

us-east-1.console.aws.amazon.com/ec2/v2/home?region=us-east-1#LaunchInstances:

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EC2 > Instances > Launch an instance

Success

Successfully initiated launch of instance (i-0f12ba924a7c991f6)

Launch log

Next Steps

Get notified of estimated charges

Create billing alerts to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier)

How to connect to your instance

Your instance is launching and it might be a few minutes until it is in the running state, when it will be ready for you to use

Click View Instances to monitor your instance's status. Once your instance is in the 'running' state, you can connect to it from the Instances screen. Find out [how to connect to your instance](#)

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Courses/NWEN243\_2022T2 | x

AWS Simple Webserver... | x

Learner Lab | x

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Instances | EC2 Management... | x

readme | x

Untitled document - Google | x

+ | x

us-east-1.console.aws.amazon.com/ec2/v2/home?region=us-east-1#Instances:instanceId=i-0f12ba924a7c991f6

aws

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N. Virginia

voclabs/user2056109=carloskhal@ecs.vuw.ac.nz @ 2405-3590-7877

New EC2 Experience

EC2 Dashboard

EC2 Global View

Events

Tags

Limits

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Scheduled Instances

Capacity Reservations

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Network & Security

Security Groups

Elastic IPs

Placement Groups

Instances (1)

Info

Refresh

Connect

Instance state

Actions

Launch instances

Search

Instance ID = i-0f12ba924a7c991f6

Clear filters

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
	Vatican	i-0f12ba924a7c991f6	Running	t2.micro	Initializing	No alarms	us-east-1c	ec2-34-229-146-183.co...	34.229.146.183	-

Select an instance

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Instances | EC2 Management Co...

nwen241 — Dolphin

Unsaved\* — Spectacle

3:46 PM 26/07/22

us-east-1.console.aws.amazon.com/ec2/v2/home?region=us-east-1#InstanceDetails:instanceId=i-Of12ba924a7c991f6

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New EC2 Experience Tell us what you think

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Limits

Instances  
Instances **New**  
Instance Types  
Launch Templates  
Spot Requests  
Savings Plans  
Reserved Instances **New**  
Dedicated Hosts  
Scheduled Instances  
Capacity Reservations

Images  
AMIs **New**  
AMI Catalog

Elastic Block Store  
Volumes **New**  
Snapshots **New**  
Lifecycle Manager **New**

Network & Security  
Security Groups  
Elastic IPs  
Placement Groups

EC2 > Instances > i-Of12ba924a7c991f6

### Instance summary for i-Of12ba924a7c991f6 (Vatican) Info

Updated less than a minute ago

Refresh Connect Instance state Actions

Instance ID i-Of12ba924a7c991f6 (Vatican)	Public IPv4 address 34.229.146.183   <a href="#">open address</a>	Private IPv4 addresses 172.31.27.251
IPv6 address -	Instance state <b>Running</b>	Public IPv4 DNS ec2-34-229-146-183.compute-1.amazonaws.com   <a href="#">open address</a>
Hostname type IP name: ip-172-31-27-251.ec2.internal	Private IP DNS name (IPv4 only) ip-172-31-27-251.ec2.internal	Elastic IP addresses -
Answer private resource DNS name IPv4 (A)	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations.   <a href="#">Learn more</a>
Auto-assigned IP address 34.229.146.183 [Public IP]	VPC ID vpc-0386390b4036f83db	Auto Scaling Group name -
IAM Role -	Subnet ID subnet-018931dff7f82bd19	

**Details** | Security | Networking | Storage | Status checks | Monitoring | Tags

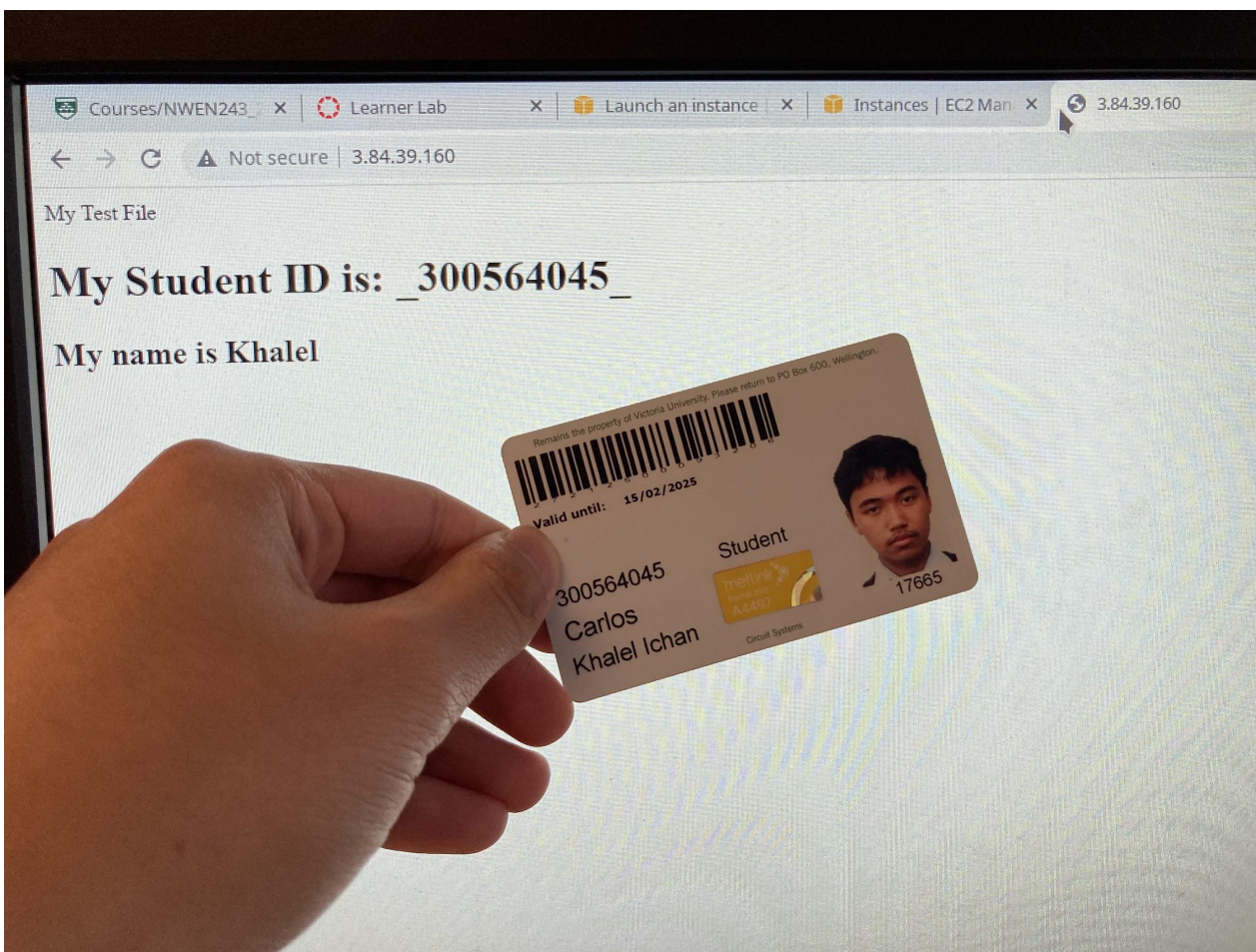
#### ▼ Instance details Info

Platform Amazon Linux (Inferred)	AMI ID ami-0c7f7528ff583bf9a	Monitoring <b>disabled</b>
Platform details Linux/UNIX	AMI name amzn2-ami-kernel-5.10-hvm-2.0.20220606.1-x86_64-gp2	Termination protection <b>Disabled</b>
Stop protection <b>Disabled</b>	Launch time Tue Jul 26 2022 15:45:43 GMT+1200 (New Zealand Standard Time) (2 minutes)	AMI location amazon/amzn2-ami-kernel-5.10-hvm-2.0.20220606.1-x86_64-gp2
Instance auto-recovery <b>Default</b>	Lifecycle <b>normal</b>	Stop-hibernate behavior <b>disabled</b>
AMI Launch index 0	Key pair name <a href="#">oken</a>	State transition reason -

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Instance details | EC2 Managem... nwen241 — Dolphin Unsaved\* — Spectacle 3:47 PM 26/07/22



```
Desktop : zsh — Konsole
File Edit View Bookmarks Plugins Settings Help
New Tab Split View
Copy Paste Find
Caused by: java.lang.ClassNotFoundException: Main
logan-brown% java JokeClient 130.195.6.15 5000
Joke: What is the best thing about Switzerland? I do not know, but the flag is a big plus.
logan-brown% java JokeClient 130.195.6.15 5000
Joke: Where are average things manufactured? The satisfactory.
logan-brown% java JokeClient 130.195.6.15 5000
Joke: I invented a new word: Plagiarism!
logan-brown% java JokeClient 130.195.6.15 5000
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Joke: I invented a new word: Plagiarism!
logan-brown% java JokeClient 130.195.6.15 5000
Joke: Where are average things manufactured? The satisfactory.
logan-brown% java JokeClient 130.195.6.15 5000
Joke: Did you hear about the mathematician who is afraid of negative numbers? He will stop at nothing to avoid them.
logan-brown% java JokeClient 130.195.6.15 5000
Joke: Did you hear about the mathematician who is afraid of negative numbers? He will stop at nothing to avoid them.
logan-brown% 
```

Port number used : 6001

AWS Simple Servers x AWS Simple Servers x Learner Lab x EC2 Management Console x My Drive - Google Drive x carloskhal NWEN243 LAB 1 - x +

us-east-1.console.aws.amazon.com/ec2/v2/home?region=us-east-1#LaunchInstances:

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EC2 > Instances > Launch an instance

**Success**  
Successfully initiated launch of instance (i-03675b543d4b0eabc)

Launch log

Initializing requests	Succeeded
Creating security groups	Succeeded
Creating security group rules	Succeeded
Launch initiation	Succeeded

**Next Steps**

**Get notified of estimated charges**  
[Create billing alerts](#) to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier)

**How to connect to your instance**  
Your instance is launching and it might be a few minutes until it is in the running state, when it will be ready for you to use  
Click [View Instances](#) to monitor your instance's status. Once your instance is in the 'running' state, you can connect to it from the Instances screen. Find out [how to connect to your instance](#)

[View more resources to get you started](#)

[View all instances](#)

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EC2 Management Console - Goog... JokeServer.java — Kate Desktop : zsh — Konsole 2:30 PM 10/08/22



us-east-1.console.aws.amazon.com/ec2/v2/home?region=us-east-1#Instances:

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Tags

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Instances

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Launch Templates

Spot Requests

Savings Plans

Reserved Instances New

Dedicated Hosts

Scheduled Instances

Capacity Reservations

Images

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Volumes New

Snapshots New

Lifecycle Manager New

Network & Security

Security Groups

Elastic IPs

Placement Groups

Instances (1/2) Info

Search

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
<input checked="" type="checkbox"/>	JokesJoke	i-03675b543d4b0ebac	Running	t2.micro	Initializing	No alarms	us-east-1b	ec2-34-205-125-34.co...	34.205.125.34	-
<input type="checkbox"/>	JokesJokesJokes	i-0ef4877f569212ec0	Terminated	t2.micro	-	No alarms	us-east-1b	-	-	-

Instance: i-03675b543d4b0ebac (JokesJoke)

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

▼ Instance summary Info

Instance ID

i-03675b543d4b0ebac (JokesJoke)

Public IPv4 address

34.205.125.34 | [open address](#)

Private IPv4 addresses

172.31.94.63

IPV6 address

-

Public IPv4 DNS

ec2-34-205-125-34.compute-1.amazonaws.com | [open address](#)

Hostname type

Private IP DNS name (IPv4 only)

ip-172-31-94-63.ec2.internal

Instance type

t2.micro

Elastic IP addresses

-

Auto-assigned IP address

34.205.125.34 (Public IP)

VPC ID

vpc-058639cb4036f83db | [open address](#)

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer for recommendations. | [Learn more](#)

IAM Role

-

Subnet ID

subnet-058e19be7e2850065 | [open address](#)

Auto Scaling Group name

-

▼ Instance details Info

Platform

Amazon Linux (Inferred)

AMI ID

ami-090fa75af13c156b4

Monitoring

disabled

Platform details

Linux/UNIX

AMI name

amzn2-ami-kernel-5.10-hvm-2.0.20220719.0-x86\_64-gp2

Termination protection

Disabled

Feedback

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Instances | EC2 Management Co...

JokeServer.java — Kate

Desktop : zsh — Konsole

2:31 PM

10/08/22

```
++ 1 java-1.8.0-openjdk.x86_64 (/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.332.b09-1.amzn2.0.2.x86_64/jre/bin/java)
++ 2 java-11-openjdk.x86_64 (/usr/lib/jvm/java-11-openjdk-11.0.13.0.8-1.amzn2.0.3.x86_64/bin/java)

Enter to keep the current selection[+], or type selection number: 11

There are 2 programs which provide 'java'.

Selection Command
-----
* 1 java-1.8.0-openjdk.x86_64 (/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.332.b09-1.amzn2.0.2.x86_64/jre/bin/java)
  2 java-11-openjdk.x86_64 (/usr/lib/jvm/java-11-openjdk-11.0.13.0.8-1.amzn2.0.3.x86_64/bin/java)

Enter to keep the current selection[+], or type selection number: 2
[ec2-user@ip-172-31-94-63 ~]$ java -version
openjdk version "11.0.13" 2021-10-19 LTS
OpenJDK Runtime Environment 18.9 (build 11.0.13+8-LTS)
OpenJDK 64-Bit Server VM 18.9 (build 11.0.13+8-LTS, mixed mode, sharing)
[ec2-user@ip-172-31-94-63 ~]$ java JokeServer
Error: Could not find or load main class JokeServer
Caused by: java.lang.ClassNotFoundException: JokeServer
[ec2-user@ip-172-31-94-63 ~]$ java JokeServer.java
logan-brown$ javac JokeServer.java
logan-brown$ scp -i kingskey.pem JokeServer.java ec2-user@34.205.125.34:
JokeServer.java 100% 1130 4.8KB/s 00:00
logan-brown$ ls
ec2-user@34.205.125.34 labuser.pem
ENGR123 Lab 1 - Carloskhal.pdf mick.pem
Hello.java oken.pem
HelloWorld.java P1.1.png
index.html P1.2.png
JokeServer.class Screenshot_20220726_160032.jpg
JokeServer.java Screenshot_20220726_160054.jpg
'Khalel - engrproj2' Screenshot_20220726_160402.jpg
kingskey.pem Screenshot_20220726_160418.jpg
logan-brown$ java JokeClient 34.205.125.34 6001
Error: Could not find or load main class JokeClient
Caused by: java.lang.ClassNotFoundException: JokeClient
logan-brown$ java JokeClient.java 34.205.125.34 6001
Joke: Two fish in a tank. One says: How do you drive this thing?
logan-brown$ java JokeClient.java 34.205.125.34 6001
Joke: Two fish in a tank. One says: How do you drive this thing?
logan-brown$ java JokeClient.java 34.205.125.34 6001
Joke: Two fish in a tank. One says: How do you drive this thing?
logan-brown$
```

51 php@0.0 available [ =stable ]

52 tomcat9 available [ =stable ]

53 unbound1.13 available [ =stable ]

54 mariadb10.5 available [ =stable ]

55 kernel-5.10-latest enabled [ =stable ]

56 redis6 available [ =stable ]

57 ruby3.0 available [ =stable ]

58 postgresql12 available [ =stable ]

59 postgresql13 available [ =stable ]

60 mock2 available [ =stable ]

61 dnsmasq2.85 available [ =stable ]

62 kernel-5.15 available [ =stable ]

63 postgresql14 available [ =stable ]

64 firefox available [ =stable ]

[ec2-user@ip-172-31-94-63 ~]\$ java -version

openjdk version "1.8.0.332"

OpenJDK Runtime Environment (build 1.8.0.332-b09)

OpenJDK 64-Bit Server VM (build 25.332-b09, mixed mode)

[ec2-user@ip-172-31-94-63 ~]\$ sudo alternatives --config java

There are 2 programs which provide 'java'.

Selection Command

-----

\* 1 java-1.8.0-openjdk.x86\_64 (/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.332.b09-1.amzn2.0.2.x86\_64/jre/bin/java)

2 java-11-openjdk.x86\_64 (/usr/lib/jvm/java-11-openjdk-11.0.13.0.8-1.amzn2.0.3.x86\_64/bin/java)

Enter to keep the current selection[+], or type selection number: 11

There are 2 programs which provide 'java'.

Selection Command

-----

\* 1 java-1.8.0-openjdk.x86\_64 (/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.332.b09-1.amzn2.0.2.x86\_64/jre/bin/java)

2 java-11-openjdk.x86\_64 (/usr/lib/jvm/java-11-openjdk-11.0.13.0.8-1.amzn2.0.3.x86\_64/bin/java)

Enter to keep the current selection[+], or type selection number: 2

[ec2-user@ip-172-31-94-63 ~]\$ java -version

openjdk version "11.0.13" 2021-10-19 LTS

OpenJDK Runtime Environment 18.9 (build 11.0.13+8-LTS)

OpenJDK 64-Bit Server VM 18.9 (build 11.0.13+8-LTS, mixed mode, sharing)

[ec2-user@ip-172-31-94-63 ~]\$ java JokeServer

Error: Could not find or load main class JokeServer

Caused by: java.lang.ClassNotFoundException: JokeServer

[ec2-user@ip-172-31-94-63 ~]\$ java JokeServer.java

for(true) { (new JokeServer(SS.accept(t), 172.31.94.63, 6001))

4 errors

logan-brown\$ javac JokeServer.java

JokeServer.java:31: error: ';' expected

import java.net.\*

JokeServer.java:14: error: ';' expected

}

2 errors

logan-brown\$ javac JokeServer.java

JokeServer.java:33: error: cannot find symbol

while(true) {(new JokeServer(SS.accept(), t++)).start();}

symbol: method start()

location: class JokeServer

1 error

logan-brown\$ javac JokeServer.java

logan-brown\$ scp -i kingskey.pem JokeServer.java ec2-user@34.205.125.34:

JokeServer.java 100% 1130 4.8KB/s 00:00

logan-brown\$ ls

ec2-user@34.205.125.34 labuser.pem

ENGR123 Lab 1 - Carloskhal.pdf mick.pem

Hello.java oken.pem

HelloWorld.java P1.1.png

index.html P1.2.png

JokeServer.class Screenshot\_20220726\_160032.jpg

JokeServer.java Screenshot\_20220726\_160054.jpg

'Khalel - engrproj2' Screenshot\_20220726\_160402.jpg

kingskey.pem Screenshot\_20220726\_160418.jpg

logan-brown\$ java JokeClient 34.205.125.34 6001

Error: Could not find or load main class JokeClient

Caused by: java.lang.ClassNotFoundException: JokeClient

logan-brown\$ java JokeClient.java 34.205.125.34 6001

Joke: Two fish in a tank. One says: How do you drive this thing?

logan-brown\$ java JokeClient.java 34.205.125.34 6001

Joke: Two fish in a tank. One says: How do you drive this thing?

logan-brown\$ java JokeClient.java 34.205.125.34 6001

Joke: Two fish in a tank. One says: How do you drive this thing?

logan-brown\$

3:42 PM

10/08/22



//sources:

[//Java socket programming - Simple client server program - YouTube](#)

[//Java Socket Programming Client Server Messenger - YouTube](#)

[//Client Server Program In Java Using Sockets - YouTube](#)

```
import java.util.*;
import java.io.*;
import java.net.*;
import java.lang.Math;

public class JokeServer {
    private String[] jokes = { //jokes taken from online
        "Two fish in a tank. One says: How do you drive this thing?",
        "Crime in multi-storey car parks. That is wrong on so many different levels.",
        "My IQ test results came back. They were negative.",
        "How does the man in the moon get his hair cut? Eclipse it.",
        "What happens to an illegally parked frog? It gets toad away."
    };
    private Socket ws;
    public JokeServer(Socket sock, int n) {ws = sock;}

    public void run(){
        int Min = 0;
        int Max = 4;
        try {
            //first get print stream to output
            PrintWriter write = new PrintWriter(ws.getOutputStream(), true);
            //parse through list of jokes randomly from 0 to 4 according to array placement
            write.println("Joke: " + jokes[Min + (int)(Math.random() * ((Max - Min) + 1))]);
            //close socket
            ws.close();
        } catch (IOException e) {}
    }

    public static void main(String args[]) {
        int i = 0;    //reset
        try {
            ServerSocket SS = new ServerSocket(6001); //6001 is the port number
            while(true) {(new JokeServer(SS.accept(), i++)).run();} //infinite accept loop
        } catch (IOException e) {}
    }
}
```