**Projects**

**Deploy the files to Bitbucket via Git.**

**Well done!** You've successfully completed this project.

Congratulations! Your project is evaluated and approved. Kindly rate your experience (please rate 9-10 if your experience is good) https://www.surveymonkey.com/r/58HB37G (Ticket: 00529591)

DESCRIPTION

**Create a directory named “Lesson-02” and perform the following:**

• Create multiple files with .html, .xml, .txt, .py, .js, and .java.

• Add random content in each file.

• Connect git local to Bitbucket remote.

• Push the directory “Lesson-02” to Bitbucket account.

**Access:**Click on the Labs tab on the left side panel of the LMS. Copy or note the username and password that is generated. Click on the Launch Lab button. On the page that appears, enter the username and password in the respective fields, and click Login.

**Continuous Integration with Jenkins, Git, and Maven**

DESCRIPTION

**Create a FreeStyle project in Jenkins and complete the following:**

• Install “Email Extension plugin” in Jenkins.

• Configure Gmail in Jenkins.

• Receive an email when build fails and succeeds.

**Access:**Click on the **Labs** tab on the left side panel of the LMS. Copy or note the username and password that is generated. Click on the **Launch Lab** button. On the page that appears, enter the username and password in the respective fields, and click **Login**.

**Behavior-Driven Development Approach with Java and Kotlin**

DESCRIPTION

**Create a directory named Lesson-04 and perform the following:**

• Install cucumber on IntelliJ for Java and Visual Studio Code for Kotlin.

• Execute the 3 scenarios: Undefined, Failed, and Passed for Java.

• Execute the 3 scenarios: Undefined, Failed, and Passed for Kotlin.

**Access:**Click on the **Labs** tab on the left side panel of the LMS. Copy or note the username and password that is generated. Click on the**Launch Lab** button. On the page that appears, enter the username and password in the respective fields, and click **Login**.

**Set up MySQL Database using Ansible**

DESCRIPTION

**Perform the following actions:**

• Install Ansible in Ubuntu if it is not installed.

• Establish connection between Ansible controller and the node machine.

• Write Ansible YAML script to install Ansible software.

• Run Ansible YAML script.

**Access:**Click on the **Labs** tab on the left side panel of the LMS. Copy or note the username and password that is generated. Click on the **Launch Lab** button. On the page that appears, enter the username and password in the respective fields, and click **Login**.

**Build a Docker Image and Deploy to the Docker Hub**

DESCRIPTION

**Perform the following actions:**

• Create a GitHub repository to save the code and to build the image.

• Create an account on Docker Hub.

• Install Docker on your machine.

• Login to Docker Hub.

**Access:**Click on the **Labs** tab on the left side panel of the LMS. Copy or note the username and password that is generated. Click on the **Launch Lab** button. On the page that appears, enter the username and password in the respective fields, and click **Login**.

**Add a node in Nagios Monitoring Tool**

DESCRIPTION

**Perform the following actions:**

• Download Nagios plugin source code.

• Open Admin console of Nagios to install plugin.

• Find the required plugin.

• Install the plugin.

• Validate if it is working.

**Access:**Click on the **Labs**tab on the left side panel of the LMS. Copy or note the username and password that is generated. Click on the **Launch Lab** button. On the page that appears, enter the username and password in the respective fields, and click **Login**.

**Host Docker on a Kubernetes Docker**

DESCRIPTION

**Perform the following:**

• Clone the GitHub repository to build the image.

• Confirm if any of the pods are running in the Kubernetes cluster.

• Run the Docker app at port 80.

• Host the Docker image built on a Kubernetes cluster.

**Access:**Click on the **Labs**tab on the left side panel of the LMS. Copy or note the username and password that is generated. Click on the **Launch Lab** button. On the page that appears, enter the username and password in their respective fields, and click **Login**.