**Topic 2: Version Control**

**Formative Assessment 02**

**Version Control (115362)**

*Hello and welcome to the assessment. Here you’ll prove to the world just how much you know and understand about what you’ve just learnt in the learner guides. This is an important part of your time at Umuzi because once this is done, you’ll be certified! So please, take this time to learn everything you can! Take a look at some pointers below with regard to answering the questions…*

* *Be specific*
* *Write professionally - no shorthand!*
* *Your answers must be original and come from your brain and your brain only.*
* *No copy/paste tricks! Our markers have seen it all and will know if you’re taking shortcuts.*
* *Remember, sloppy or poor work will be sent back to you to do again, so do it properly the first time and you’ll be done in no time.*
* *Ask for help at any time. Ask your friends, a manager, anybody!!*
* *Don’t skip any questions! You must do them all!*
* *You’ll see two boxes after each question - one for your answer and one for the marker’s comments. DO NOT delete the marker’s comments if you are required to resubmit your work after the first attempt. Should you have to do it again you will see a new box* ***under*** *the marker’s comments, so fill that one out in* ***BLUE****. Remember!! It’s not the end of the world if you have to resubmit. You’re here to learn, so don’t beat yourself up if you don’t get it right on the first go. Obviously, try your best to get it right on the first attempt, but if not, you have another chance to do it properly!*

*Ok, and that’s that! Time to get to it! Good luck, have fun and enjoy! :)*

**Enter your name and surname below**

|  |
| --- |
| Luvo Spofana |

**1.** **Where should you look to locate the source files of a 3rd party library you might use?**

**Provide a link as an example [4 Marks](SO:1 AC:1-2)**

**Your answer below**

|  |
| --- |
| By going to the library’s website.  e.g., https://reactjs.org/docs/getting-started.html |

**Marker’s Comments**

|  |
| --- |
|  |

**2. Describe four good naming conventions for software files [4 Marks](SO:1 AC:1-2)**

**Your answer below**

|  |
| --- |
| * Call it what it is – Choose descriptive and meaningful names so that people are able to look at the name you chose and be able to know what you intend to do. * Be sensitive to case – It is important to use one capitalization convention across your whole project because many web servers are case-sensitive. * Don’t use spaces – adding a space in the filename can cause errors when loading a file or transferring the file between computers. The space may result in a computer treating the filename as two separate filenames. * Use dashes if you are exposing things to the web – Many search engines treat a hyphen as a word separator, using spaces to separate words may result in your links being broken because some languages do not handle spaces well. |

**Marker’s Comments**

|  |
| --- |
|  |

**3. Give six reasons why you should use a version control system when you are developing a project [6 Marks](SO:2 AC:1)**

**Your answer below**

|  |
| --- |
| 1. Enables you to track changes in your files and code and keep a history of all the activity on a repository. 2. Facilitates collaboration by storing all code in a remote repository in which other developers collaborating on a project can just pull down the code and after making changes they can push back to the remote repository on a separate branch and every collaborator remains having access to all of it. 3. Dedicated CI/CD tools like CircleCI can be used to automate a variety of tasks and track changes, and perform actions like integrations tests, deploying the application, generating packages for external use, depending on the type of activity. 4. Version control systems can be integrated in development tools. Most of the tools available for developers to assist in writing code include support for version control systems to perform actions like pulling, committing & pushing changes and keeping track of the history of the repo. 5. Quality assurance engineers can use a version control system for tasks like having a dedicated repository for test automation code and approving merge requests of developers and many more. 6. Most version control systems are open-source and are free to use and one can achieve a lot with the free version and some may never need to purchase a licensed version |

**Marker’s Comments**

|  |
| --- |
|  |

**4. If you want to include a new file in a Git repository, what two commands must you type to do that? [4 Marks](SO:2 AC:2-3)**

**Your answer below**

|  |
| --- |
| * git add newFile * git commit -m “commit message” |

**Marker’s Comments**

|  |
| --- |
|  |

**5. What is the Git command to check for any conflicts between new and old versions on your repository? [2 Marks](SO:2 AC:2-3)**

**Your answer below**

|  |
| --- |
| * cat ‘fileName’ |

**Marker’s Comments**

|  |
| --- |
|  |