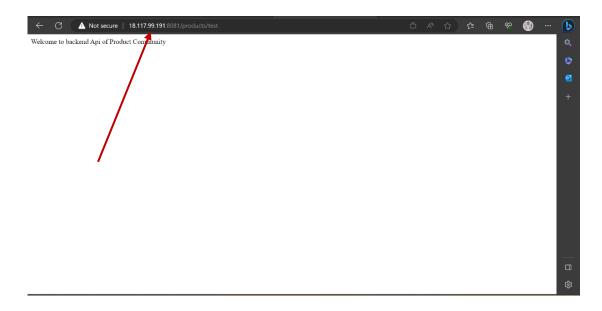


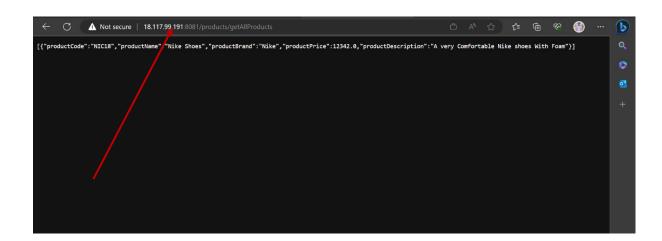




Project Running on EC2 Instance:

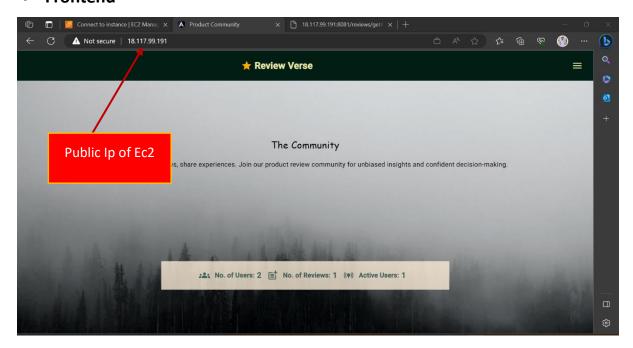
• Backend:

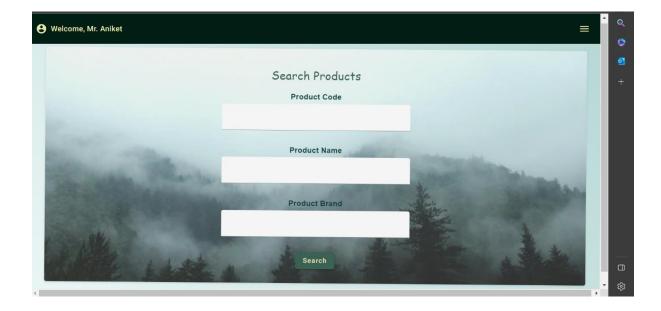


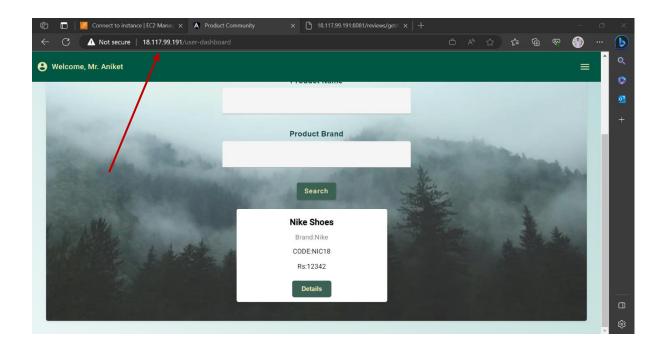


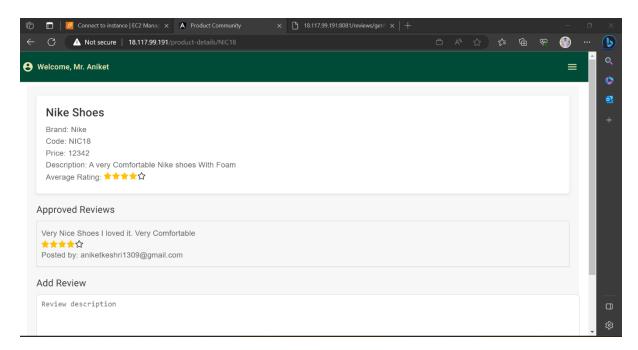


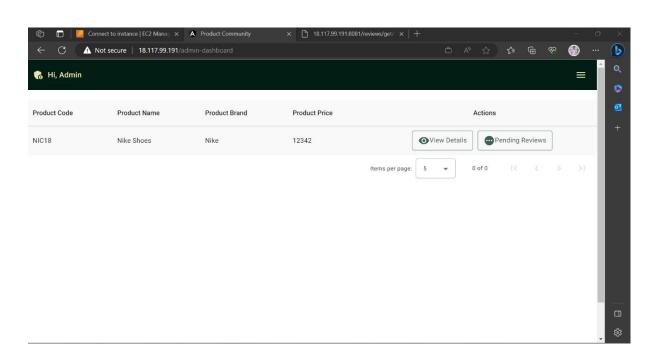
• Frontend

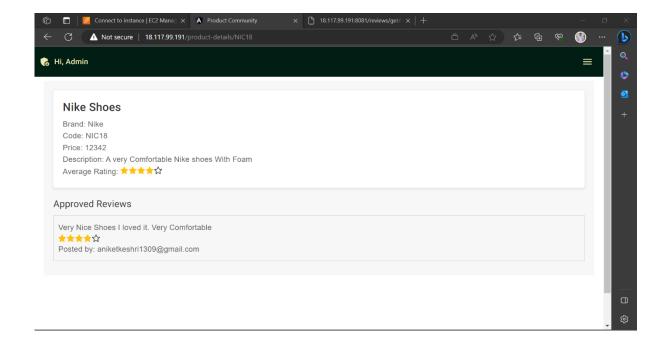




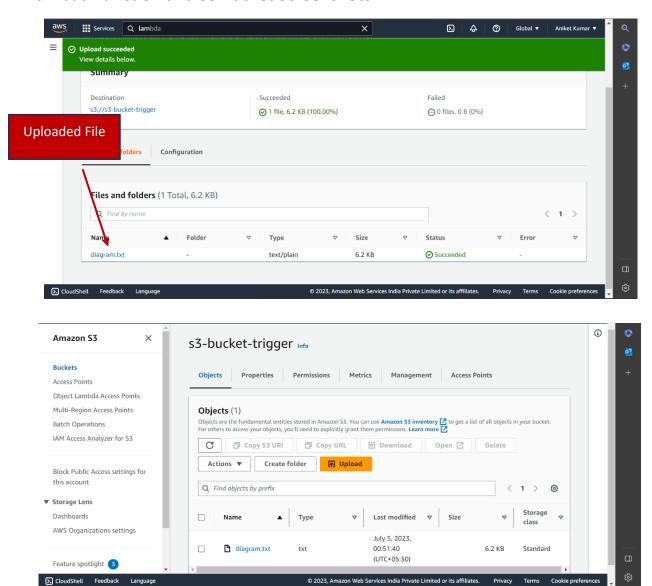


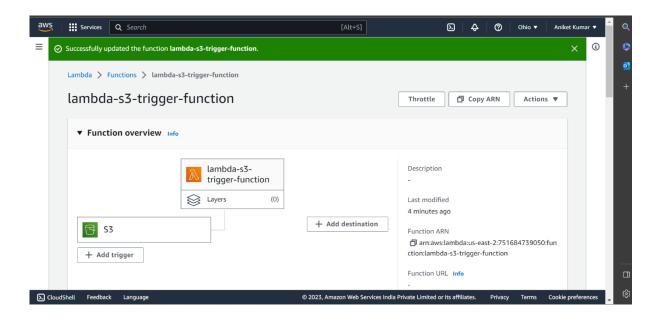


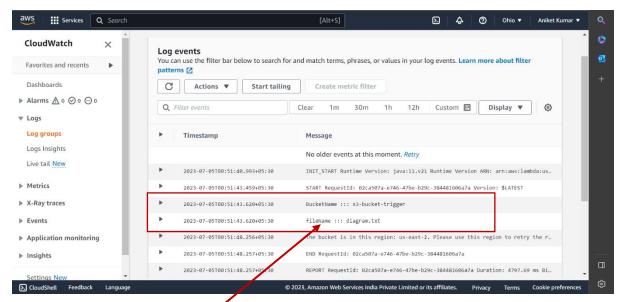




Lambda Function and S3 Bucket Screenshots



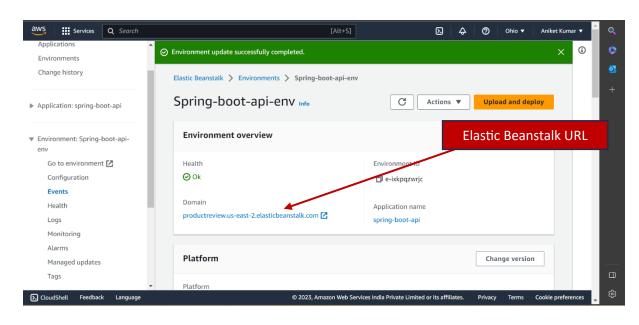


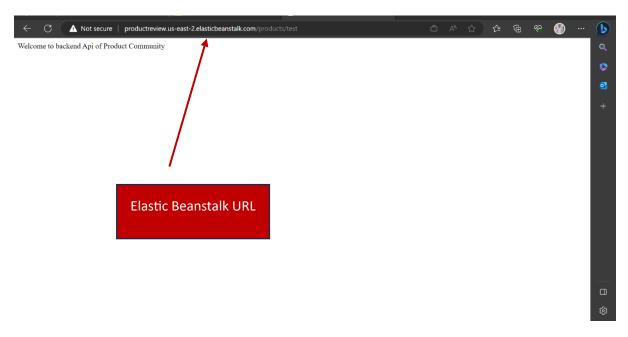


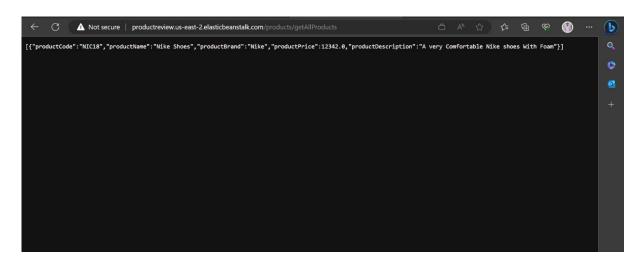
Here The Jambda function prints Name of the File

Uploaded File Name That Function is Printing

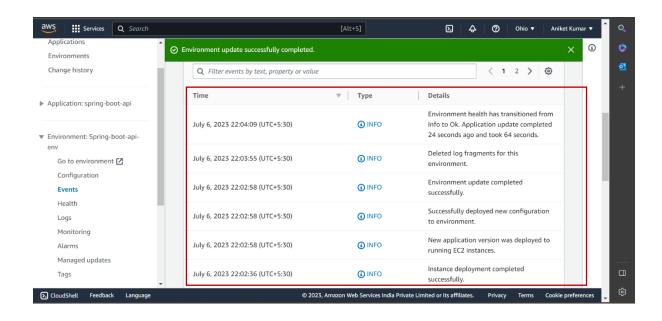
Elastic Beanstalk Screenshots:

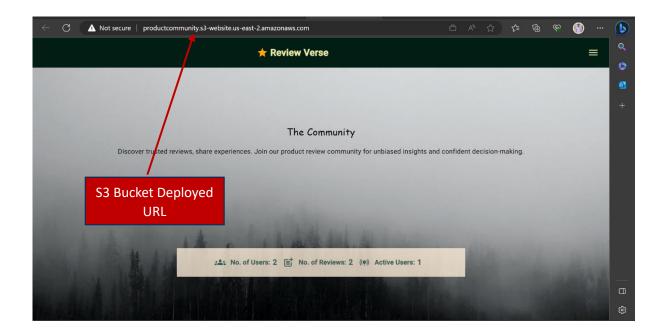


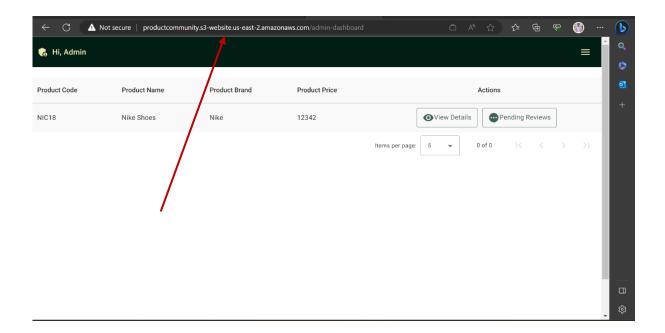


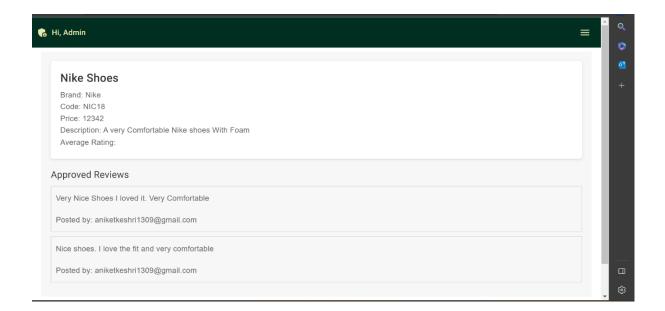








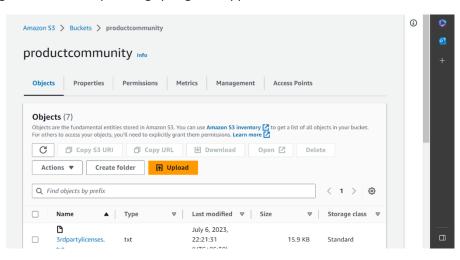




S3 Bucket Screenshots:

Here I uploaded my angular web after uploading springboot application on

Elastic beanstalk.



| | | | , | |
|-----------------------------------|------|--|----------|--------------------|
| Name 🔺 | Type | ▼ Last modified ▼ Siz | ze ▽ | Storage class ▼ |
| index.html | html | 22:21:34 (UTC+05:30) | 7.4 KB | Standard |
| main.951693113 0484185.js | js | July 6, 2023, 22:21:37 (UTC+05:30) | 743.4 KB | Standard |
| polyfills.81a9da5 5235c1fe7.js | js | July 6, 2023, 22:21:39 (UTC+05:30) | 33.1 KB | Standard |
| runtime.68c8c44 | js | July 6, 2023, 22:21:41 | 930.0 B | Standard |

