Auto-mailing with Alexa

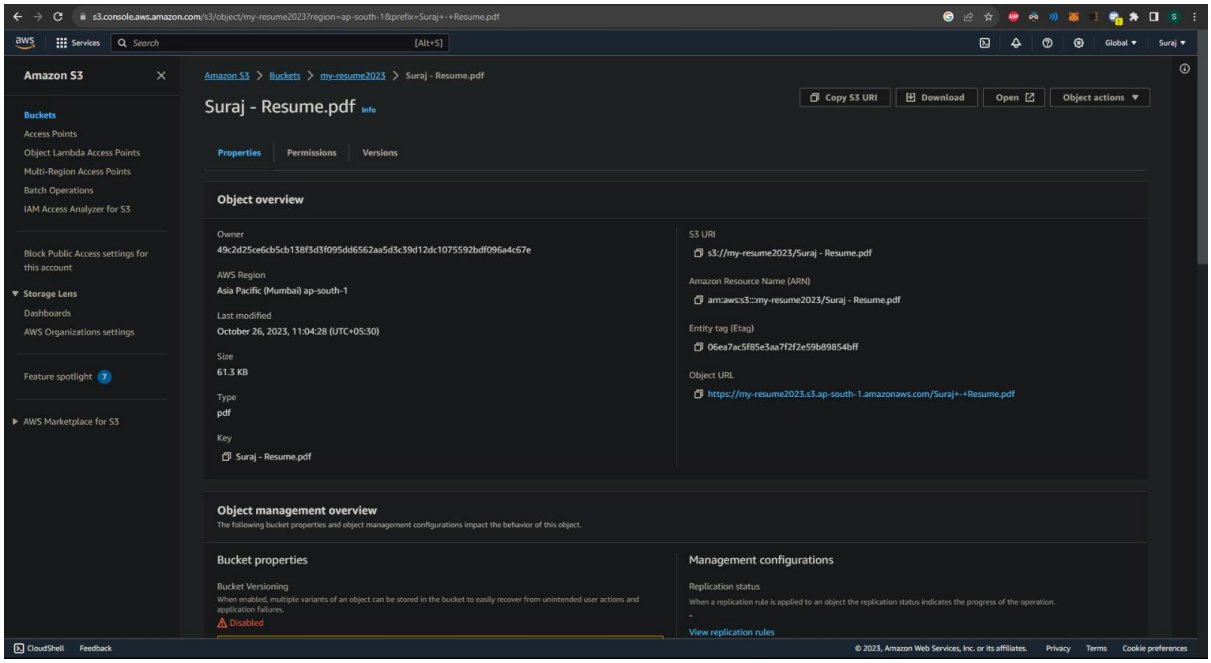
Made by:
Suraj Kumar Singh
Aadika Bhatia
Tejpal Singh
Bismanpal Singh Anand

AIM :

Building an Alexa skill that sends a mail with your resume from an S3 bucket and generates a cover letter using generative AI involves several steps.

Description :

In this project, we've successfully created an Alexa skill that streamlines the process of sending a tailored job application by email. By harnessing the power of AWS services, our skill seamlessly accesses your resume stored in an S3 bucket, and, with the assistance of a generative AI model, it crafts a personalized cover letter. This dynamic duo is combined to compose a compelling job application, which is then dispatched via email using AWS SES.

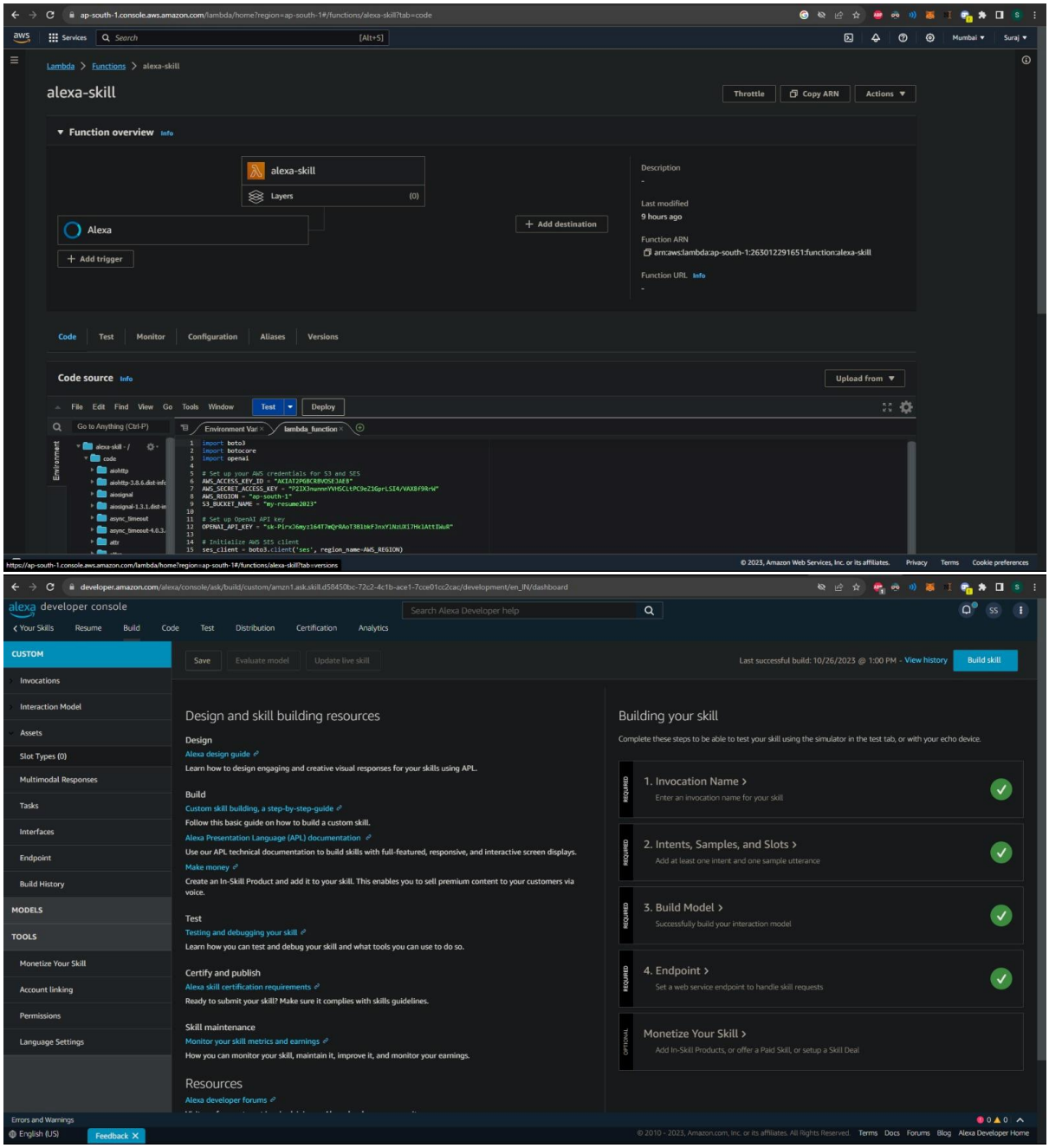


The skill was meticulously designed, starting with setting up the Alexa skill in the developer console and defining its invocation and intent. The backend logic was implemented using AWS Lambda, ensuring that the skill efficiently retrieves the resume and generates the cover letter.

Code used to configure AWS Lambda :

```
import boto3
import botocore
import openai

# Set up your AWS credentials for S3 and SES
AWS_ACCESS_KEY_ID = "AKIAT2PGBCRBVOSEJAEB"
AWS_SECRET_ACCESS_KEY = "P2IX3nunnnYVHSCLtPC9eZ1GprLSI4/VAX8f9RrW"
AWS_REGION = "ap-south-1"
S3_BUCKET_NAME = "my-resume2023"

# Set up OpenAI API key
OPENAI_API_KEY = "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"

# Initialize AWS SES client
ses_client = boto3.client('ses', region_name=AWS_REGION)

# Initialize OpenAI API
openai.api_key = OPENAI_API_KEY

def generate_cover_letter():
    # Use the ChatGPT API to generate a cover letter
    response = openai.Completion.create(
        engine="davinci",
        prompt="Generate a cover letter for the job application...",
        max_tokens=150,  # Adjust the token limit as needed
        n = 1  # Number of responses to generate
    )
    cover_letter = response.choices[0].text

    return cover_letter

def send_email_with_resume_and_cover_letter():
    # Retrieve the resume from S3
    s3 = boto3.client('s3', aws_access_key_id=AWS_ACCESS_KEY_ID,
aws_secret_access_key=AWS_SECRET_ACCESS_KEY)
```

```
    resume_object = s3.get_object(Bucket=S3_BUCKET_NAME, Key=Suraj - Resume.pdf)
    resume_data = resume_object['Body'].read()

    # Generate the cover letter
    cover_letter = generate_cover_letter()

    # Compose the email
    subject = 'Job Application'
    sender = "suraj.singhh9968@gmail.com"
    recipient = "surajsingh24@icloud.com"

    email_body = f"Dear Hiring Manager,\n\n{cover_letter}\n\nSincerely,\nYour Name"

    # Send the email using SES
    ses_client.send_email(
        Source=sender,
        Destination={'ToAddresses': [recipient]},
        Message={
            'Subject': {'Data': subject},
            'Body': {'Text': {'Data': email_body}}
        }
    )

def lambda_handler(event, context):
    send_email_with_resume_and_cover_letter()
    return {
        'statusCode': 200,
        'body': 'Email sent successfully'
    }
```



This project showcases how voice technology and artificial intelligence can be harnessed to simplify a traditionally time-consuming task, making job applications more efficient and user-friendly. It serves as a testament to the potential of voice-driven applications and AWS services in streamlining everyday processes.

Result :

The project yielded promising results, as demonstrated by the successful reception of an email containing the job application materials. During testing, the Alexa skill flawlessly executed the following key tasks:

1. Retrieving Resume: The skill effectively accessed the user's resume stored in an S3 bucket, showcasing the seamless integration of AWS services.
2. Cover Letter Generation: Leveraging a generative AI model (such as GPT-3), the skill demonstrated its capability to autonomously craft a compelling cover letter, personalized to the user's unique qualifications and the job position.
3. Email Composition: The skill proficiently composed the job application email by combining the retrieved resume and the generated cover letter, ensuring all necessary elements were included.
4. Email Dispatch: Utilizing AWS SES, the skill reliably sent the email to the designated recipient, proving its ability to manage communication tasks efficiently.