DevOps Interview Technical Task: Save sent picture to S3 bucket

Objectives

Create an AWS infrastructure consisting of the following components:

- **AWS API Gateway**: To act as the entry point for requests.
- **AWS S3 Bucket**: To store data (pictures only).
- **AWS Lambda Function**: To process requests and interact with the S3 bucket.
- **Private VPC**: To host the Lambda function securely.

Requirements

- The Lambda function must be deployed within a private Virtual Private Cloud (VPC).
- The API Gateway should trigger the Lambda function upon receiving requests.
- The Lambda function should have the necessary permissions to write data to the S3 bucket.
- All AWS resources must be deployed with terraform.

Expected Outcome

A functional AWS infrastructure that allows interaction with an S3 bucket through an API endpoint, with the processing logic running in a Lambda function within a private VPC.

Brief documentation describing the solution and how to use it.

Access to code used for resource creation.

Evaluation Criteria

- Proper setup and configuration of VPC, API Gateway, Lambda, and S3.
- Security considerations, particularly regarding access control and VPC configuration.
- Functionality of the Lambda function to interact with the S3 bucket.
- Deployment process and automation (if used).