

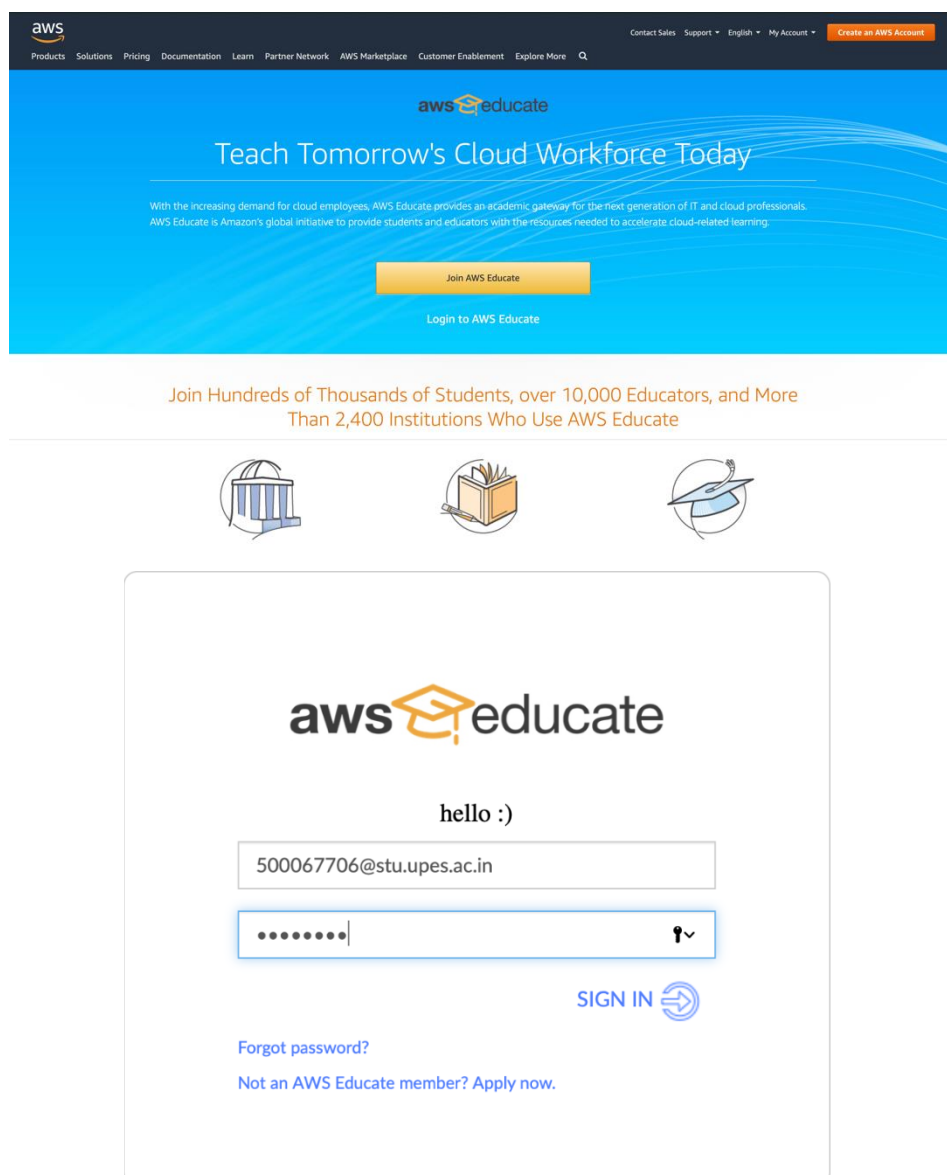
EXPERIMENT-2: EC2 instance creation [IaaS/PaaS]

Steps:

Launching EC2 Instance:

- Step 1:- Login your account on AWS and open the Amazon EC2 console.
- Step 2:- Choose 'Launch Instance' from the console dashboard.
- Step 3:- Choose an Amazon Machine image. In our case choose 'Windows server 2012 R2 base.
- Step 4:- On the choose an Instance page, select the t2 microtype, which is selected by default.
- Step 5:- Click on review&launch.
- Step 6:- Select on launch, on the Review Instance Launch page.
- Step 7:- Choose an existing key pair or create a new key pair and then download key pair.
- Step 8:- Click on view instances to close the configuration page.
- Step 9:- On view Instances screen, wait for the status checks to be final.

Screenshots:



The image shows two screenshots of the AWS Educate platform. The top screenshot is the AWS Educate homepage, featuring the AWS logo, navigation links (Products, Solutions, Pricing, Documentation, Learn, Partner Network, AWS Marketplace, Customer Enablement, Explore More), and a blue banner with the text 'Teach Tomorrow's Cloud Workforce Today'. Below the banner is a yellow 'Join AWS Educate' button and a 'Login to AWS Educate' link. The bottom screenshot is the login page, which includes the AWS Educate logo, a greeting 'hello :)', a text input field containing the email '500067706@stu.upes.ac.in', a password input field with masked characters and a visibility toggle, a 'SIGN IN' button with a right-pointing arrow, and links for 'Forgot password?' and 'Not an AWS Educate member? Apply now.'

AWS Educate Starter Account

Your cloud journey has only just begun. Use your AWS Educate Starter Account to access the AWS Console and resources, and start building in the cloud!

[AWS Educate Starter Account](#)

Your account has an estimated **75** credits remaining and access will end on **Sep 4, 2020**.

Note: Clicking this button will take you to a third party site managed by Vocareum, Inc. ("Third Party Servicer"). In addition to the AWS Educate terms of service, your use of the AWS Educate Starter Account is governed by the Third Party Servicer's terms, including its Privacy Policy. AWS assumes no responsibility or liability and makes no representations or warranties regarding services provided by a Third Party Servicer.

Your Starter Account Status



Active

full access (500067706@stu.upes.ac.in)



\$75

credits (estimated)



364d 23:38:43

remaining term



2:60

session time

[Account Details](#)

[AWS Console](#)

AWS Management Console

AWS services

Find Services

You can enter names, keywords or acronyms.

 Example: Relational Database Service, database, RDS

► All services

Build a solution

Get started with simple wizards and automated workflows.

Launch a virtual machine

With EC2

2-3 minutes



Build a web app

With Elastic Beanstalk

6 minutes



Build using virtual servers

With Lightsail

1-2 minutes



Connect an IoT device

With AWS IoT

5 minutes



Start a development project

With CodeStar

5 minutes



Register a domain

With Route 53

3 minutes



► See more

Step 1: Choose an Amazon Machine Image (AMI)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

Cancel and Exit

Q Search for an AMI by entering a search term e.g. "Windows"

Quick Start

My AMIs

AWS Marketplace

Community AMIs

☐ Free tier only

Amazon Linux

Free tier eligible

Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-0b69ea66f7391e80 (64-bit x86) / ami-09c61c4850b7465cb (64-bit Arm)

Amazon Linux 2 comes with five years support. It provides Linux kernel 4.14 tuned for optimal performance on Amazon EC2, systemd 219, GCC 7.3, Glibc 2.26, Binutils 2.29.1, and the latest software packages through extras.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Select

64-bit (x86)

64-bit (Arm)

Amazon Linux

Free tier eligible

Amazon Linux AMI 2016.03.0 (HVM), SSD Volume Type - ami-00eb20669e0990cb4

The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Select

64-bit (x86)

Red Hat

Free tier eligible

Red Hat Enterprise Linux 8 (HVM), SSD Volume Type - ami-0c322300a1dd5dc79 (64-bit x86) / ami-03587fa4048e9eb92 (64-bit Arm)

Red Hat Enterprise Linux version 8 (HVM), EBS General Purpose (SSD) Volume Type

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Select

64-bit (x86)

64-bit (Arm)

SUSE Linux

Free tier eligible

SUSE Linux Enterprise Server 15 SP1 (HVM), SSD Volume Type - ami-0b5372ab3202bd20b (64-bit x86) / ami-0072af0151be67b9 (64-bit Arm)

SUSE Linux Enterprise Server 15 Service Pack 1 (HVM), EBS General Purpose (SSD) Volume Type. Public Cloud, Advanced Systems Management, Web and Scripting, and Legacy modules enabled.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Select

64-bit (x86)

64-bit (Arm)

Ubuntu

Free tier eligible

Ubuntu Server 18.04 LTS (HVM), SSD Volume Type - ami-07d0cf3af28718ef8 (64-bit x86) / ami-0c46f9f09e3a8c2b5 (64-bit Arm)

Ubuntu Server 18.04 LTS (HVM),EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Select

64-bit (x86)

64-bit (Arm)

Are you launching a database instance? Try Amazon RDS.

Amazon Relational Database Service (RDS) makes it easy to set up, operate, and scale your database on AWS by automating time-consuming database management tasks. With RDS, you can easily

Hide

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance types Current generation Show/Hide Columns

Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	General purpose	t2.micro	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes

Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/xvda	snap-0e4c15b8cba3e8ae6	16	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

Add New Volume

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

Select an existing key pair or create a new key pair



A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Choose an existing key pair



Select a key pair

goyal



☒ I acknowledge that I have access to the selected private key file (goyal.pem), and that without this file, I won't be able to log into my instance.

Cancel

Launch Instances

EC2 Dashboard

Launch Instance Connect Actions

Filter by tags and attributes or search by keyword

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6 IPs	Key Name
	i-030caacae32822dbc	t2.micro	us-east-1b	terminated	None	None				goyal
	i-05b5be27f25b6d18	t2.micro	us-east-1b	running	Initializing	None	ec2-34-229-130-247.co...	34.229.130.247		goyal

Actions menu:

- Image
- Networking
- CloudWatch Monitoring
- Stop - Hibernate
- Reboot
- Terminate

EC2 Dashboard

Launch Instance Connect Actions

Filter by tags and attributes or search by keyword

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6 IPs	Key Name
	i-030caacae32822dbc	t2.micro	us-east-1b	terminated	None	None				goyal
	i-05b5be27f25b6d18	t2.micro	us-east-1b	stopped	None	None				goyal

EC2 Dashboard

Events

Tags

Reports

Limits

INSTANCES

Instances

Launch Templates

Spot Requests

Reserved Instances

Dedicated Hosts

Scheduled Instances

Capacity Reservations

IMAGES

AMIs

Bundle Tasks

Launch Instance

Connect

Actions

Filter by tags and attributes or search by keyword

<<

<

1 to 2 of 2

>

>>

	Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6 IPs	Key Name
<input type="checkbox"/>		i-030caace32822dbc	t2.micro	us-east-1b	terminated	None			-	-	goyal
<input checked="" type="checkbox"/>		i-05b5be27bf25b6d18	t2.micro	us-east-1b	stopped	None			-	-	goyal

Connect

Get Windows Password

Create Template From Instance

Launch More Like This

Instance State

Instance Settings

Image

Networking

CloudWatch Monitoring

Start

Stop

Stop - Hibernate

Reboot

Terminate

Terminate Instances



Warning

On an EBS-backed instance, the default action is for the root EBS volume to be deleted when the instance is terminated. Storage on any local drives will be lost.

Are you sure you want to terminate these instances?

- i-05b5be27bf25b6d18

Cancel

Yes, Terminate

EC2 Dashboard

Events

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INSTANCES

Instances

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Reserved Instances

Dedicated Hosts

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Filter by tags and attributes or search by keyword

<<

<

1 to 2 of 2

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	Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6 IPs	Key Name
<input type="checkbox"/>		i-030caace32822dbc	t2.micro	us-east-1b	terminated	None			-	-	goyal
<input checked="" type="checkbox"/>		i-05b5be27bf25b6d18	t2.micro	us-east-1b	terminated	None			-	-	goyal

