

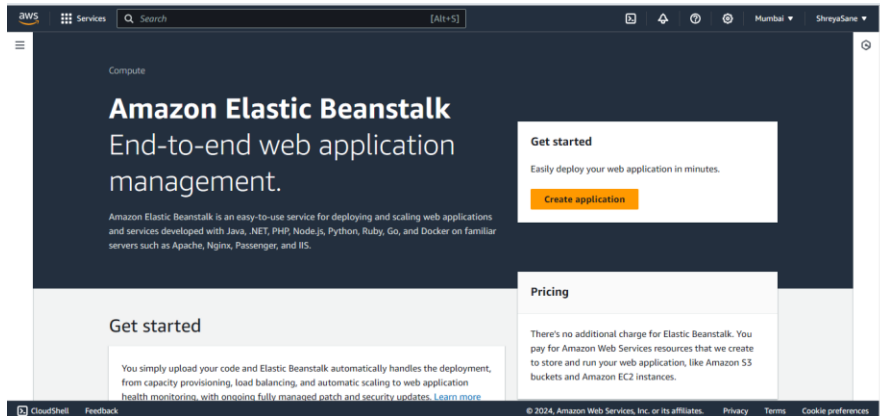
Cloud Computing

PRACTICAL 5

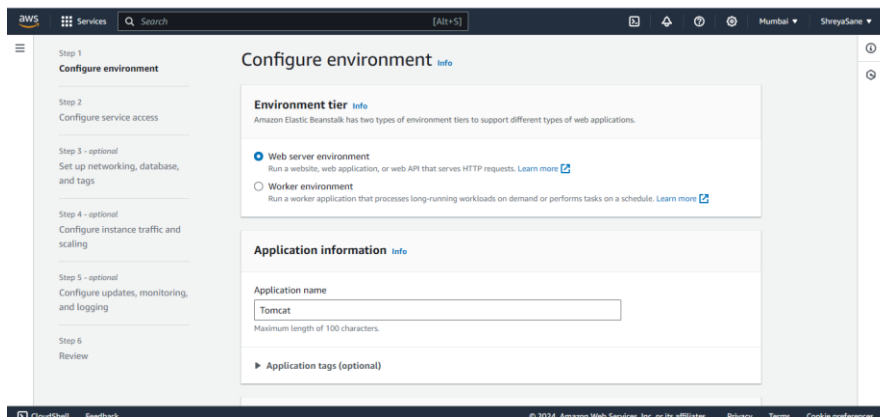
To configure Elastic Beanstalk in AWS

1. Open AWS console. Select Compute service. Click on **Elastic Beanstalk**. Select **create application**.

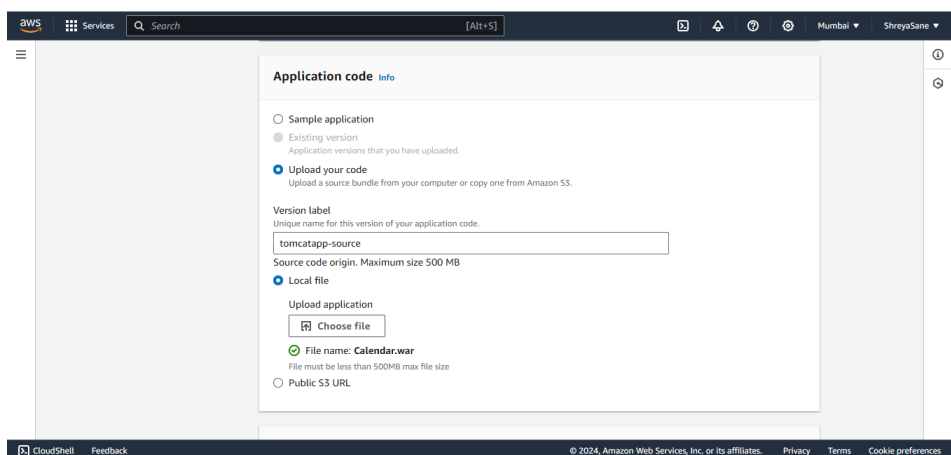
AWS LAB.pdf Page no 320



2. Enter application name



3. Download the **calendar.war** file from github and upload in the **upload file** section.



4. Select the platform as **Tomcat** and enter **Next**.

Name: Shreya Sameer Sane
SAP ID: 86062300009
Roll No: A054
M.Sc. Statistics & Data Science

Platform Info

Platform type

- ☒ Managed platform
Platforms published and maintained by Amazon Elastic Beanstalk. [Learn more](#)
- ☐ Custom platform
Platforms created and owned by you. This option is unavailable if you have no platforms.

Platform

Tomcat

Platform branch

Tomcat 10 with Corretto 21 running on 64bit Amazon Linux 2023

Platform version

5.3.2 (Recommended)

Local file

Upload application

[Choose file](#)

File name: **Calendar.war**
File must be less than 500MB max file size

☐ Public S3 URL

Presets Info

Start from a preset that matches your use case or choose custom configuration to unset recommended values and use the service's default values.

Configuration presets

- ☒ Single instance (free tier eligible)
- ☐ Single instance (using spot instance)
- ☐ High availability
- ☐ High availability (using spot and on-demand instances)
- ☐ Custom configuration

Cancel **Next**

5. Enter skip to review and Submit it.

Configure service access

IAM roles, assumed by Elastic Beanstalk as a service role, and EC2 instance profiles allow Elastic Beanstalk to create and manage your environment. Both the IAM role and instance profile must be attached to IAM managed policies that contain the required permissions. [Learn more](#)

Service role

- ☐ Create and use new service role
- ☒ Use an existing service role

Existing service roles

Choose an existing IAM role for Elastic Beanstalk to assume as a service role. The existing IAM role must have the required IAM managed policies.

EC2 key pair

Select an EC2 key pair to securely log in to your EC2 instances. [Learn more](#)

Choose a key pair

EC2 instance profile

Choose an IAM instance profile with managed policies that allow your EC2 instances to perform required operations.

View permission details

Cancel **Skip to review** Previous **Next**

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Step 1
[Configure environment](#)

Step 2
[Configure service access](#)

Step 3 - optional
[Set up networking, database, and tags](#)

Step 4 - optional
[Configure instance traffic and scaling](#)

Step 5 - optional
[Configure updates, monitoring, and logging](#)

Step 6
Review

Review Info

Step 1: Configure environment Edit

Environment information

Environment tier	Application name
Web server environment	Tomcat
Environment name	Application code
Tomcat-env	Calendar.war
Platform	
arn:aws:elasticbeanstalk:ap-south-1:platform/Tomcat 10 with Corretto 21 running on 64bit Amazon Linux 2023/5.3.2	

Step 2: Configure service access Edit

Elastic Beanstalk ×

Applications

Environments

Change history

▼ Application: Tomcat

Application versions

Saved configurations

▼ **Environment: Tomcat-env**

Go to environment 🔗

Configuration

Events

Health

Logs

Monitoring

...

Elastic Beanstalk is launching your environment. This will take a few minutes. ×

Elastic Beanstalk > Environments > Tomcat-env

Tomcat-env Info

🔄 Actions ▼ Upload and deploy

Environment overview

Health	Environment ID
🕒 Pending	📄 e-7va6g67mvt
Domain	Application name
-	Tomcat

Platform Change version

Platform

Tomcat 10 with Corretto 21 running on 64bit Amazon Linux 2023/5.3.2

Running version

-

Platform state

🟢 Supported

Events Health Logs Monitoring Alarms Managed updates Tags

Elastic Beanstalk ×

Applications

Environments

Change history

▼ Application: Tomcat

Application versions

Saved configurations

▼ **Environment: Tomcat-env**

Go to environment 🔗

Configuration

Events

Health

Logs

Monitoring

Alarms

Elastic Beanstalk is launching your environment. This will take a few minutes. ×

Elastic Beanstalk > Environments > Tomcat-env

Tomcat-env Info

🔄 Actions ▼ Upload and deploy

Environment overview

Health	Environment ID
🕒 Unknown	📄 e-7va6g67mvt
Domain	Application name
-	Tomcat

Platform Change version

Platform

Tomcat 10 with Corretto 21 running on 64bit Amazon Linux 2023/5.3.2

Running version

-

Platform state

🟢 Supported

Events Health Logs Monitoring Alarms Managed updates Tags

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Step 1
Configure environment

Step 2
Configure service access

Step 3 - optional
Set up networking, database, and tags

Step 4 - optional
Configure instance traffic and scaling

Step 5 - optional
Configure updates, monitoring, and logging

Step 6
Review

Configure environment Info

Environment tier Info

Amazon Elastic Beanstalk has two types of environment tiers to support different types of web applications.

☒ **Web server environment**
Run a website, web application, or web API that serves HTTP requests. [Learn more](#)

☐ **Worker environment**
Run a worker application that processes long-running workloads on demand or performs tasks on a schedule. [Learn more](#)

Application information Info

Application name

Maximum length of 100 characters.

▶ Application tags (optional)

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Environment information Info

Choose the name, subdomain and description for your environment. These cannot be changed later.

Environment name

Must be from 4 to 40 characters in length. The name can contain only letters, numbers, and hyphens. It can't start or end with a hyphen. This name must be unique within a region in your account.

Domain
.ap-south-1.elasticbeanstalk.com

Environment description

Platform Info

Platform type
☒ Managed platform

CloudShell

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PlatformInfo

Platform type

☒ Managed platform
Platforms published and maintained by Amazon Elastic Beanstalk. [Learn more](#)

☐ Custom platform
Platforms created and owned by you. This option is unavailable if you have no platforms.

Platform

Python

Platform branch

Python 3.11 running on 64bit Amazon Linux 2023

Platform version

4.1.4 (Recommended)

Application codeInfo

CloudShellFeedback

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Application codeInfo

☒ Sample application

☐ Existing version
Application versions that you have uploaded.

☐ Upload your code
Upload a source bundle from your computer or copy one from Amazon S3.

PresetsInfo

Start from a preset that matches your use case or choose custom configuration to unset recommended values and use the service's default values.

Configuration presets

☒ Single instance (free tier eligible)

☐ Single instance (using spot instance)

☐ High availability

☐ High availability (using spot and on-demand instances)

☐ Custom configuration

Cancel

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Identity and Access Management (IAM)

Search IAM

Dashboard

Access management

User groups

Users

Roles

Policies

Identity providers

Account settings

Access reports

Access Analyzer

External access

Unused access

IAM > Roles

Roles (2) Info

Refresh

Delete

Create role

An IAM role is an identity you can create that has specific permissions with credentials that are valid for short durations. Roles can be assumed by entities that you trust.

Search

<input type="checkbox"/>	Role name	Trusted entities	Last activity
<input type="checkbox"/>	AWSServiceRoleForSupport	AWS Service: support (Service-Linker)	-
<input type="checkbox"/>	AWSServiceRoleForTrustedAdvisor	AWS Service: trustedadvisor (Service-Linker)	-

Roles Anywhere Info

Manage

Authenticate your non AWS workloads and securely provide access to AWS services.

Access AWS from your non AWS workloads

X.509 Standard

Temporary credentials

CloudShell

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IAM > Roles > Create role

Step 1

Select trusted entity

Step 2

Add permissions

Step 3

Name, review, and create

Select trusted entity Info

Trusted entity type

☒ AWS service

Allow AWS services like EC2, Lambda, or others to perform actions in this account.

☐ AWS account

Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.

☐ Web identity

Allows users federated by the specified external web identity provider to assume this role to perform actions in this account.

☐ SAML 2.0 federation

Allow users federated with SAML 2.0 from a corporate directory to perform actions in this account.

☐ Custom trust policy

Create a custom trust policy to enable others to perform actions in this account.

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Service or use case

EC2

Choose a use case for the specified service.
Use case

☒ EC2

Allows EC2 instances to call AWS services on your behalf.

☐ EC2 Role for AWS Systems Manager

Allows EC2 instances to call AWS services like CloudWatch and Systems Manager on your behalf.

☐ EC2 Spot Fleet Role

Allows EC2 Spot Fleet to request and terminate Spot Instances on your behalf.

☐ EC2 - Spot Fleet Auto Scaling

Allows Auto Scaling to access and update EC2 spot fleets on your behalf.

☐ EC2 - Spot Fleet Tagging

Allows EC2 to launch spot instances and attach tags to the launched instances on your behalf.

☐ EC2 - Spot Instances

Allows EC2 Spot Instances to launch and manage spot instances on your behalf.

☐ EC2 - Spot Fleet

Allows EC2 Spot Fleet to launch and manage spot fleet instances on your behalf.

☐ EC2 - Scheduled Instances

Allows EC2 Scheduled Instances to manage instances on your behalf.

Cancel

Next

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Step 3

Name, review, and create

Filter by type

beans

All types

14 matches

	Policy name	Type	Description
<input type="checkbox"/>	AdministratorAccess-AWS...	AWS managed	Grants account administrative permissions. Explicitly allows developers and administrators t...
<input type="checkbox"/>	AWSElasticBeanstalkCust...	AWS managed	Provide the instance in your custom platform builder environment permission to launch EC...
<input type="checkbox"/>	AWSElasticBeanstalkEnha...	AWS managed	AWS Elastic Beanstalk Service policy for Health Monitoring system
<input type="checkbox"/>	AWSElasticBeanstalkMan...	AWS managed	This policy is for the AWS Elastic Beanstalk service role used to perform managed updates o...
<input checked="" type="checkbox"/>	AWSElasticBeanstalkMulti...	AWS managed	Provide the instances in your multicontainer Docker environment access to use the Amazon ...
<input type="checkbox"/>	AWSElasticBeanstalkRead...	AWS managed	Grants read-only permissions. Explicitly allows operators to gain direct access to retrieve inf...
<input type="checkbox"/>	AWSElasticBeanstalkRole...	AWS managed	AWSElasticBeanstalkRoleCore (Elastic Beanstalk operations role) Allows core operation of a ...
<input type="checkbox"/>	AWSElasticBeanstalkRole...	AWS managed	(Elastic Beanstalk operations role) Allows an environment to manage Amazon CloudWatch L...
<input type="checkbox"/>	AWSElasticBeanstalkRole...	AWS managed	(Elastic Beanstalk operations role) Allows a multicontainer Docker environment to manage ...
<input type="checkbox"/>	AWSElasticBeanstalkRole...	AWS managed	(Elastic Beanstalk operations role) Allows an environment to integrate an Amazon RDS insta...
<input type="checkbox"/>	AWSElasticBeanstalkRole...	AWS managed	(Elastic Beanstalk operations role) Allows an environment to enable Amazon SNS topic inte...
<input type="checkbox"/>	AWSElasticBeanstalkRole...	AWS managed	(Elastic Beanstalk operations role) Allows a worker environment tier to create an Amazon D...
<input checked="" type="checkbox"/>	AWSElasticBeanstalkWeb...	AWS managed	Provide the instances in your web server environment access to upload log files to Amazon S3.
<input checked="" type="checkbox"/>	AWSElasticBeanstalkWor...	AWS managed	Provide the instances in your worker environment access to upload log files to Amazon S3, t...

Set permissions boundary - optional

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Global view

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Identity and Access Management (IAM)

Search IAM

Dashboard

Access management

- User groups
- Users
- Roles**
- Policies
- Identity providers
- Account settings

Access reports

- Access Analyzer
- External access
- Unused access
- Analyzer settings
- Credential report
- Organization activity
- Service control policies

Role Firsttime_role created. View role

IAM > Roles

Roles (3) Info Refresh Delete Create role

An IAM role is an identity you can create that has specific permissions with credentials that are valid for short durations. Roles can be assumed by entities that you trust.

Search

<input type="checkbox"/>	Role name	Trusted entities	Last activity
<input type="checkbox"/>	AWSServiceRoleForSupport	AWS Service: support (Service-Linker)	-
<input type="checkbox"/>	AWSServiceRoleForTrustedAdvisor	AWS Service: trustedadvisor (Service-Linker)	-
<input type="checkbox"/>	Firsttime_role	AWS Service: ec2	-

Roles Anywhere Info Manage

Authenticate your non AWS workloads and securely provide access to AWS services.

Access AWS from your non AWS workloads

Operate your non AWS workloads using the same authentication and authorization strategy that you use within AWS.

X.509 Standard

Use your own existing PKI infrastructure or use [AWS Certificate Manager Private Certificate Authority](#) to authenticate identities.

Temporary credentials

Use temporary credentials with ease and benefit from the enhanced security they provide.

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Step 1
Configure environment

Step 2
Configure service access

Step 3 - optional
Set up networking, database, and tags

Step 4 - optional
Configure instance traffic and scaling

Step 5 - optional
Configure updates, monitoring, and logging

Step 6
Review

Configure service access

Service access

IAM roles, assumed by Elastic Beanstalk as a service role, and EC2 instance profiles allow Elastic Beanstalk to create and manage your environment. Both the IAM role and instance profile must be attached to IAM managed policies that contain the required permissions. [Learn more](#)

Service role

☐ Create and use new service role

☒ Use an existing service role

Existing service roles

Choose an existing IAM role for Elastic Beanstalk to assume as a service role. The existing IAM role must have the required IAM managed policies.

Firsttime_role

EC2 key pair

Select an EC2 key pair to securely log in to your EC2 instances. [Learn more](#)

Choose a key pair

EC2 instance profile

Choose an IAM instance profile with managed policies that allow your EC2 instances to perform required operations.

Firsttime_role

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Elastic Beanstalk

Applications

Environments

Change history

Application: WebApp

Application versions

Saved configurations

Environment: Webapp-env

Go to environment

Configuration

Events

Health

Logs

Monitoring

Alarms

Elastic Beanstalk is launching your environment. This will take a few minutes.

Elastic Beanstalk > Environments > Webapp-env

Webapp-env

Environment overview

Health

Unknown

Environment ID

e-a8tcnwd77w

Domain

-

Application name

WebApp

Platform

Change version

Platform

Python 3.11 running on 64bit Amazon Linux 2023/4.1.4

Running version

-

Platform state

Supported

Events

Health

Logs

Monitoring

Alarms

Managed updates

Tags

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Elastic Beanstalk

- Applications
- Environments
- Change history

▼ Application: WebApp

- Application versions
- Saved configurations

▼ Environment: Webapp-env

- Go to environment
- Configuration
- Events
- Health
- Logs
- Monitoring
- Alarms

Environment successfully launched.

Elastic Beanstalk > Environments > Webapp-env

Webapp-env

Actions Upload and deploy

Environment overview

Health Warning

Environment ID: e-a8tcnwd77w

Domain: Webapp-env.eba-ssthmami.ap-south-1.elasticbeanstalk.com

Application name: WebApp

Platform

Change version

Platform: Python 3.11 running on 64bit Amazon Linux 2023/4.1.4

Running version: -

Platform state: Supported

Events Health Logs Monitoring Alarms Managed updates Tags

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← → ↻ Not secure webapp-env.eba-ssthmami.ap-south-1.elasticbeanstalk.com

Congratulations

Your first AWS Elastic Beanstalk Python Application is now running on your own dedicated environment in the AWS Cloud

This environment is launched with Elastic Beanstalk Python Platform

What's Next?

- [AWS Elastic Beanstalk overview](#)
- [AWS Elastic Beanstalk concepts](#)
- [Deploy a Django Application to AWS Elastic Beanstalk](#)
- [Deploy a Flask Application to AWS Elastic Beanstalk](#)
- [Customizing and Configuring a Python Container](#)
- [Working with Logs](#)

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Elastic Beanstalk

- Applications
- Environments
- Change history

▼ Recent environments

- Webapp-env
- Tomcat-env

Environment successfully terminated.

Elastic Beanstalk > Environments

Environments (1)

Filter environments

Create environment

Environment name	Health	Applica...	Platform	Domain	Runnin...
Webapp-env (terminated)	Unknown	WebApp	Python 3...	Webapp-env.eba-ssthmami.ap...	-