

Explore the Value Of Automation

Lab Overview

Automation is the technology by which a process or procedure is performed with minimal human assistance. In software, automation technology is used to control and monitor the production and delivery of various goods and services.

In this lab, you will:

- Participate in a group to research a topic on automation
- Present your results to the class

Estimated Completion Time

30 minutes

Exercise 1: Research Automation Topics

Divide into groups. The groups should be approximately equal in size, ideally with 5 members per group. Each group should choose one of the following automation topics do research for about 15 minutes to answer the corresponding questions.

Topic: Build Automation

Build automation is the practice of automatically compiling your code after changes are made. Use the Internet to research answers to the following questions:

1. What are some build automation tools?

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2. What are the expected benefits of build automation?

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3. What are the challenges and problems with implementing build automation?

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Topic: Test Automation

Test automation uses logic tests to ensure software runs the way you intended after changes are made. Use the Internet to research answers to the following questions:

4. What are some test automation tools?

5. What are the expected benefits of test automation?

6. What are the challenges and problems with implementing test automation?

Topic: Deployment Automation

Deployment automation is a way to get your code to a useable format either for testing or for use. Use the Internet to research answers to the following questions:

7. What are some deployment automation tools?

8. What are the expected benefits of deployment automation?

9. What are the challenges and problems with implementing deployment automation?

Exercise 2: Group Presentations

Each group will present their research topic and a summary of the tools, the benefits, and challenges. Note, presentations should be short, about 2 to 3 minutes per group.

Lab Review

As a class, discuss the following questions:

10. What is the value of automation?
11. Why should you not automate every process in DevOps?

STOP

You have successfully completed this lab.

Additional Resources

For more information about AWS Training and Certification, see <https://aws.amazon.com/training/> (<https://aws.amazon.com/training/>).

Your feedback is welcome and appreciated. If you would like to share any suggestions or corrections, please provide the details in our AWS Training and Certification Contact Form (<https://support.aws.amazon.com/#/contacts/aws-training>).

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