

Scope And Assumptions

Scope:

The scope of AWS Assignment is to develop and deploy a product community application on the AWS cloud infrastructure.

1. The project involves the following tasks:
2. Creating an AWS account.
3. Setting up a virtual network with specific requirements for the application.
4. Deploying a virtual machine (VM) with the product community application.
5. Ensuring secure communication between the VM and the database (RDS).
6. Deploying the application to the Elastic Beanstalk service.
7. Creating a Lambda function to trigger actions upon file uploads in an S3 bucket.

The project aims to develop a product community application, and the tasks mentioned above are related to the AWS cloud infrastructure deployment and configuration required for the application.

Assumptions:

1. **Infrastructure Requirements Only:** The project solely provides infrastructure requirements and does not divulge any intricate details about the application's functionality or purpose. Consequently, all development tasks will be predicated solely on the provided infrastructure requirements.
2. **AWS Account Access:** The developer undertaking this project possesses the requisite credentials and privileges to create and configure AWS resources, encompassing EC2 instances, VPCs, subnets, RDS instances, Elastic Beanstalk applications, and Lambda functions.
3. **Application Code:** Although specific particulars regarding the application remain undisclosed, it is assumed that the developer already possesses extant application code that can be deployed on the virtual machine (VM) and Elastic Beanstalk. The code should be compatible with the requisite AWS services.
4. **Security Group and Network Access Control List (NACL) Rules:** The developer will ascertain the apt security group and NACL rules to facilitate requisite communication between resources while upholding the desired standards of security and privacy.
5. **AWS Services Availability:** All necessary AWS services (VPC, EC2, RDS, Elastic Beanstalk, S3, and Lambda) are accessible in the chosen deployment region and are amenable to developer access.
6. **S3 Bucket Configuration:** It is presumed that an extant S3 bucket exists, and the developer possesses the necessary permissions to upload files to said bucket. The bucket should be suitably configured to trigger the Lambda function upon file uploads.

7. **File Name Retrieval in Lambda:** The Lambda function crafted will be designed to retrieve and display the name of the uploaded file. Other specific actions pertaining to the uploaded file are beyond the purview of the current undertaking.
8. **Cost and Billing:** The developer is cognizant of the costs entailed by the services employed in the project and exercises due caution to avert unanticipated expenditure.
9. **Backup and Disaster Recovery:** The project omits explicit mention of backup and disaster recovery requisites. Ergo, it is surmised that these facets do not fall within the ambit of the current scope, with primary focus being allocated to application deployment and functionality.
10. **Documentation and Testing:** It is expected that the developer will furnish comprehensive documentation elucidating the setup, configuration, and steps undertaken to accomplish each task. Additionally, meticulous testing of the deployed resources and application is crucial to ensure functional integrity and robust security of the project.