

Tutorials for Setting Up Deployments with AWS

Log in Canvas -> AWS Academy Learner Lab [109407] -> Modules -> Launch AWS Academy

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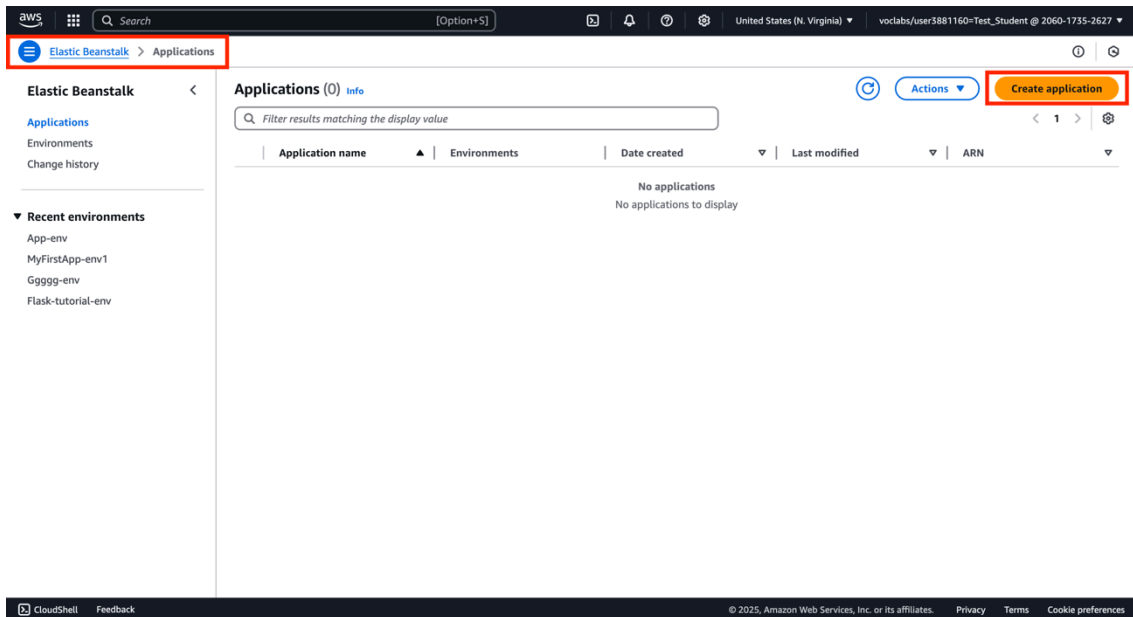
EC2

Follow the tutorial in the screenshot below and read the official User Guide (https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EC2_GetStarted.html) as a complement.

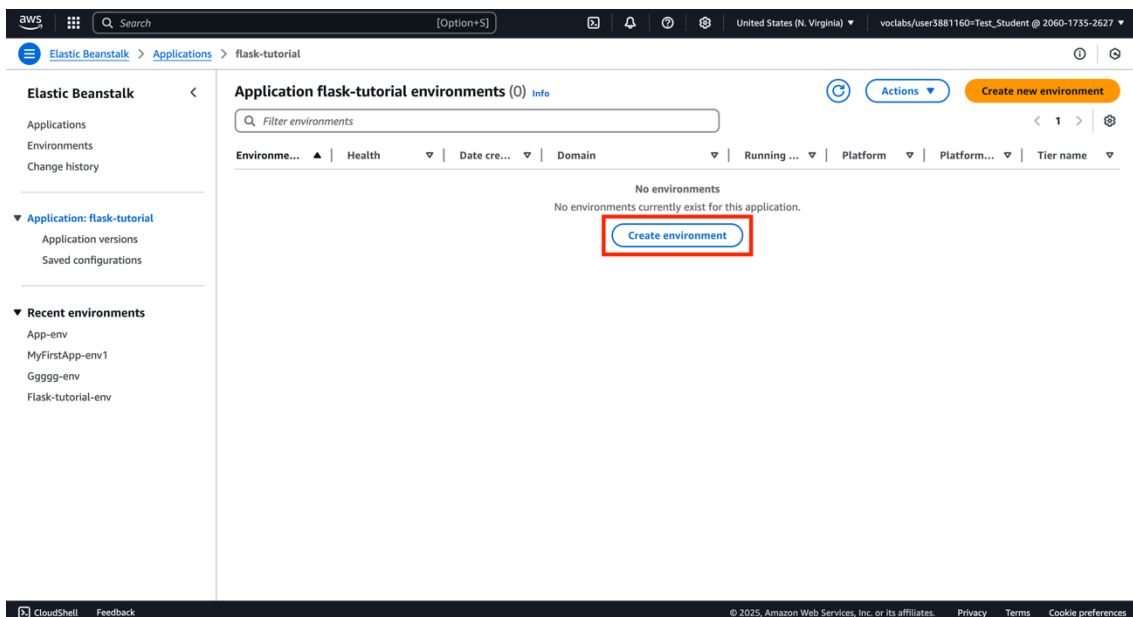
The screenshot shows the AWS Management Console interface for launching an EC2 instance. The breadcrumb navigation at the top reads "EC2 > Instances > Launch an instance". A red box highlights this breadcrumb. The main content area is divided into several sections: "Architecture" (64-bit (x86)), "Boot mode" (uefi-preferred), "AMI ID" (ami-05b10e08d247fb927), and "Username" (ec2-user). A "Summary" section shows "Number of instances" set to 1. A "Key pair (login)" section is active, with a dropdown menu set to "Select" and a "Create new key pair" button. A "Network settings" section is also visible. A "Help panel" is located in the top right corner, with a red arrow pointing to it. A tutorial overlay is present in the center, titled "Task 1: Launch a test instance", with a "Next" button. On the right side, a "Tutorial" sidebar is visible, containing a list of steps: "Task 1: Launch a test instance" (8 total steps) and "Task 2: Post Launch Setup" (1 total step). A "Dismiss tutorial" button is at the bottom of the sidebar. The footer of the console shows "© 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences".

Elastic Beanstalk - Deploying a Flask application to Elastic Beanstalk

1. Create a Flask application `application.py` and a requirements file `requirements.txt`, following the instructions in the official Developer Guide (<https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/create-deploy-python-flask.html>).
2. Compress these two files into a ZIP archive named `eb-Flask.zip`
3. AWS Management Console -> Elastic Beanstalk -> Applications -> Create application
 - Application name: `flask-tutorial` --> Create



4. Create environment



- Platform -> Platform: `Python`

- Application code -> Upload your code
 - Version label: **1.0**
 - Local file -> Choose file: **eb-Flask.zip**
- Next
- Service access -> Use an existing service role
 - Existing service roles: **LabRole**
 - EC2 instance profile: **LabInstanceProfile**
- Next
- Skip to review
- Submit

5. Press the refresh button until the environment successfully launched.
6. Press the Domain link.

The screenshot shows the AWS Elastic Beanstalk console for the environment 'Flask-tutorial-env'. A green banner at the top indicates 'Environment successfully launched.' Below this, the 'Environment overview' section shows the health status as 'Ok' and the domain as 'Flask-tutorial-env.eba-wdwxpp8h.us-east-1.elasticbeanstalk.com', which is highlighted with a red box. The 'Platform' section shows 'Python 3.13 running on 64bit Amazon Linux 2023/4.4.1' and 'Running version 1.0' with a 'Supported' platform state. The 'Events' section shows a list of events, including 'Environment health has transitioned from Pending to Ok' and 'Successfully launched environment: Flask-tutorial-env'.

For more information, please refer to the links below:

- How to Create Elastic Beanstalk environment in AWS | Python sample Application: <https://www.youtube.com/watch?v=Hp6QgknseuQ>
- How to Deploy Python Flask based Web Application to Elastic Beanstalk Environment: <https://www.youtube.com/watch?v=FaKlKlCicyKQ>

Amplify

Due to IAM role and policy restrictions, the tutorial in the link below **cannot be completed in the AWS Academy Learner Lab**. However, you can complete it using your personal AWS account instead.

- Build a Basic Web Application TUTORIAL:
<https://aws.amazon.com/getting-started/hands-on/build-web-app-s3-lambda-api-gateway-dynamodb/>

App Runner

Due to IAM role and policy restrictions, the tutorial in the link below **cannot be completed in the AWS Academy Learner Lab**. However, you can complete it using your personal AWS account instead.

- Getting started with App Runner:
<https://docs.aws.amazon.com/apprunner/latest/dg/getting-started.html>

