Project Overview: AWS EC2 and S3 for Web Hosting

Objective:

This project aims to set up a Node.js application on AWS EC2 with an image gallery hosted on Amazon S3.

The application features a completion page displaying a personalized congratulatory message.

Prerequisites:

- Ensure you can connect to the EC2 instance using AWS Systems Manager. Create an IAM role and attach the necessary policies to enable secure access.

- Set up your own Virtual Private Cloud (VPC) to provide a dedicated network environment for the EC2 instance.

Required Resources:

Amazon EC2 Instance:

- Launch an instance using an Ubuntu AMI.

- Access the instance and deploy the Node.js application provided in the zip file.

- Install Node.js and npm to run the application.

- Include the Express framework as part of the Node.js setup.

Amazon S3 Bucket:

- Upload at least three images to your S3 bucket.

- Set each image to public access to ensure they can be displayed within the application.

EC2 Instance Setup:

Install Node.js and npm carefully, as these are critical for running the application. Once installed, confirm versions using the commands below:

$ node -v

$ npm -v

Take a screenshot after running these commands to confirm installation.

Preparing the Application Files:

Make any necessary adjustments to the application files as specified before uploading them to EC2.

Instructions:

Completion Page Modifications:

- Extract the provided zip file and open the 'completion.html' file.

- Replace [Your Name] with your actual name.

- Add S3 image links in place of 'S3IMAGESURL' within 'completion.html' using the public URLs from your S3 bucket.

Running the Application:

Deploy and test the application on your EC2 instance by running:

$ node app.js

Check that the images from S3 appear correctly in the application gallery.

Verifying the Application:

- Access the running application in your browser at http://<your-public-ip>.

- Take a screenshot of the application as it appears in the browser to show it is working as expected.

Submission Requirements:

Submit the following screenshots:

- Verification of Node.js and npm installations.

- The application's homepage as accessed via http://<your-public-ip>.