# Cognito Email Verification Flow

This project delivers a fully serverless user authentication and email verification flow using **Amazon Cognito**, enabling users to register with their email, receive a verification code, and confirm their identity. Upon successful verification, email data is processed and stored using an **AWS Lambda** function and **Amazon DynamoDB**. The entire solution is deployed with **AWS Amplify**, integrated into a **CI/CD pipeline through GitHub** for automated deployments. This cloud-native architecture showcases secure, scalable identity management and event-driven backend processing while following best practices in serverless development, version control, and continuous delivery

2. Technologies Used

Technology	Purpose
Amazon Cognito	User sign-up, authentication, and email verification management
AWS Lambda	Serverless backend function to process and store user email data
Amazon DynamoDB	NoSQL database for storing verified user emails securely
AWS Amplify	Hosting, deployment, and CI/CD pipeline connected to GitHub
GitHub	Source code repository and version control, triggers Amplify builds

Architecture

Amplify

Lambda

Cognito

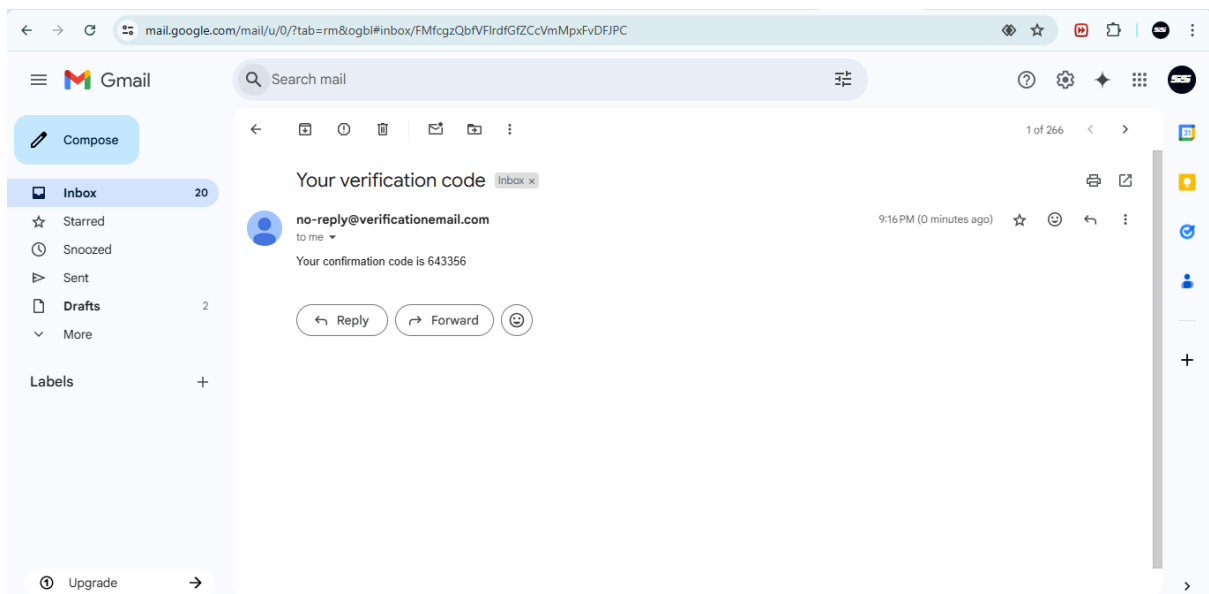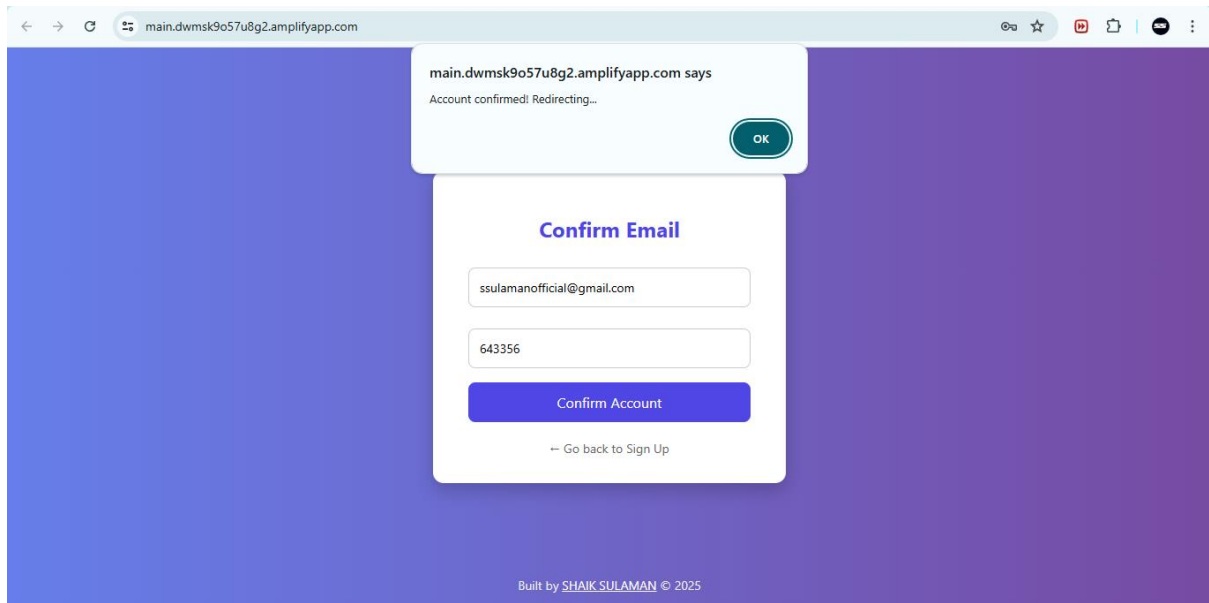Dynamo DB

IAM Roles

USER
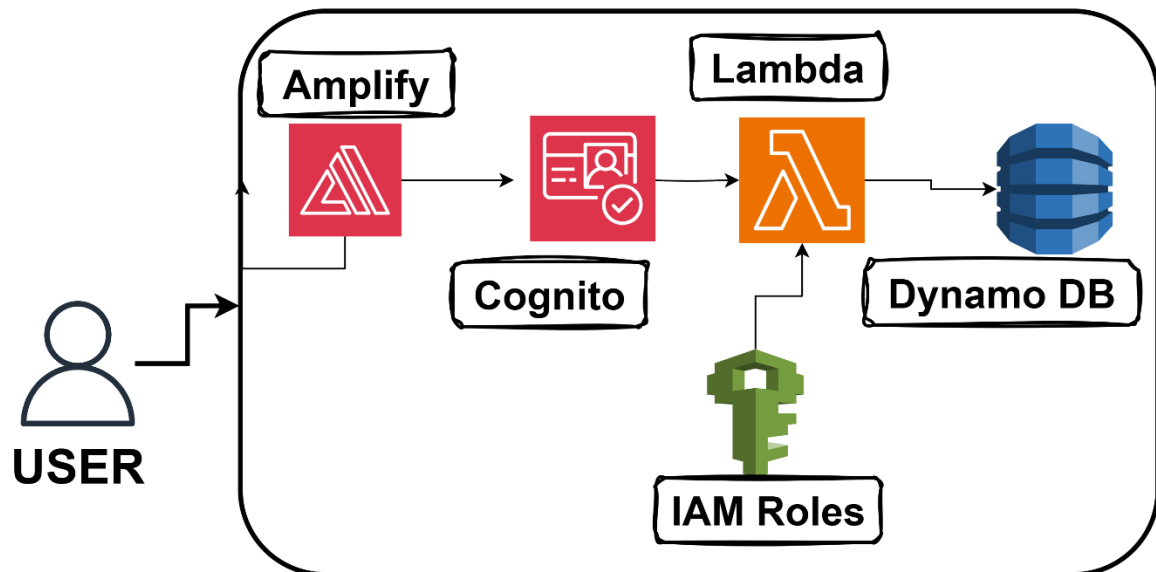
RESULT:-

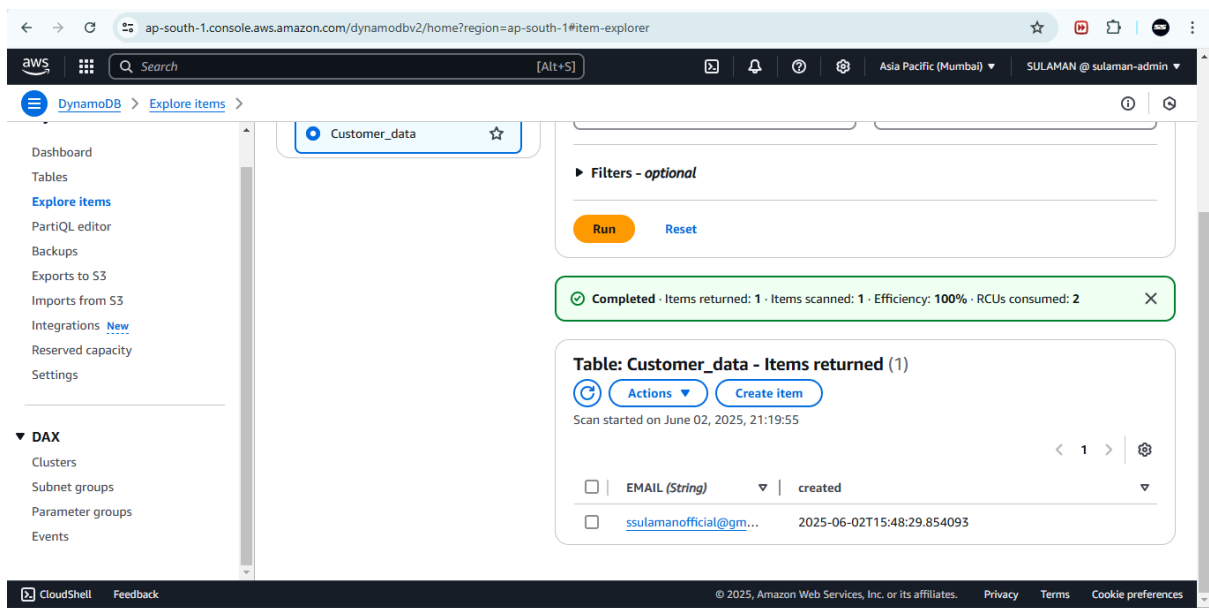1) Frontend sign up with password complexity
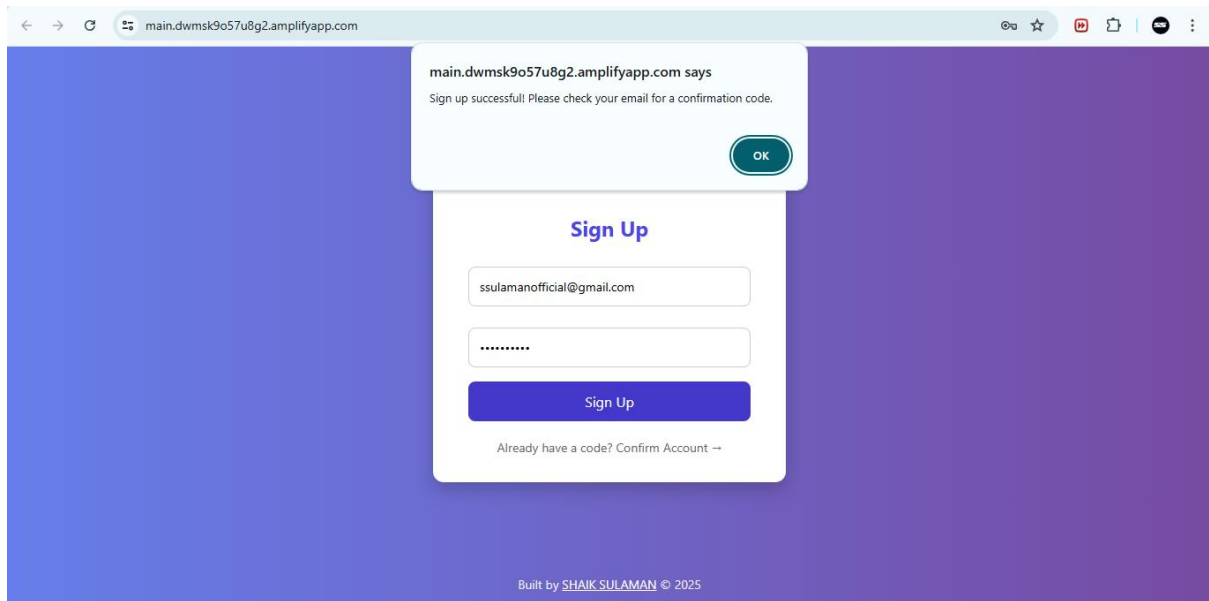
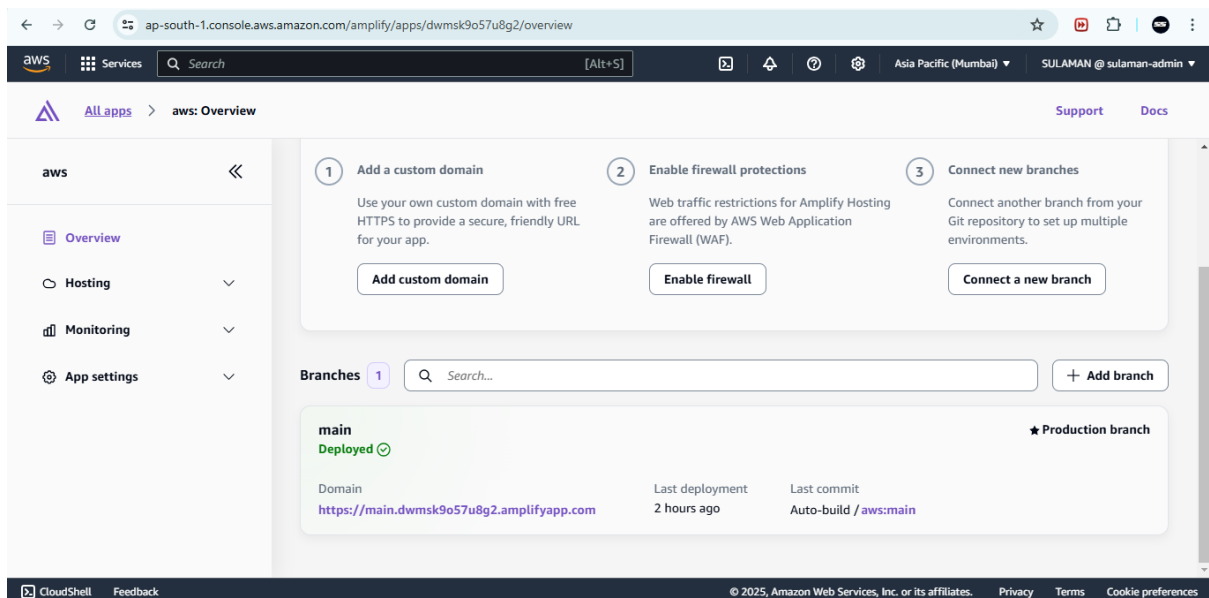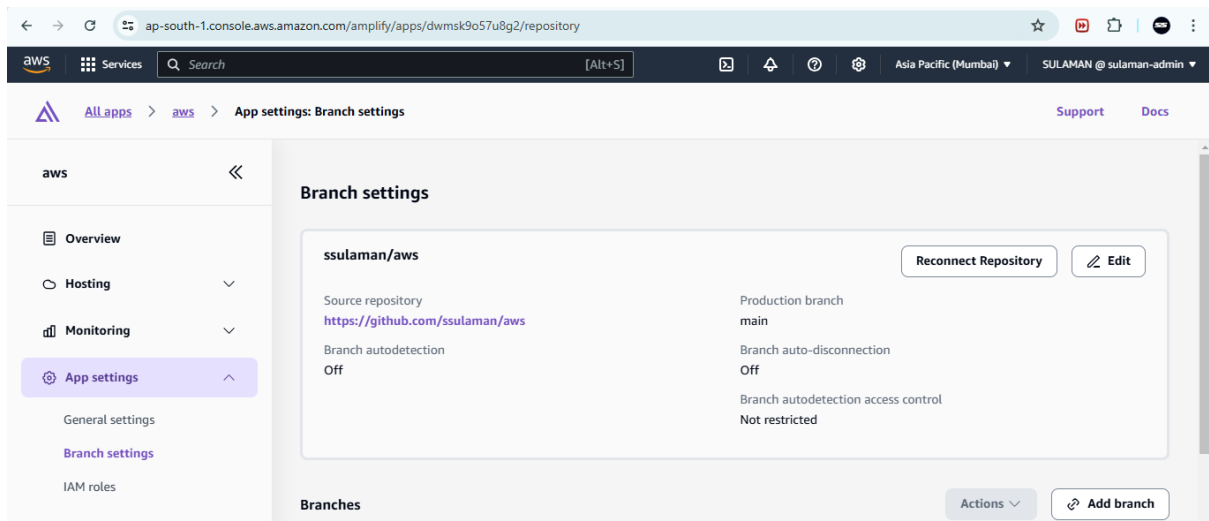2) OTP received

3) Validation & redirection

4) Emails stored in Dynamo DB

1) AWS Amplify

Amplify app connected to GitHub for continuous integration and deployment. Any changes pushed to the connected branch automatically trigger a build and deployment pipeline.

2)AWS Cognito

Amazon Cognito User Pool configuration showing user identification settings and app client details used for authentication in the web app & lambda post confirmation

3)AWS Lambda

AWS Lambda function responsible for processing verified email submissions and writing them to the DynamoDB table.

4)Dynamo DB

DynamoDB item view displaying stored user emails submitted post-verification via the Lambda function.