CS008: AMAZON WEB SERVICES (AWS) ACCOUNT SETUP

& GETTING STARTED WITH CLOUD9

Last updated by Toby Gustafson on January 7, 2023

UCR

Acknowledgement:

These instructions were very blatantly copied from the CS006 AMAZON WEB SERVICES (AWS) ACCOUNT SETUP instructions created by Ryan Rusich.

UCR

Step 0

AWS Account Setup

- Each student will create a new account for use in the course for the current quarter only.

- Your AWS account is provided free of additional charge for your use this quarter.

- Do **not** use your personal Amazon account during this process, or at any time for course work this quarter. This is to protect you from incurring any additional costs.

- Your AWS account will be deleted after the quarter, so if you want to keep your code long term, make sure you download and store the code on a local device or a cloud-based storage service such as Google Drive.

- Carefully complete **all** steps in the slides, in order.

- Read each instruction in its entirety before proceeding with the process.

- Accounts from previous quarters for CS006/CS008 cannot be reused.

Step 1

Authenticate as UCR student with AWS

- In a web browser open the following web page: https://awsconnect.cs.ucr.edu
- Once the web page opens, go to step 2 (next slide).

Step 2

Login to UCR web services
- Click on the **Log in with R'Mail** blue button.
- Do **not** use your personal G'Mail account.
- You will be prompted to login to UCR web services via two-factor authentication (next slide).

UCR Department of Computer Science & Engineering - AWS Connect

IMPORTANT: If you're currently signed in to a non-R'Mail Google account, sign out of Google before using this page!!!

In order to change your AWS password you must verify your identity by connecting to your R'Mail account with the steps below:

STEP 1

If you're currently signed in to a Google account that is not your **UCR R'Mail** account, **sign out of Google** and return to this page.

STEP 2

If you're not already signed in to your UCR R'Mail account, **sign in now** (opens in new tab).

STEP 3

Click "Log in with R'Mail" button below and click **Accept** when prompted to grant access to **UCR CSE - AWS Connect**.
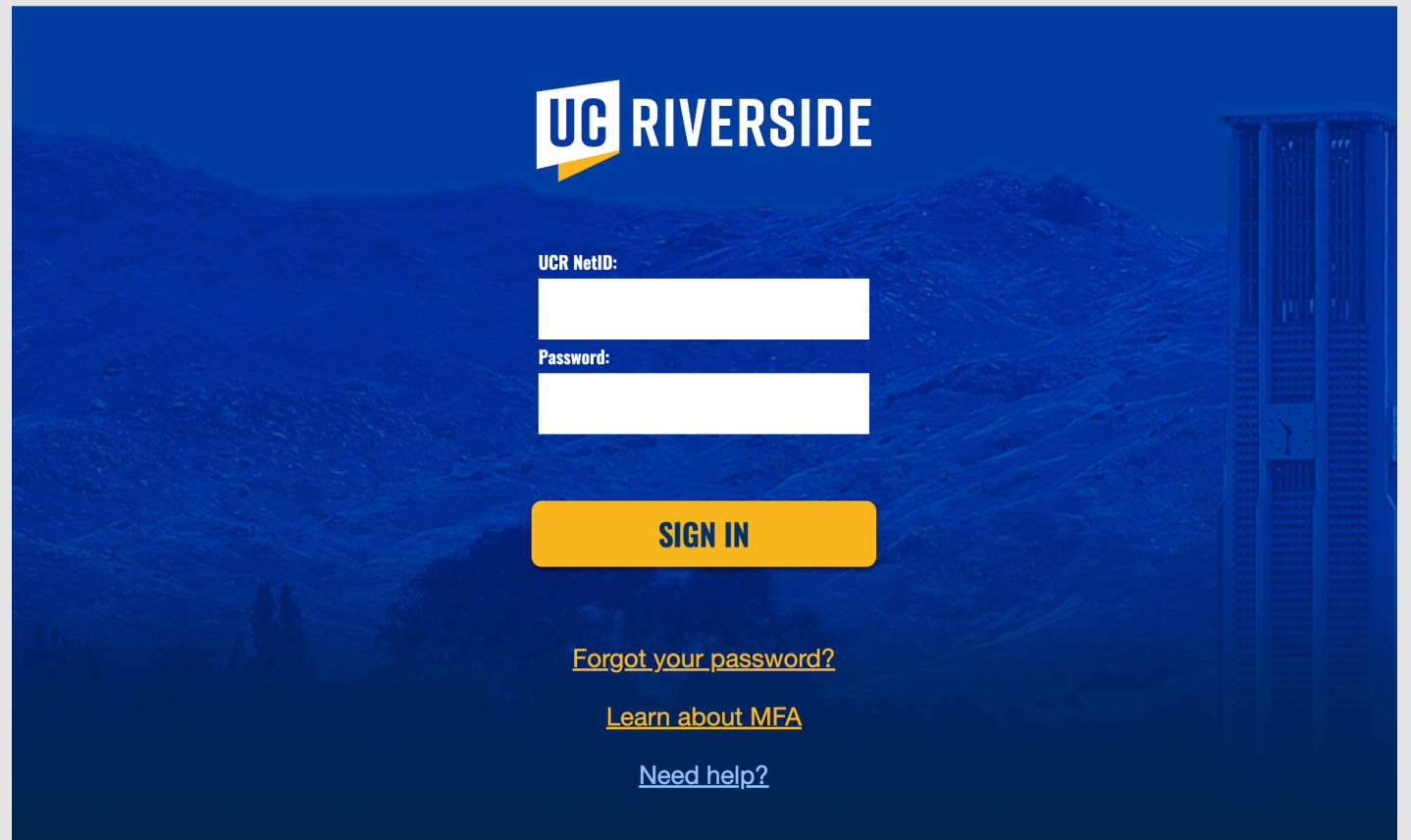
Log in with R'Mail

Step 2

Login to UCR web services
- Authenticate with the same credentials used to login to elearn.ucr.edu.
- If you cannot login, click on **Forgot your password?** and reset your UCR password.
- Once successfully logged in, go to step 3 (next slide).

Step 3

Create AWS account password

- Your AWS account password should be distinct from your UCR web services password.
- Do not reuse the password you use to login to https://elearn.ucr.edu.
- Carefully follow the Password requirements below.
- Once a valid password is entered twice, click **Set AWS password for… account** blue button.

UCR Department of Computer Science & Engineering - AWS Connect

Email address **rrusi001@ucr.edu** is associated with AWS login **rrusi001**

STEP 1

Verify that the email address above is your UCR R'Mail account. If it is not, **sign out of Google** before proceeding!

STEP 2

Verify that the AWS login above is your AWS username. If it is not, **sign out of Google** before proceeding!

STEP 3

If the email address above **is** your UCR R'Mail account, please enter your new AWS password below:

Password: [_____]   **Confirm Password:** [_____]

[Set AWS password for 'rrusi001' account]

(must be 8 - 32 characters and contain at least one lowercase letter, one uppercase letter, one number, and one symbol [,/:~!@#&%^*()+={}])

If **rrusi001@ucr.edu** is not your UCR R'Mail account, please click "Sign Out of Google".

[Cancel AWS Password Change]   [Sign Out of Google]

Password requirements
- length 8-32
- one lowercase letter (a-z)
- one uppercase letter (A-Z)
- one number (0-9)
- one symbol from this list only :
  [, / : ~ ! @ # & % ^ * ( ) + = { }]

Step 4

AWS Password Set

- If AWS password creation was successful, you will see **AWS password change successful!** as below.
- Make sure you keep this AWS password in a safe location for retrieval.
- The AWS password will be used in combination with your UCR NetID to login to your AWS account.
- If at any time during the course **you forget your AWS password**, repeat the AWS Account Setup process in these slides from **steps 1-4**. This will effectively reset your password.

UCR Department of Computer Science & Engineering **- AWS Connect**

AWS password change successful!

Please allow up to 5 minutes for your change to take effect (please do not change it again during this time).

! As a security precaution we've logged you out of "UCR CSE - AWS Connect" and signed you out of Google. **!**

If logged in as a TA, please close the browser now!

Step 5

Login to AWS Account

- Open the following web page in a browser (this web page will be used to sign into your AWS account for the duration of the course): https://959097940486.signin.aws.amazon.com/console
- The fields (shown on right) must have the following values:
    - **The Account ID (12 digits) or account alias:** 959097940486
    - **IAM user name:** Your UCR NetID
    - **Password:** AWS account password created/changed in step 4.
- Click on the **Sign in** blue button to login to AWS account.

aws

Sign in as IAM user

Account ID (12 digits) or account alias

959097940486

IAM user name

rrusi001

Password

················

☐ Remember this account

Sign in

Sign in using root user email

Forgot password?

Step 6

Set server region to US East (Ohio)

- In the upper right corner of the web page ensure that **Ohio** is displayed.
- If it is not, click on the region to display the drop down menu and select **US East (Ohio)**
- This is required, if your region is incorrect, your AWS account services will not be fully functional.

Step 7

Open Cloud9 IDE (Integrated Development Environment)
- In the *Search* field, type **Cloud9** and then press the return/enter button on your keyboard.
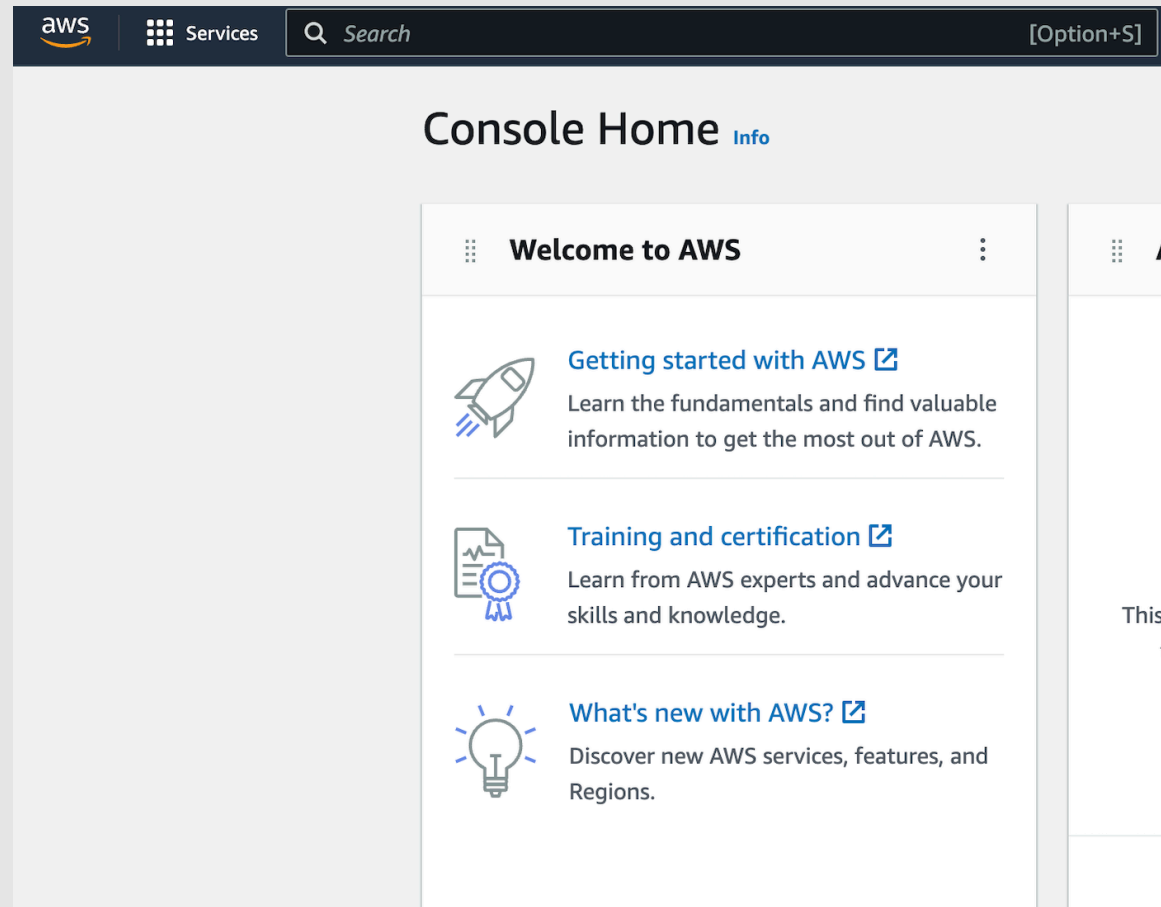
Step 7

Open Cloud9 IDE (Integrated Development Environment)
- In the **Services** column (shown below), click on the first item (**Cloud9**) in light blue.
- In steps 8-9 you will create and configure your AWS environment.
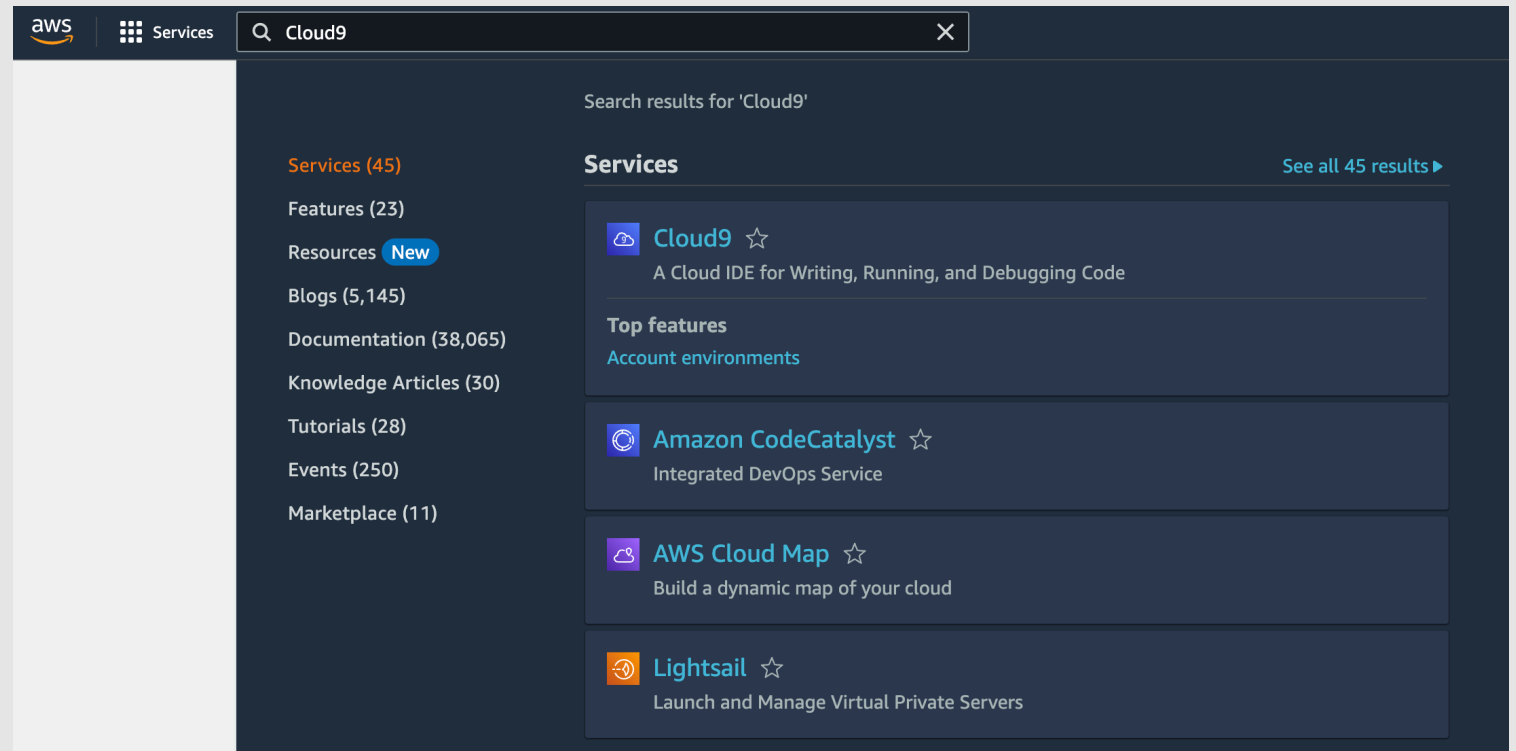
Step 8

Create Environment
- In the web page opened, click on the **Create environment** orange button.
- In step 9 we will configure our AWS environment (next slide).

Step 9

Configure Environment

- In **Name** field type **cs008_win23_** (lowercase c, lowercase s, zero, zero, 8, underscore, lowercase w, lowercase i, lowercase n, 2, 3, underscore) then your NetID in all lowercase (no spaces in between).
- For example, if your NetID was **kflynn001**, then the environment name will be **cs008_win23_kflynn001**.
- In **Description** field type **AWS environment for CS008 labs** (see next slide)**.**

Step 9

Configure Environment

- **Name** – **cs008_win23_** (lowercase c, lowercase s, zero, zero, 8, underscore, lowercase w, lowercase i, lowercase n, 2, 3, underscore) then your NetID in all lowercase (no spaces in between).
- For example, if your NetID was **kflynn001**, then the environment name will be **cs008_win23_kflynn001**.
- **Description** – **AWS environment for CS008 labs.**

Step 9

Configure Environment

- **Environment type** – **New EC2 instance** should be selected.
- **New EC2 Instance** – **t2.micro (1 GiB RAM + 1 vCPU)** should be selected.
- Confirm your settings match those below.
- Scroll down page to next sequence of settings (see next slide).

Step 9

Configure Environment

- **Platform** – **Amazon Linux 2** should be selected.
- **Timeout** – **30 minutes** should be selected.
- **Connection** – change to **Secure Shell (SSH)**. Do **not** use AWS System Manager (SSM)
- Confirm your settings match those below.
- Click **Create** orange button (see next slide).

Step 10

Environment Instantiation (creation)

- After **Create** orange button was pressed in previous slide you will see a **blue banner** at the top of the web page that states:
  - **Creating (account environment name). This can take a few minutes. While you wait, see…**
  - **Environments (1)** will display, not Environments (13) as below.
  - **Important:** do not abort this process or close your web
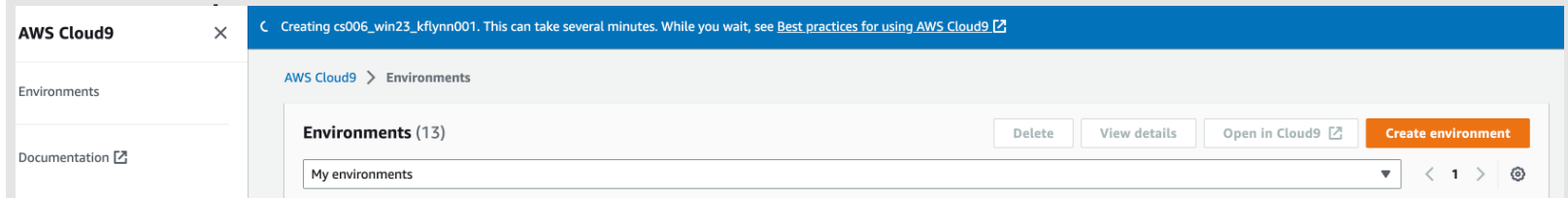
- Once the account is successfully created, you will see a **green banner** at the top of the web page that states:
  - **Successfully created (account environment name). To get the most out of your environment, see…**
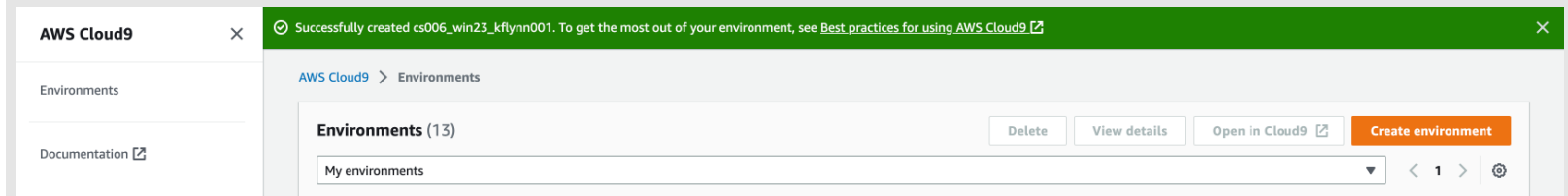
Step 11

Open AWS Cloud9 Environment

- Select the radio button (blue circle on left below) next to your Cloud9 EC2 instance, then click on **Open.**

●	cs006_win23_kflynn001	🗂 Open	EC2 instance	Secure Shell (SSH)	Owner	🗐 arn:aws:iam::959097940486:user/rrusi001

- After you click on **Open**, you will see the web page below. Be patient until your Cloud9 instance is done opening.
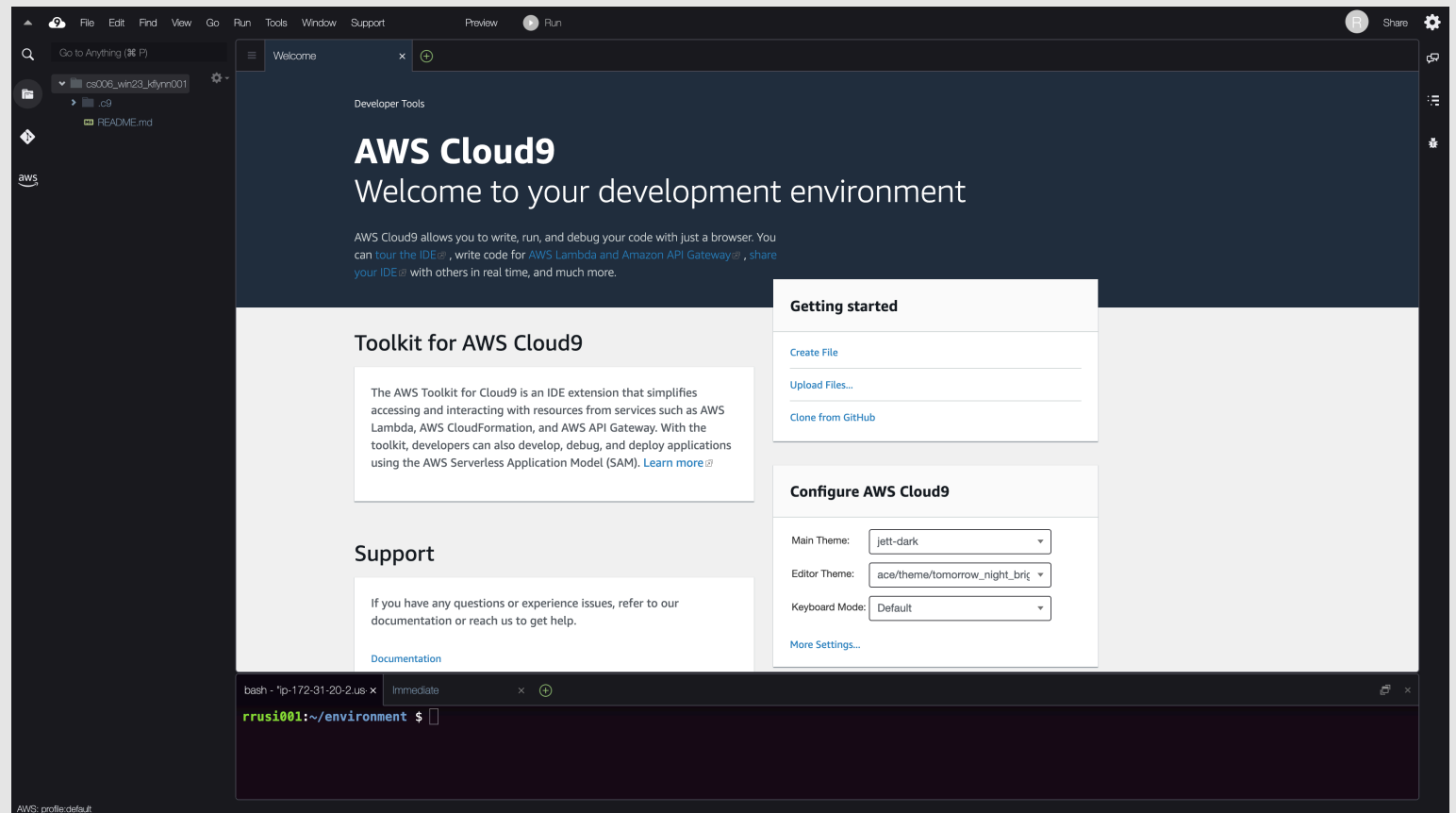

Press Option-Tab to go to the next IDE tab.

Step 11

AWS Cloud9 Welcome

- You should see the **AWS Cloud9 Welcome to your development environment** web page below.
- In the next slide we will close two windows shown below.

Step 11

AWS Cloud9 Welcome

- You should see the **AWS Cloud9 Welcome to your development environment** web page below.
- Click on the **x** next to the **Welcome** window tab to close the middle window at the top of web page (bright yellow circle below).
- Click on the **x** next to the **Immediate**… window tab to close the middle window at bottom of web page (bright cyan circle below).
- Go to next slide now to see final view of your AWS Cloud9 Environment.
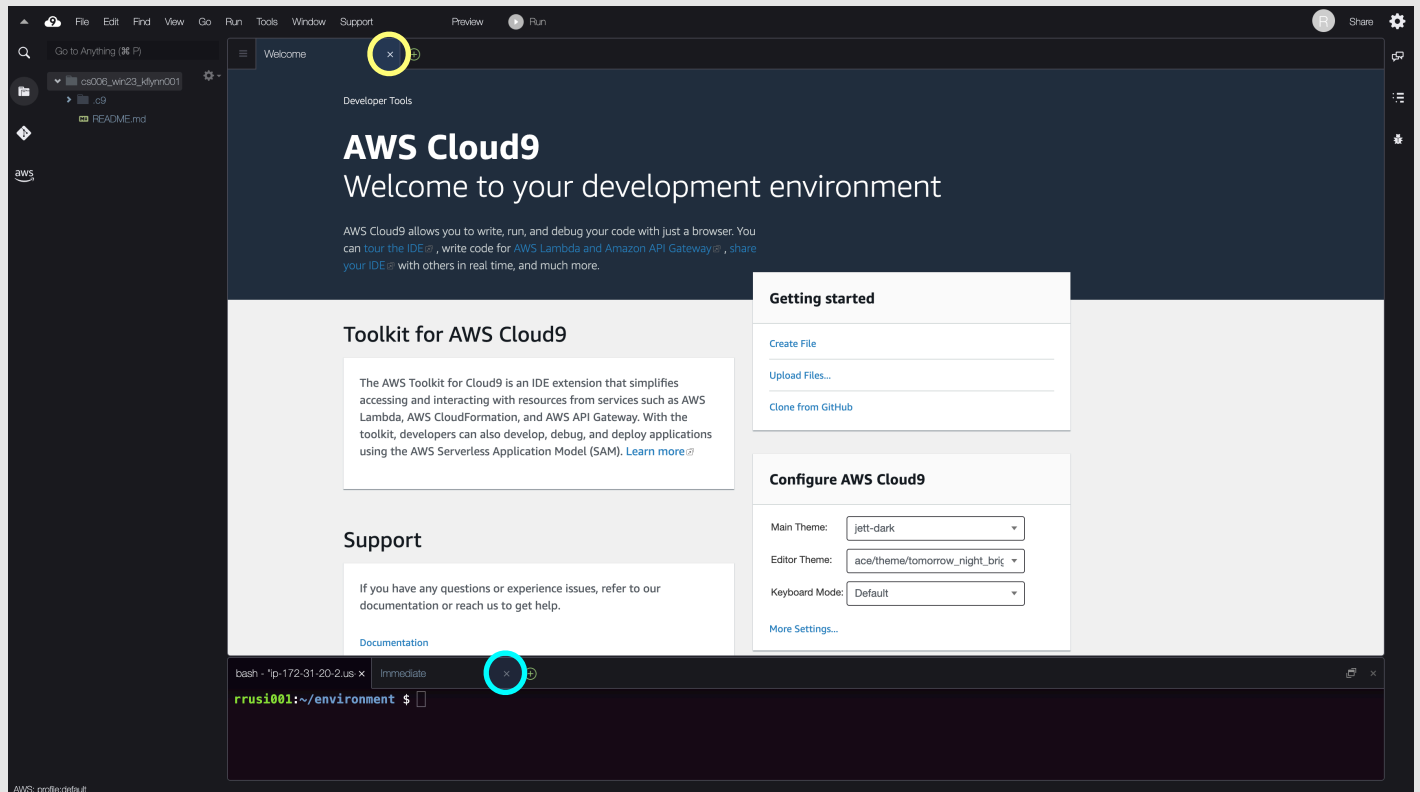
Happy Coding!

AWS Account Setup Complete!!
- Your AWS account is successfully created.
- Your Cloud9 environment is ready to use.
- Google Chrome is required for the course. Go here to install the app. https://www.google.com/chrome/index.html
- Not all browsers display the same web page in the same way.
- Other browsers are not supported and may cost you points unnecessarily if used.