EXPERIMENT 1A

Div/Roll No: D15C/57

Step 1: Log in to AWS Management Console

Go to AWS Management Console and log in with your AWS account credentials.

Step 2: Navigate to S3 Service

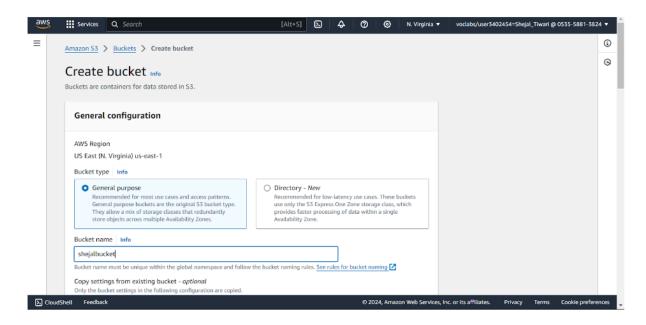
In the AWS Management Console, search for "S3" in the search bar at the top, and click on "S3" under Services.

Step 3: Create a New Bucket

Click on the "Create bucket" button.

Fill in the details:

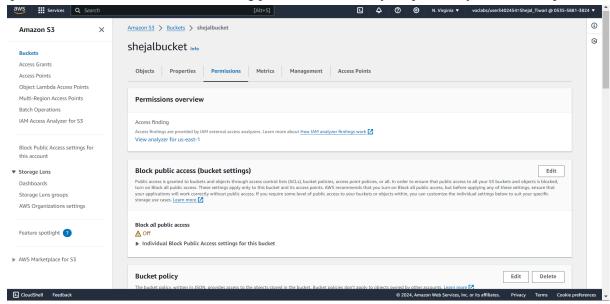
- Bucket Name: Enter a globally unique name for your bucket. The name must be DNS-compliant.
- AWS Region: Select the region where you want to create the bucket. Choose a region closest to you or your users for better performance.



Step 4: Configure Bucket Options

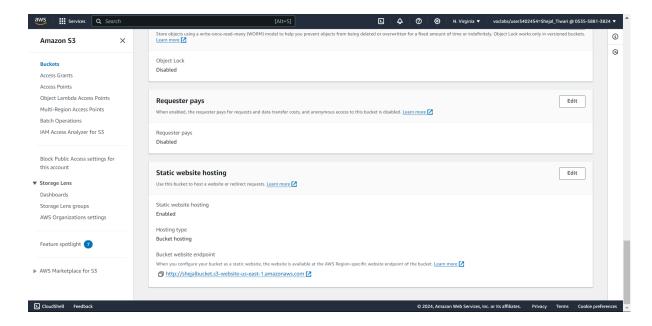
Object Ownership: Decide if you want to disable or enable object ownership. By default, it's set to "Bucket owner preferred."

Block Public Access Settings: You can choose to block all public access to your bucket or configure specific rules. AWS recommends blocking public access unless you specifically need it to be public.



Bucket Versioning: Enable versioning if you want to keep multiple versions of objects in your bucket. This is useful for backup and recovery.

Tags: You can add tags to your bucket to organize and track its costs.



Step 5: Set Policy and Permissions

1. Set permissions based on your requirements. You can keep the default settings for private access or modify them for public or specific user access.

```
Bucket policy

The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts. Learn more 

{

"Version": "2012-10-17",

"Statement": [

{

Sid": "PublicReadGetObject",

"Effect": "Allow",

"Principal": {

"AWS": "**

},

"Action": "$3:GetObject",

"Resource": "arm:aws:s3:::shejalbucket/"*

}

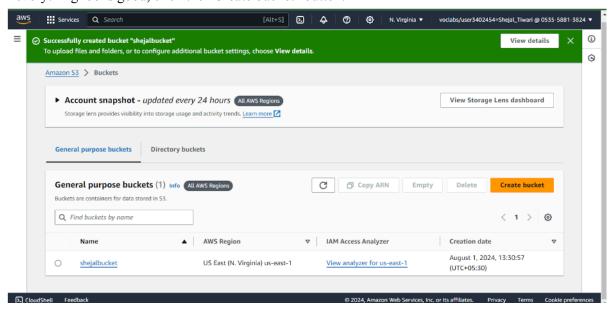
}

}
```

Step 6: Review and Create

Review all the settings you've configured.

If everything looks good, click the "Create bucket" button.



Step 1: Install XAMPP

- 1. **Download XAMPP**: If you haven't already installed XAMPP, you can download it from the official website.
- 2. **Install XAMPP**: Run the installer and follow the instructions to install XAMPP on your machine.

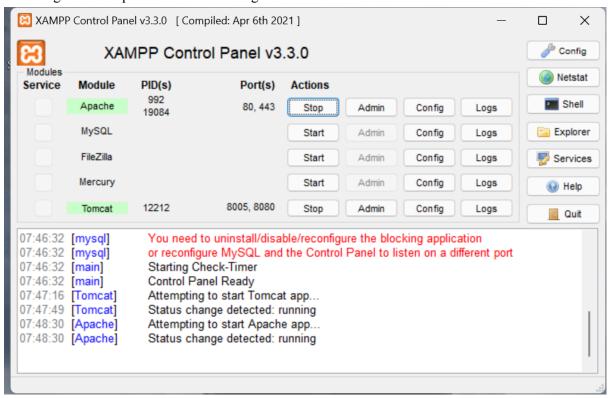
To host a PHP file on the XAMPP server, follow these steps:

Step 1: Install XAMPP

- 1. **Download XAMPP**: If you haven't already installed XAMPP, you can download it from the official website.
- 2. **Install XAMPP**: Run the installer and follow the instructions to install XAMPP on your machine.

Step 2: Start Apache Server

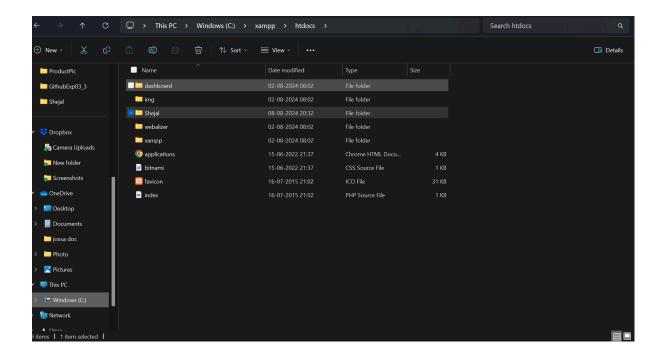
- 1. **Open XAMPP Control Panel**: After installation, open the XAMPP Control Panel.
- 2. **Start Apache**: Click the "Start" button next to Apache. The status should turn green, indicating that the Apache server is running.



Step 3: Place PHP Files in the htdocs Folder

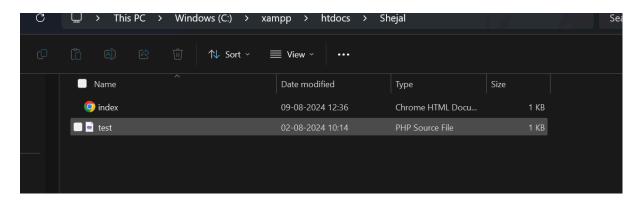
3.

- 1. **Navigate to XAMPP Directory**: Go to the directory where you installed XAMPP (e.g., C:\xampp on Windows).
- 2. **Open htdocs Folder**: Inside the XAMPP folder, you'll find a folder named htdocs. This is the root directory where you should place your PHP files.
- 3. Create a New Folder (Optional): You can create a new folder inside htdocs to organize your project (e.g., C:\xampp\htdocs\myproject).
- 4. **Place PHP File**: Copy your PHP file (e.g., index.php) into the htdocs directory or your project folder.



Step 4: Access the PHP File via Browser

- 1. **Open Web Browser**: Open any web browser.
- 2. Access the File: In the address bar, type the following URL:
 - o If you placed the file directly in htdocs, use: http://localhost/filename.php
 - o If you placed the file inside a folder, use: http://localhost/foldername/filename.php
 - For example, if your file is index.php inside myproject folder, the URL would be: http://localhost/myproject/index.php



```
      ★ test.php
      ★

      C: > xampp > htdocs > Shejal > ★ test.php

      1
      <?php</td>

      2
      echo "Hello, World!"

      3
      ?>
```

Step 5: View the Output

• The PHP file will be executed on the server, and the output will be displayed in your browser.



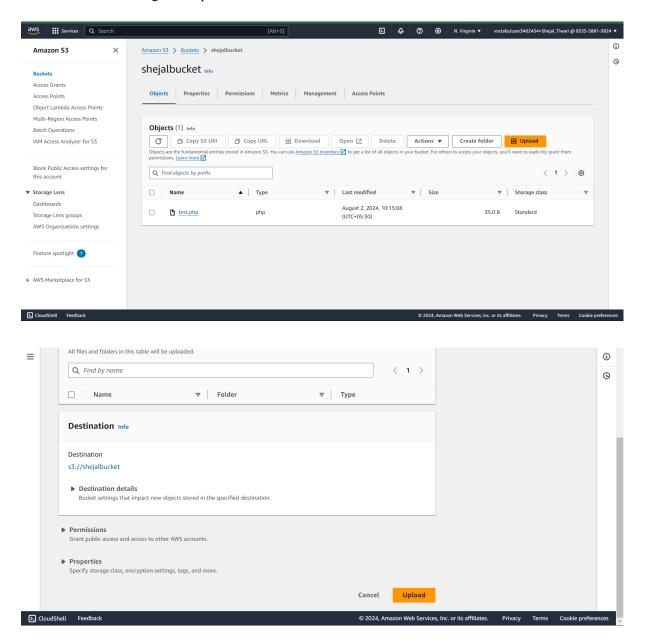
Additional Tips:

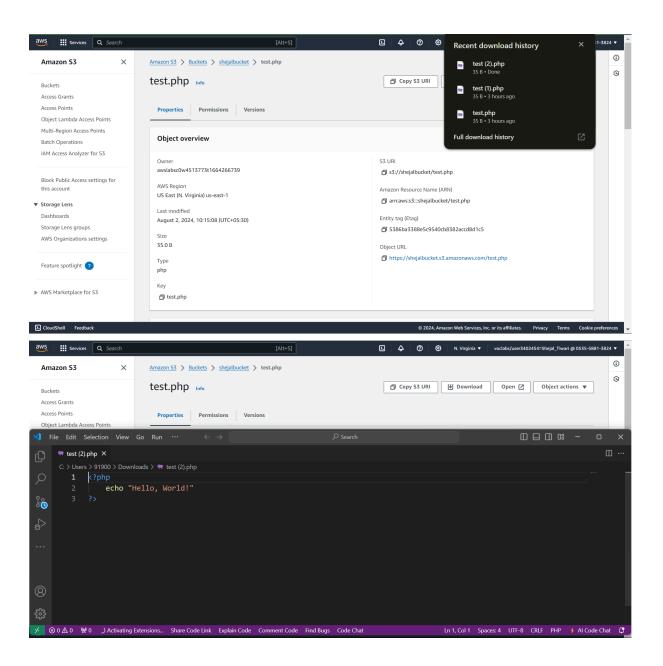
• **PHP Errors**: If there are errors in your PHP code, they will be displayed in the browser. You can also check the error logs in the XAMPP Control Panel under Apache > Logs > PHP Error Log.

Your PHP file is now hosted on your local XAMPP server!

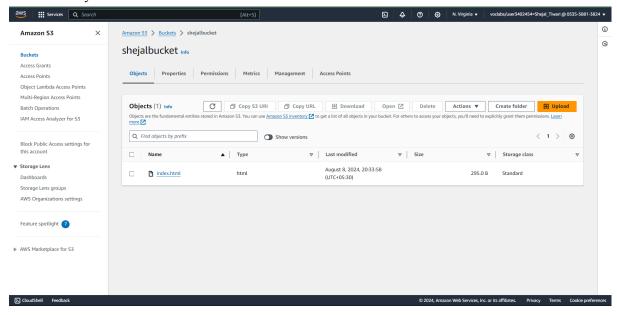
Step 7: Upload Objects (Optional)

1. Once the bucket is created, you can start uploading objects to it by clicking on the bucket name and using the "Upload" button.





In similar way it is done for index.html file



Click on the URL and your website is hosted on cloud.



Hello, World!

This is a basic HTML page.

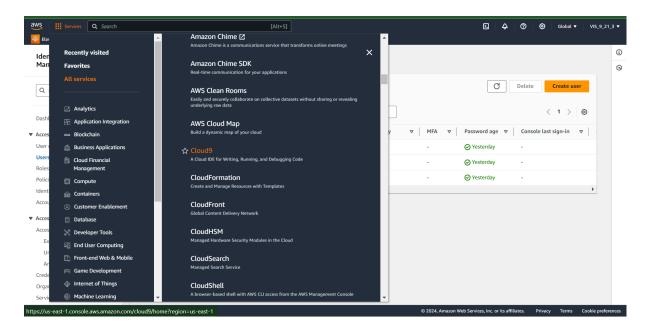
EXPERIMENT 1B

Step 1: Sign in to AWS Management Console

- 1. Go to the AWS Management Console.
- 2. Sign in with your AWS credentials.

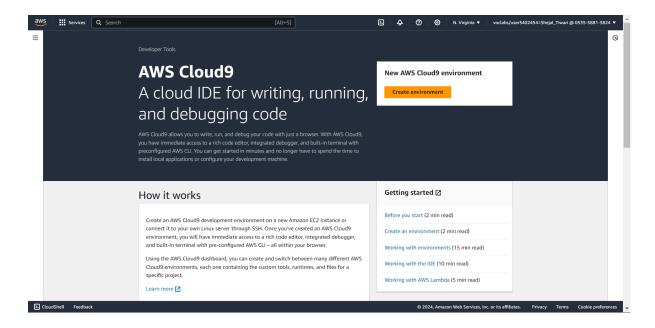
Step 2: Navigate to Cloud9

- 1. In the AWS Management Console, search for "Cloud9" in the search bar at the top.
- 2. Click on "Cloud9" under Services.



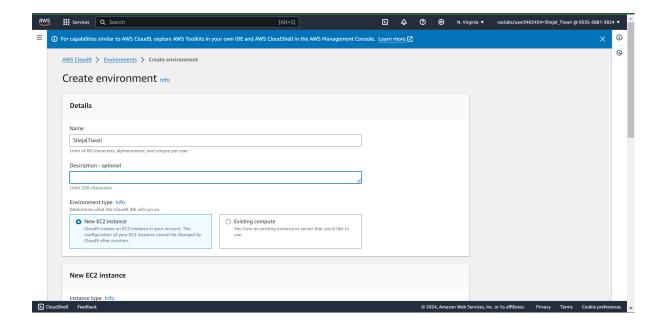
Step 3: Create a New Environment

1. On the Cloud9 dashboard, click on the "Create environment" button.



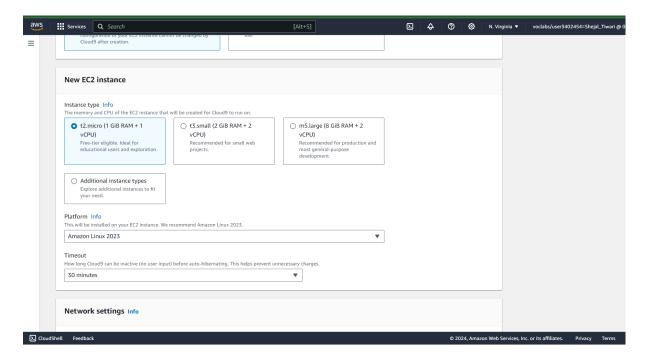
Step 4: Configure Environment Settings

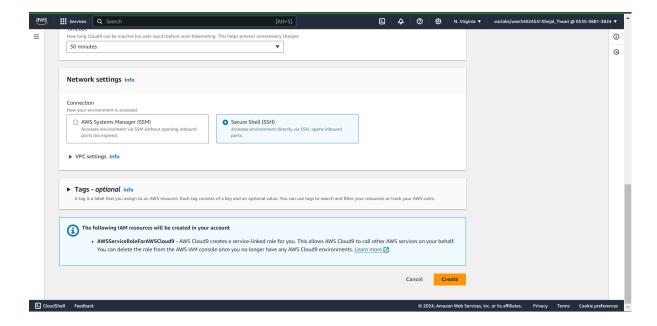
- 1. Name and Description:
 - Name: Enter a name for your environment.
 - **Description**: Optionally, provide a description of the environment.
- 2. Environment Settings:
 - **Environment type**: Choose one of the following:
 - Create a new EC2 instance for environment: AWS will automatically create an EC2 instance for you. Choose this if you want to run the environment on a new EC2 instance.
 - Connect to an existing EC2 instance: If you have an existing EC2 instance, you can select this option to connect Cloud9 to it.
 - Connect to your own server via SSH: Use this if you want to connect Cloud9 to an on-premises server or another cloud provider's server.
 - **Instance type**: Select the instance type (e.g., t2.micro for free tier).
 - **Platform**: Choose the platform that suits your development needs (e.g., Amazon Linux, Ubuntu, etc.).
 - Cost-saving setting: Set an automatic timeout to stop the EC2 instance when it's not in use, saving costs.



3. Network Settings:

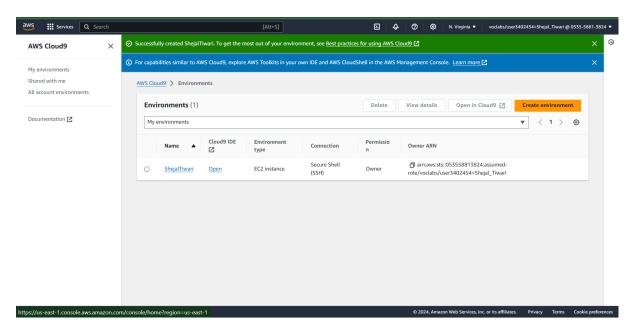
 If you selected "Create a new EC2 instance for environment," you'll need to choose a VPC (Virtual Private Cloud) and a subnet. Usually, the default options will work, but you can customize them if needed.





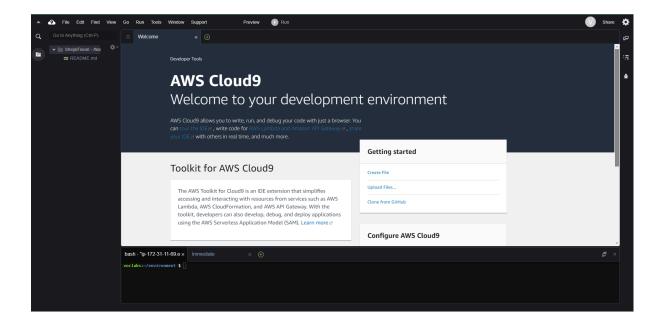
Step 5: Review and Create

- 1. Review all the settings you configured.
- 2. If everything looks good, click on the "Create environment" button.



Step 6: Access Your Cloud9 Environment

- 1. After a few moments, your Cloud9 environment will be ready, and you'll be automatically redirected to the Cloud9 IDE.
- 2. You can start coding immediately, using the terminal to install packages, run scripts, or manage files as you would on a local machine.



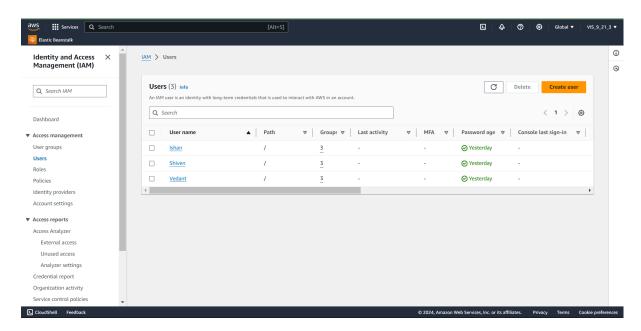
Additional Configuration (Optional)

- **Install additional tools**: You can install additional tools and software using the terminal within Cloud9, just as you would on a regular Linux server.
- Clone repositories: Use Git within Cloud9 to clone repositories, manage version control, and collaborate on code.

2. Creating an IAM User in AWS

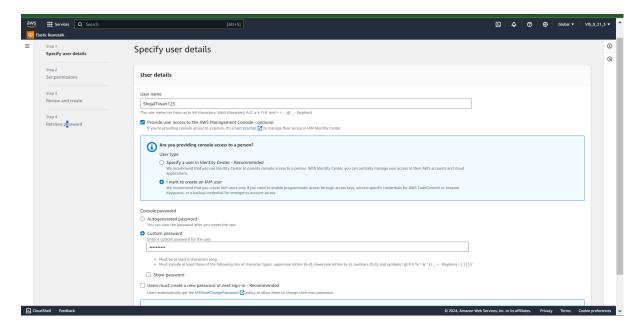
To create a new IAM user in AWS:

- 1. Sign in to AWS Management Console:
 - o Go to the AWS Management Console.
- 2. Navigate to IAM:
 - Search for "IAM" in the services menu and select it.
- 3. Create a New User:
 - Click on "Users" in the left-hand menu.
 - o Click on "Add user."



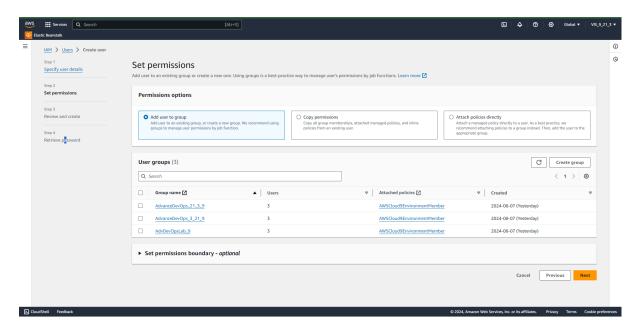
4. Set User Details:

- User Name: Enter a name for the new user.
- Access Type:
 - **Programmatic access**: If the user needs access to AWS CLI, SDK, or API.
 - **AWS Management Console access**: If the user needs access to the AWS Management Console.



5. Set Permissions:

 You can attach existing policies directly, add the user to a group with predefined permissions, or copy permissions from another user.

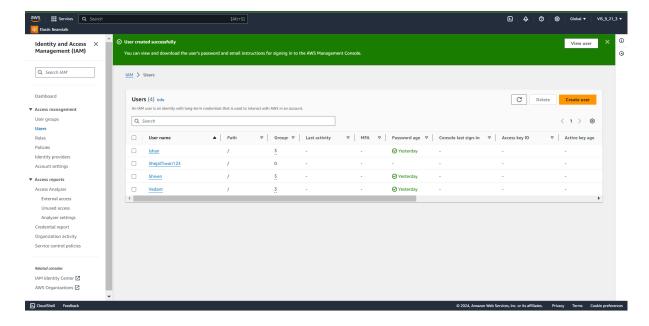


6. Tags (Optional):

• Add tags to the user account for easy identification or organization.

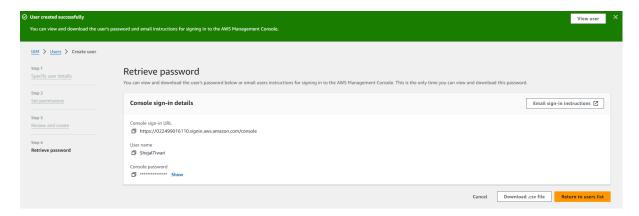
7. Review and Create:

• Review the settings and click "Create user."



8. Download Credentials:

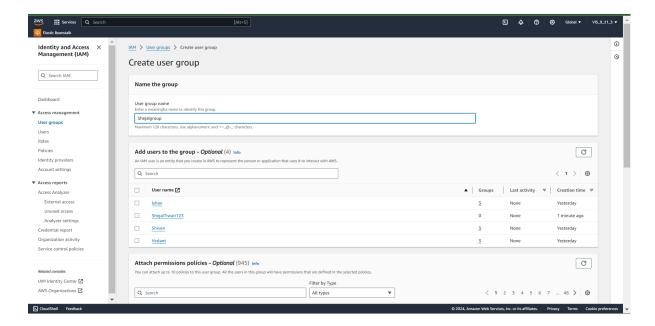
On the confirmation page, download the access key and secret key if you've enabled programmatic access. Keep them secure.



Creating a User Group in AWS IAM

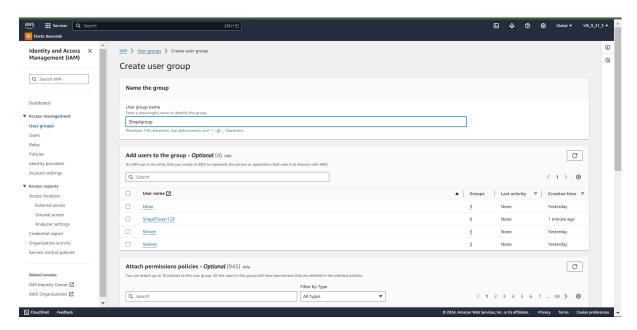
To create a new user group in AWS IAM:

- 1. Sign in to AWS Management Console:
 - o Go to the <u>AWS Management Console</u>.
- 2. Navigate to IAM:
 - Search for "IAM" in the services menu and select it.
- 3. Create a New Group:
 - Click on "User groups" in the left-hand menu.
 - Click on "Create group."



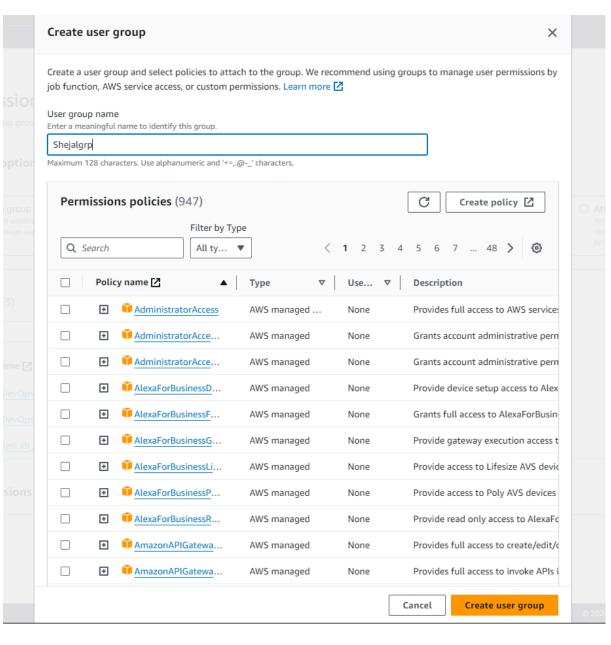
4. Set Group Name:

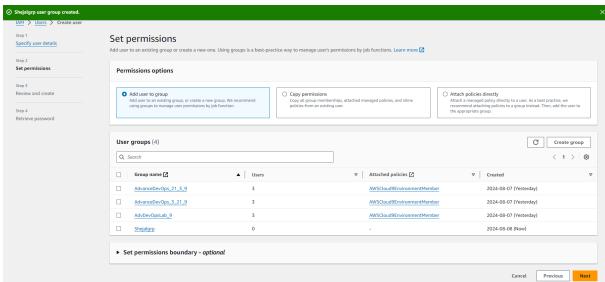
Enter a name for your group in the "Group name" field.



5. Attach Permissions Policies:

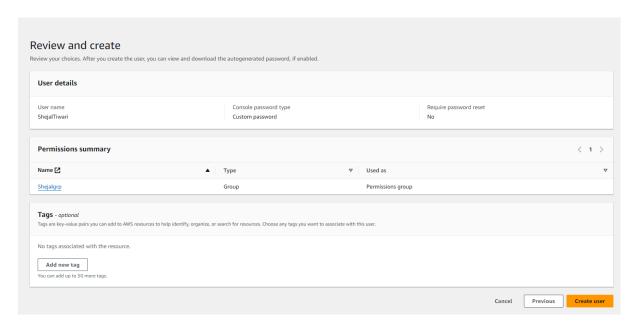
- Select the policies you want to attach to the group. These policies define what actions the users in this group can perform.
- You can attach existing AWS managed policies, or create and attach a custom policy.





6. Review and Create:

o Review your settings and click on "Create group."



7. Add Users to the Group (Optional):

• After creating the group, you can add users to it by selecting the group, then going to the "Users" tab and clicking on "Add users to group."

