



ENTERPRISE SYSTEMS INTEGRATION

ACIT4850 – WINTER 2024



AGENDA – LESSON 11

- Quiz 10 on D2L
- Experimental Lab 11 – GitLab CI/CD Variables and Templates

QUIZ 10

- Open Book – You can use the Lesson 11 reading materials
- You have 15 minutes to complete
- We will resume in 15 minutes, or when everyone is done

Enterprise Software Development Environment

Shared Tools

Source
Code
Mgmt

Work
Mgmt

Knowledge
Base

Communication

Orchestration

Artifacts

Test and
Analysis

IT Shared Services

Active
Directory

Operations

Monitoring and
Reporting

Shared Services

Software
Product 1

Product CI Pipeline

Test

Staging

Production.

Users (i.e.,
Customers)

Software
Product 2

Product CI/CD Pipeline

Test

Staging

Production

Users (i.e.,
Customers)

...

Software
Product N

Product CI/CD Pipeline

Test

Staging

Production

Users (i.e.,
Customers)

...

THE ROADMAP (AKA COURSE SCHEDULE)

Week	Topics	Notes
1	<ul style="list-style-type: none"> Components of an Enterprise Development Environment Software Source Code Management 	Lab 1
2	<ul style="list-style-type: none"> Work Management and Knowledge Base Tools 	Lab 2, Quiz 1
3	<ul style="list-style-type: none"> Tool Selection – Requirements Integration and Security 	Lab 3, Quiz 2
4	<ul style="list-style-type: none"> Tool Selection – Stakeholders/Process Continuous Integration (CI) Tool CI Tool Setup 	Lab 4, Quiz 3
5	<ul style="list-style-type: none"> CI Pipelines – Python 	Lab 5, Quiz 4
6	<ul style="list-style-type: none"> CI Pipelines – Shared Libraries 	Lab 6, Quiz 5, Assignment 1 Due
7	<ul style="list-style-type: none"> CI Pipelines – Java and Static Code Analysis <p><i>Note: At home lab for Monday set</i></p>	Lab 7, Quiz 6 (Sets A and B)
8	<ul style="list-style-type: none"> Midterm 	Midterm Review Quiz
9	<ul style="list-style-type: none"> CI Pipelines – Alternate Tools (GitLab CI) 	Lab 8, Quiz 6 (Set C), Quiz 7
10	<ul style="list-style-type: none"> Spring Break 	
11	<ul style="list-style-type: none"> Continuous Delivery (CD) CD Pipelines - Containerization 	Lab 9, Quiz 8, Assignment 2 Due
12	<ul style="list-style-type: none"> CD Pipelines – Deployment Developer Workflows 	Lab 10, Quiz 9
13	<ul style="list-style-type: none"> CD Pipelines – Alternate Tools (GitLab CI) <p><i>Note: At home lab for Monday Set</i></p>	Lab 11, Quiz 10 (Sets A and B)
14	<ul style="list-style-type: none"> Microservices Pipelines Final Exam Preview 	Quiz 10 (Set C), Assignment 3 Due
15	Final Exam	

LAB 11

- Add the Package and Deploy stages to your GitLab CI Point Pipeline
- Use CI/CD Variables for:
 - Deployment – UI Variable
 - Docker Login – CI/CD Variable (Masked)
 - Conditional Package Stage – Built-in Variable in a Rule
- Create template jobs and use them in the GitLab CI Point Pipeline and a GitLab CI CarLot pipeline