**ICTICT449**

Use Version Control Systems

in Development Environments



data:image/png;base64,

**Question 1:**

Briefly explain in 40 – 60 words the purpose of web-based DevOps lifecycle tools.

**Question 2:**

List three DevOps automation tools?

**Question 3:**

Explain in 40 – 60 words about what is version conflict?

**Question 4:**

Explain in 60 – 80 words how you would back-out/recover from a version merge conflict?

**Question 5:**

List 5 version control industry standard best practices?

**Question 6:**

Explain in 60 – 80 words, what is distributed version control?

**Question 7:**

List three (3) distributed version control industry standard best practices?

## **Part 1** - Research VCS

## Research Report and Email

You have been tasked to research and report on VCS (Version Control System) that is suitable for AIT-CS organisational requirements. You will be required to send an email to communicate any disruptions.

### **The Report Should Include The Following:**

* Research at least three (3) VCS
* Select a preferred VCS
* Identify pre installation requirements for the selected VCS
* Identify installation procedures for VCS

## 

## 

## Research Report

Insert Text Here

## 

## 

## 

## 

## 

## 

## 

## 

## 

## 

## 

## 

### **The Email Should Include The Following:**

* Identify any installation disruptions to normal daily operations and communicate disruption via email to the appropriate person

## 

## Email

Insert Text Here

## **Part 2** - **Install and test vcs**

## Test Content Version System

You are required to install and test the content version system. Follow the following steps with each step requiring a screenshot showing evidence of completion.

1. **GitHub Account**

(In Workshop Presentation, This is Step 1)

If you don’t have a GitHub, login with the following steps that will help you create a GitHub account.

Go to [GitHub **join**](https://github.com/join) web page:

1. Create your account
2. Username – please use a conventional style naming convention
3. Email address
4. Create Password (at least 15 characters OR at least 8 characters including a number and a lowercase letter)
5. Click Verify your account (security feature)
6. Click Create account

**Already Have an Account**

If you already have a GitHub account, please go to the next step “Create a repository and workflow”

**<Insert Your GitHub Link Here>** eg. github.com/pasz4

**2. Create a Repository and Workflow**

(In Workshop Presentation, This is Step 2)

Login to GitHub and create a repository and work flow.

| Task |
| --- |
|
| Create your own repository |
| Repository name: eg: 42project |
| Make public |
| Create a workflow |
| Create a directory (folder) Structure |

**Insert Screenshot Here**

**3. Create Three (3) Code Files**

(In Workshop Presentation, This is Step 3)

Upload 3 working code documents.

| Task |
| --- |
|
| Upload an existing code project file:   * Upload code 1 * Upload code 2 * Upload code 3 |
| Commit changes |

**Insert Screenshot Here**

**4. Share Code Files**

(In Workshop Presentation, This is Step 4)

Share code documents with the project team (two students).

| Task |
| --- |
|
| Share code documents with project team |

**Insert Screenshot Here**

**5. Modify Code Files**

(In Workshop Presentation, This is Step 5)

Code documents to be modified by team members (two students).

| Task |
| --- |
|
| Code 1:   * Team member to pull document and modify code document then sync (push) back to work flow * Review changes |
| Code 2:   * Team member to pull document and modify code document then sync (push) back to work flow * Review changes |
| Code 3:   * Team member to pull document and modify code document then sync (push) back to work flow * Review changes |

**Insert Screenshot Here**

**6. Check Version Control**

(In Workshop Presentation, This is Step 6 and Step 7)

After code documents have been synced back to work flow check version control.

| Task |
| --- |
|
| Check/review version control:   * Code document 1 * Code document 2 * Code document 3 |

**Insert Screenshot Here**

1. **Restore Previous Version**

(In Workshop Presentation, This is Step 8)

Restore previous version for code documents.

| Task |
| --- |
|
| Restore previous version:   * Code document 1 * Code document 2 * Code document 3 |

**Insert Screenshot Here**

## 

## **Part 3 - report vcs test outcomes**

## Feedback Response

The development management team at AIT-CS have reviewed the email report on the content version system from part 1.

The feedback from the management team is that there are concerns of document continuity on software version updates.

Update your report addressing the management team’s concerns including backup and restore procedures and obtain final sign-off.

**Insert Text Here**

### 

### 

### 

### 

### 

### 

### 

### 

### 

### 

### **Assessment Upload**

.docx or .pdf

### 

### **Submission To**

<https://portal.academyit.edu.au/course/view.php?id=57&sectionid=557>