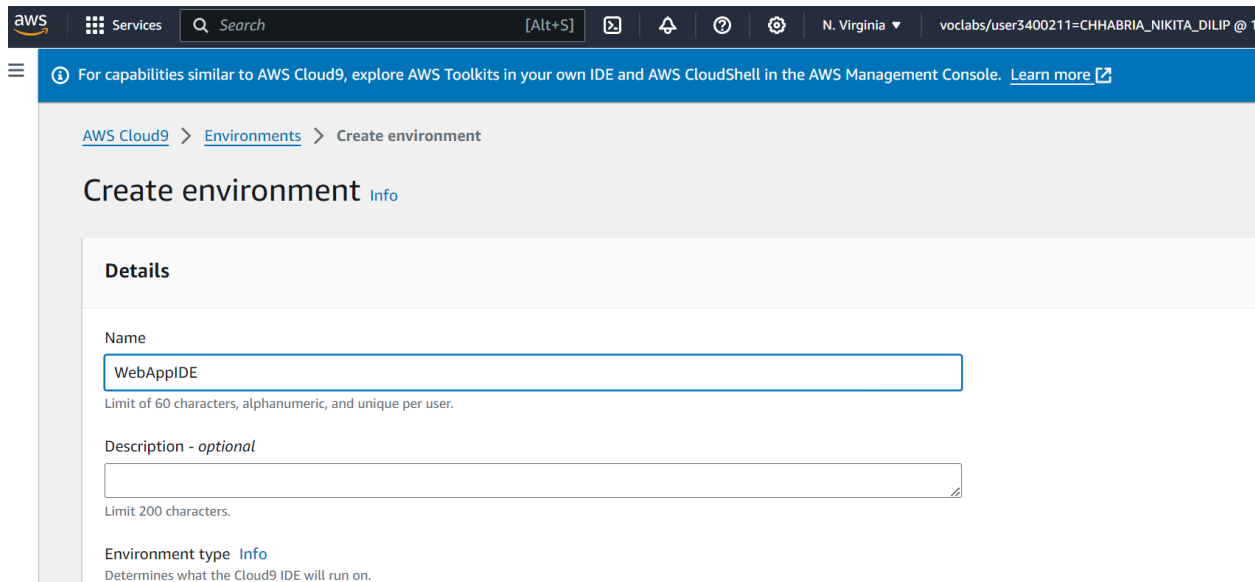


Aim: To understand the benefits of Cloud Infrastructure and Setup AWS Cloud9 IDE, Launch AWS Cloud9 IDE and Perform Collaboration Demonstration.

Login in to your Aws canva account and search for AWS Cloud9 in services



aws Services Search [Alt+S] N. Virginia voclabs/user3400211=CHHABRIA_NIKITA_DILIP @ T

For capabilities similar to AWS Cloud9, explore AWS Toolkits in your own IDE and AWS CloudShell in the AWS Management Console. [Learn more](#)

[AWS Cloud9](#) > [Environments](#) > Create environment

Create environment [Info](#)

Details

Name

WebAppIDE

Limit of 60 characters, alphanumeric, and unique per user.

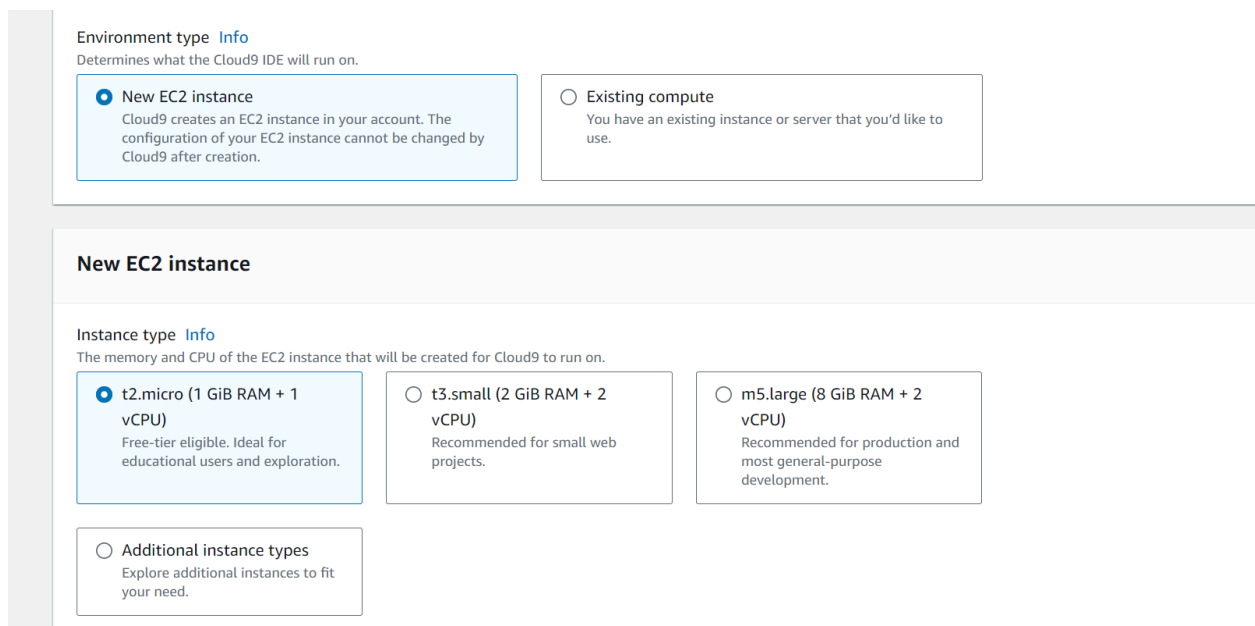
Description - *optional*

Limit 200 characters.

Environment type [Info](#)

Determines what the Cloud9 IDE will run on.

Select Environment type to be EC2



Environment type [Info](#)

Determines what the Cloud9 IDE will run on.

☒ New EC2 instance

Cloud9 creates an EC2 instance in your account. The configuration of your EC2 instance cannot be changed by Cloud9 after creation.

☐ Existing compute

You have an existing instance or server that you'd like to use.

New EC2 instance

Instance type [Info](#)

The memory and CPU of the EC2 instance that will be created for Cloud9 to run on.

☒ t2.micro (1 GiB RAM + 1 vCPU)

Free-tier eligible. Ideal for educational users and exploration.

☐ t3.small (2 GiB RAM + 2 vCPU)

Recommended for small web projects.

☐ m5.large (8 GiB RAM + 2 vCPU)

Recommended for production and most general-purpose development.

☐ Additional instance types

Explore additional instances to fit your need.

A few other options depending on your use case and then **Create environment**

The screenshot shows the 'Create environment' dialog in AWS Cloud9. It has a 'Connection' section with two options: 'AWS Systems Manager (SSM)' (unselected) and 'Secure Shell (SSH)' (selected). Below this is a 'Tags' section with a link to 'Tags - optional Info'. A light blue box contains information about IAM resources, stating that a service-linked role 'AWSServiceRoleForAWSCloud9' will be created. At the bottom right are 'Cancel' and 'Create' buttons.

Connection
How your environment is accessed.

☐ AWS Systems Manager (SSM)
Accesses environment via SSM without opening inbound ports (no ingress).

☒ Secure Shell (SSH)
Accesses environment directly via SSH, opens inbound ports.

► VPC settings [Info](#)

► Tags - *optional* [Info](#)
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

The following IAM resources will be created in your account

- **AWSServiceRoleForAWSCloud9** - AWS Cloud9 creates a service-linked role for you. This allows AWS Cloud9 to call other AWS services on your behalf. You can delete the role from the AWS IAM console once you no longer have any AWS Cloud9 environments. [Learn more](#)

Cancel Create

The environment is ready



Now, to enable collaboration in cloud environment, we need to add a user group. Only IAM users can be part of this group.

Set permissions

Add user to an existing group or create a new one. Using groups is a best-practice way to manage user's permissions by job functions. [Learn more](#)

Permissions options

☒ Add user to group

Add user to an existing group, or create a new group. We recommend using groups to manage user permissions by job function.

☐ Copy permissions

Copy all group memberships, attached managed policies, and inline policies from an existing user.

☐ Attach policies directly

Attach a managed policy directly to a user. As a best practice, we recommend attaching policies to a group instead. Then, add the user to the appropriate group.

The screenshot shows the AWS IAM console interface. On the left is a navigation sidebar with 'Identity and Access Management (IAM)' at the top, followed by a search bar and a menu with 'Dashboard', 'Access management' (expanded), 'User groups' (selected), 'Users', and 'Roles'. The main content area is titled 'Create user group' and shows the breadcrumb 'IAM > User groups > Create user group'. Under the heading 'Name the group', there is a 'User group name' label and a text input field containing 'group1'. A note below the input field states: 'Enter a meaningful name to identify this group. Maximum 128 characters. Use alphanumeric and '+,=, @, -, _' characters.'

Group created without any hassle

The screenshot shows the AWS IAM console 'User groups' page. A green success banner at the top reads 'group1 user group created.' with a 'View group' button. The breadcrumb is 'IAM > User groups'. The page title is 'User groups (1)' with an 'Info' icon. Below the title is a description: 'A user group is a collection of IAM users. Use groups to specify permissions for a collection of users.' There is a search bar and a table with columns: 'Group name', 'Users', 'Permissions', and 'Creation time'. The table contains one entry for 'group1', which has 0 users, no permissions (indicated by a warning icon and 'Not defined'), and was created 'Now'. A 'Create group' button is visible in the top right of the table area.

| Group name | Users | Permissions | Creation time |
|------------------------|-------|-------------|---------------|
| group1 | 0 | Not defined | Now |

Step 3
Review and create

Step 4
Retrieve password

User name
nikita

The user name can have up to 64 characters. Valid characters: A-Z, a-z, 0-9, and + = , . @ _ - (hyphen)

☒ Provide user access to the AWS Management Console - *optional*
If you're providing console access to a person, it's a [best practice](#) to manage their access in IAM Identity Center.

Are you providing console access to a person?

User type

☐ Specify a user in Identity Center - Recommended
We recommend that you use Identity Center to provide console access to a person. With Identity Center, you can centrally manage user access to their AWS accounts and cloud applications.

☒ I want to create an IAM user
We recommend that you create IAM users only if you need to enable programmatic access through access keys, service-specific credentials for AWS CodeCommit or Amazon Keyspaces, or a backup credential for emergency account access.

Console password

☒ Autogenerated password
You can view the password after you create the user.

☐ Custom password
Enter a custom password for the user.

Specify user details

Step 2
Set permissions

Step 3
Review and create

Step 4
Retrieve password

Set permissions

Add user to an existing group or create a new one. Using groups is a best-practice way to manage user's permissions by job functions. [Learn more](#)

Permissions options

☒ Add user to group
Add user to an existing group, or create a new group. We recommend using groups to manage user permissions by job function.

☐ Copy permissions
Copy all group memberships, attached managed policies, and inline policies from an existing user.

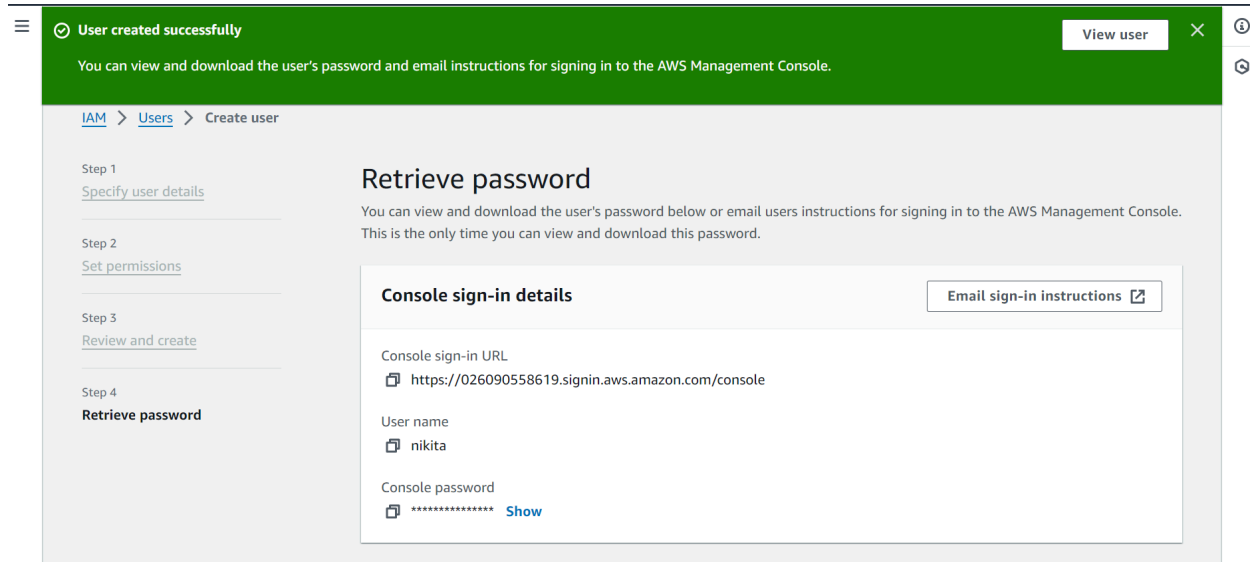
☐ Attach policies directly
Attach a managed policy directly to a user. As a best practice, we recommend attaching policies to a group instead. Then, add the user to the appropriate group.

User groups (1/1)

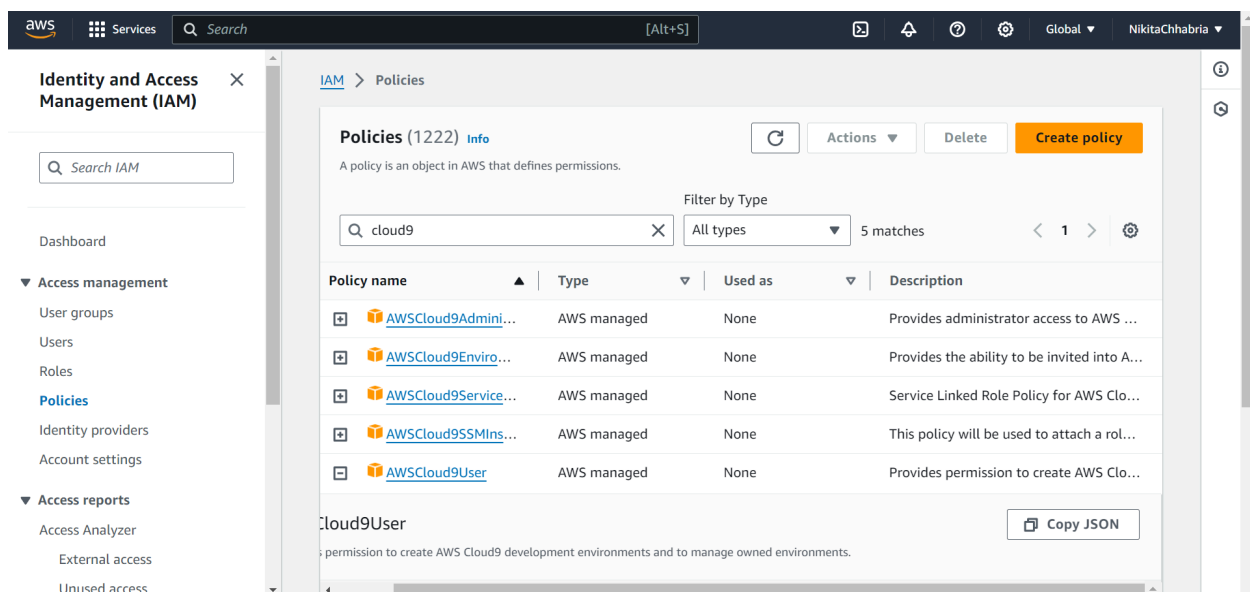
Search

| <input checked="" type="checkbox"/> | Group name | Users | Attached policies | Created |
|-------------------------------------|------------|-------|-------------------|------------------|
| <input checked="" type="checkbox"/> | group1 | 0 | - | 2024-08-09 (2... |

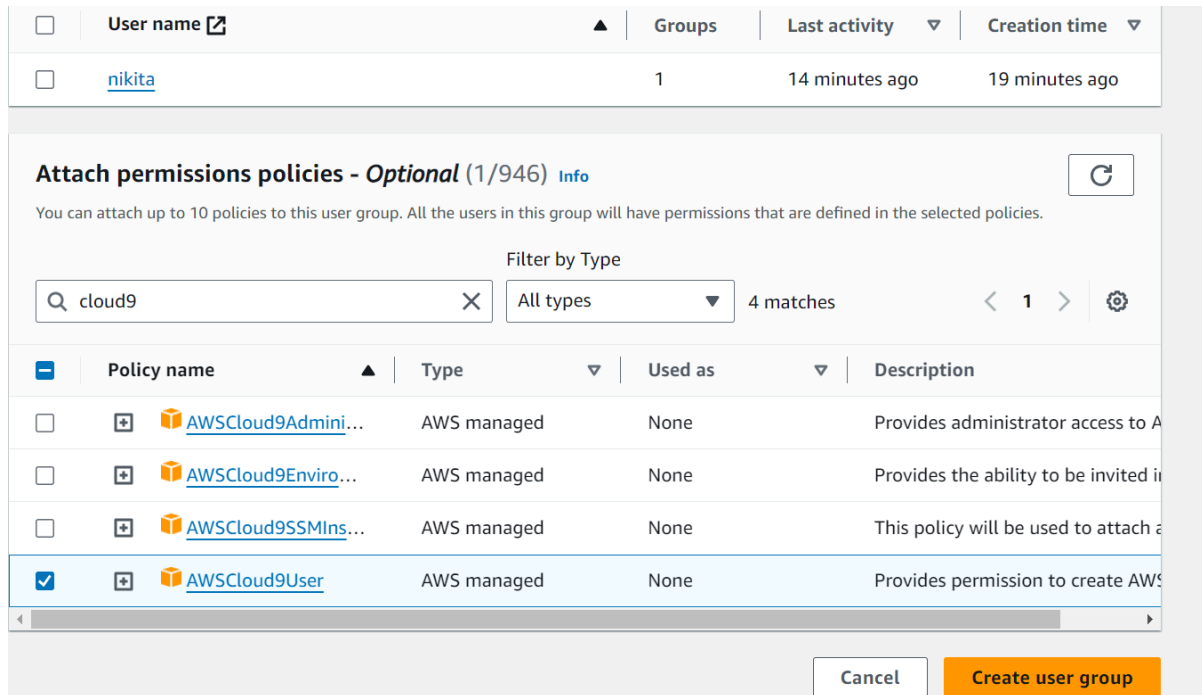
Now for creating an IAM user, you need to create an account as in the academy you don't the access to create one.



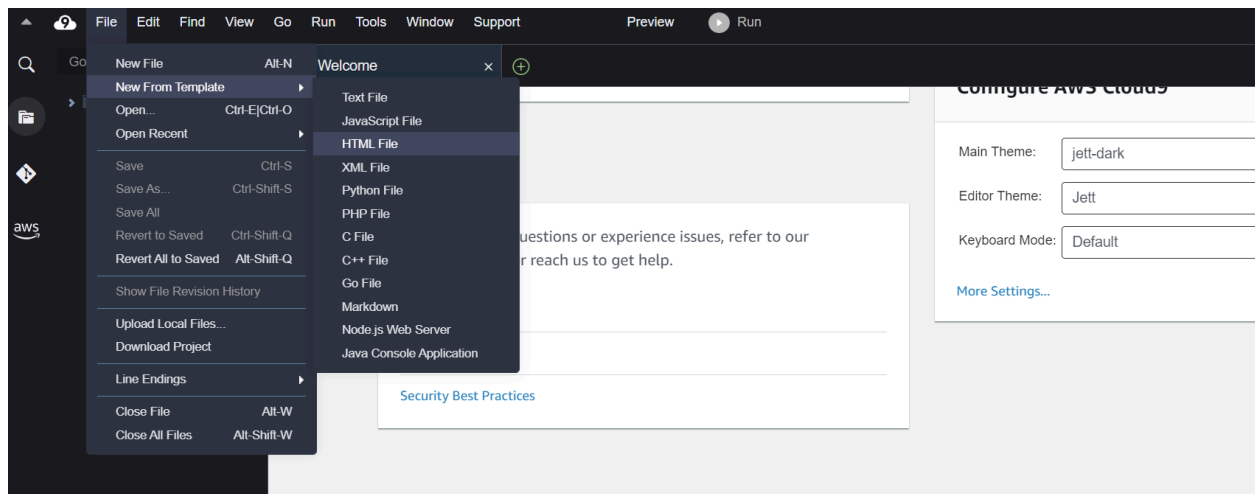
Add policies as per your requirement> I've added AWS Cloud9 services

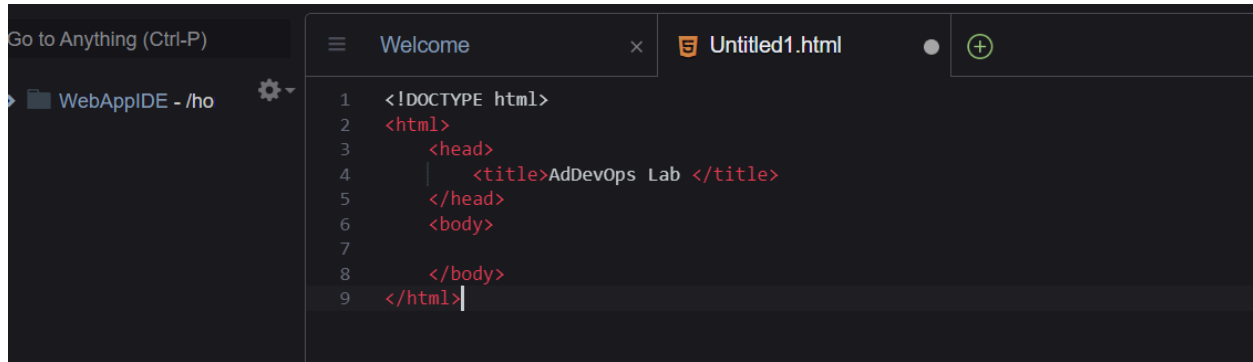


Click on create and done



Now, go back to the academy account and deploy your code

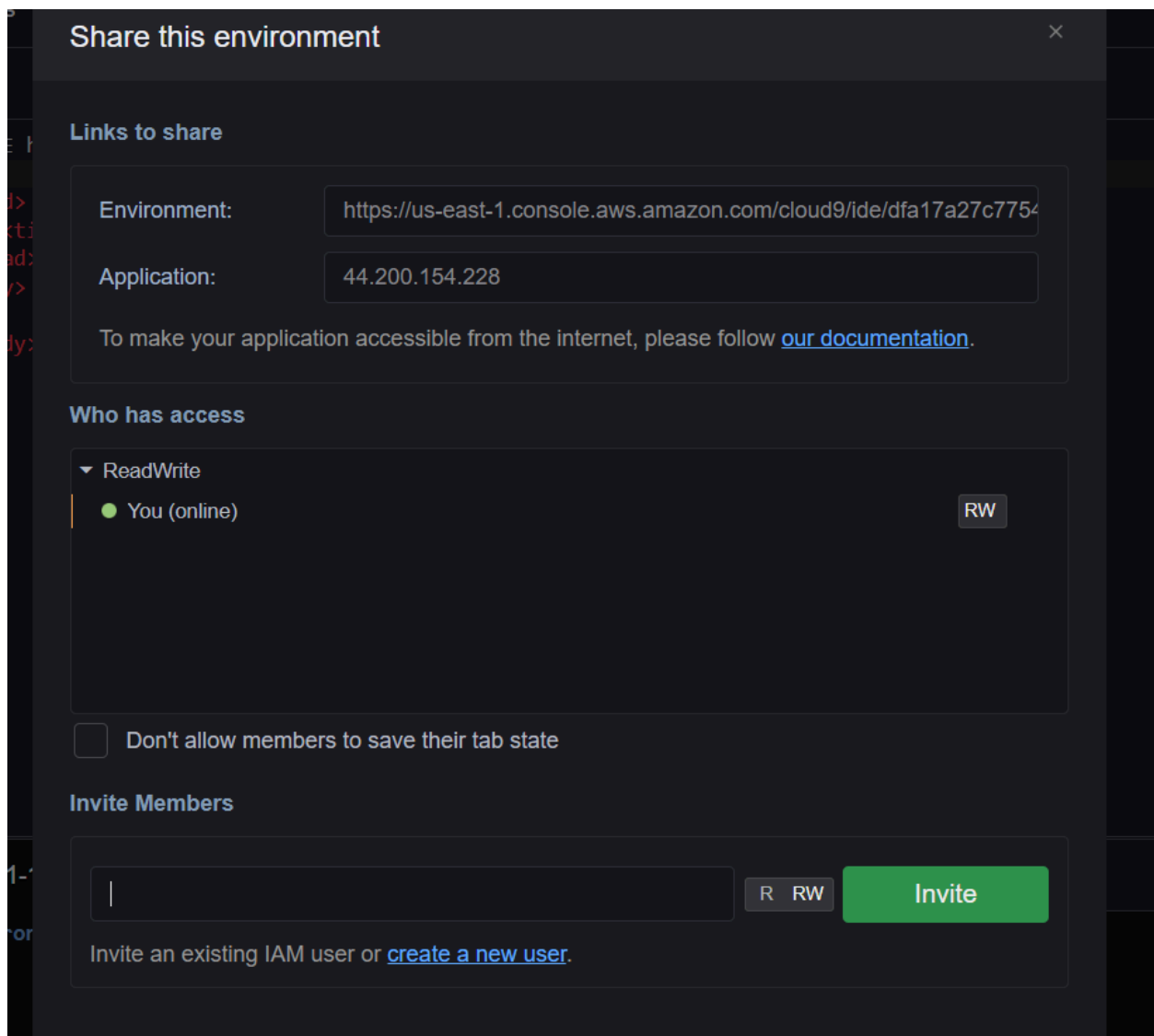




The screenshot shows a code editor interface with a dark theme. The top bar includes a search icon, a hamburger menu, and tabs for 'Welcome' and 'Untitled1.html'. The left sidebar shows a file explorer with a folder named 'WebAppIDE - /ho'. The main editor area displays the following HTML code:

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>AdDevOps Lab </title>
5   </head>
6   <body>
7
8   </body>
9 </html>
```

Click on share this environment and update the <who can access> section



The screenshot shows a 'Share this environment' dialog box with a dark theme. The dialog has a title bar with a close button. It contains the following sections:

- Links to share**:
 - Environment:** `https://us-east-1.console.aws.amazon.com/cloud9/ide/dfa17a27c7754`
 - Application:** `44.200.154.228`
 - To make your application accessible from the internet, please follow [our documentation](#).
- Who has access**:
 - A dropdown menu is set to 'ReadWrite'.
 - A list of users shows 'You (online)' with a green dot and a 'RW' role button.
 - A checkbox labeled 'Don't allow members to save their tab state' is currently unchecked.
- Invite Members**:
 - A text input field is empty.
 - A dropdown menu is set to 'RW'.
 - A green 'Invite' button is visible.
 - Below the input field, it says 'Invite an existing IAM user or [create a new user](#)'.

And done!