4. IAM Users and Roles Lab:

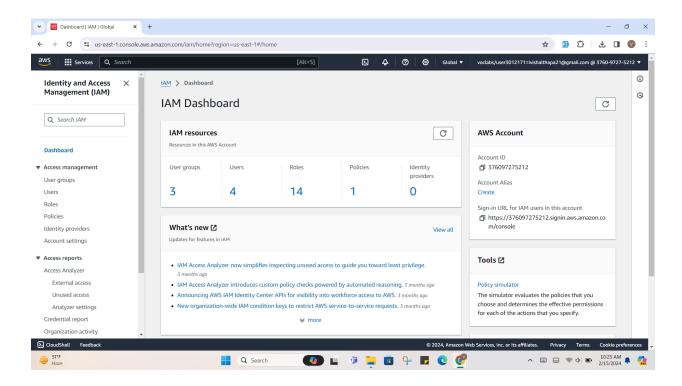
Objective:

The objective of this lab is to gain the understanding of AWS IAM by creating and managing users, groups, and roles.

Steps involved:

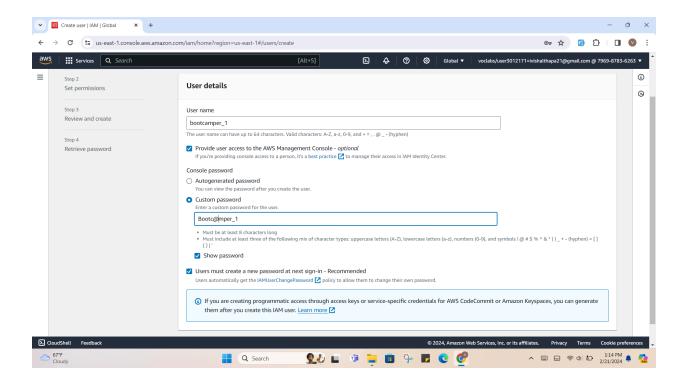
I. Access the IAM Dashboard:

a. Once signed in, locate and select the "IAM" service from the list of available services which will send us to the IAM dashboard.



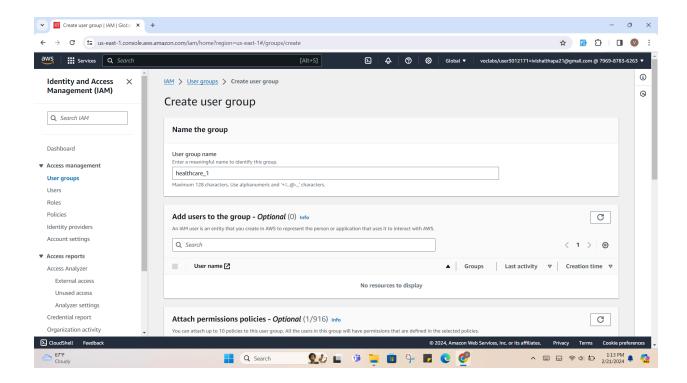
II. Create IAM Users:

- a. In the IAM dashboard, select "Users" from the left-hand menu.
- b. Click on "Add user" button
- c. Enter a username for the new IAM user
- d. Choose the access type
- e. Set the user's permissions: we can either add the user to an existing group with predefined permissions or attach policies directly to the user.
- f. Click "Next" to review our choices and then "Create user" to create the IAM user



III. Create IAM Groups:

- a. In the IAM dashboard, select "Groups" from the left-hand menu
- b. Click on "Create Group" button
- c. Enter a name for the group and add a description (Optional)
- d. Attach policies to the group to define its permissions
- e. Click "Create group" to create the IAM group

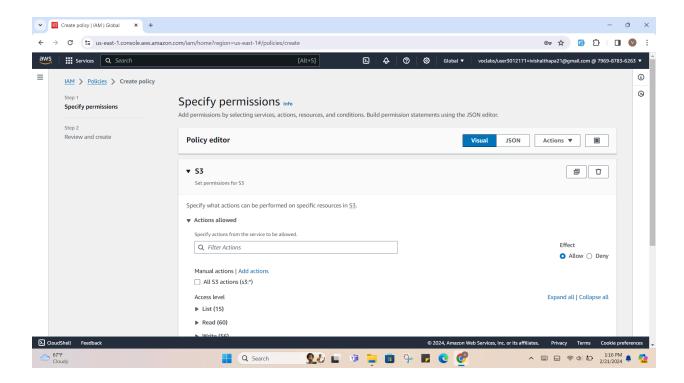


IV. Assign IAM Users to Groups:

- a. In the IAM dashboard, select "Users" from the navbar
- b. Select the IAM user we want to add to a group
- c. Click on "Add user to group" button
- d. Select the group/groups we want to add to user
- e. Click "Add to groups" to assign the user to the selected group/groups.

V. Apply IAM policies to Users and Groups:

- a. In the IAM dashboard, navigate to the "Policies" section
- b. Choose whether to create a custom policy or use existing one
- c. Attach the policy to IAM users or groups by selecting them and clicking on "Attach Policy"



VI. Create IAM Roles:

- a. In the IAM dashboard, select "Roles" from the navbar
- b. Click on "Create role" button
- c. Choose the trusted entity type (i.e. AWS Service)
- d. Select the service that will use this role
- e. Attach a policies to define the permissions for the role
- f. Click "Create role" to create the IAM role.

