**Formative Assessment**

**Software Development Process (115392)**

*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* ***PURPLE****. 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.** **What is a user story? Provide an example [4 Marks](4 - SO:1 AC:1-2)**

**Your answer below**

|  |
| --- |
| A user story is a brief description of a feature told from the perspective of the individual, normally a user or a customer of a system, that desires and intends to make use of the new capability. They take the following form:  “As a <type of user>, I want <some goal>, so that <some benefit/value>”    e.g., As a fan of a show, I want to know when new episodes get released, so that I can watch and keep up to date with the show. |

**Marker’s Comments**

|  |
| --- |
|  |

**2. What purpose do user stories serve in the software development process? [5 Marks](5 - SO:2 AC:2-4)**

**Your answer below**

|  |
| --- |
| User stories require you to be user-centered and put users at the center of the conversation around what to add or change in a software product. User stories are used to determine the functionality that must be included in any software being developed. They can stories save time when prioritizing the development of requirements and functionality. They are used to articulate how a piece of work will deliver value back to the end user. They give the development team the context and the why of what they’re creating, and this helps them understand how they’re providing value for the business and the end user. |

**Marker’s Comments**

|  |
| --- |
|  |

**3. Describe at least three considerations you should make when designing software. [6 Marks](6 - SO:2 AC:1-4)**

**Your answer below**

|  |
| --- |
| * Security – The software should be able to withstand malicious and hostile acts. * Reusability - The software should be reusable; it should be able to add more features at a later stage and handle feature modifications. * Extensibility – The software should be able to take in new capabilities being added to it without requiring the underlying architecture to be changed |

**Marker’s Comments**

|  |
| --- |
|  |

**4. What is the purpose of the product backlog in the development process? (4 - SO:3 AC:1-3)**

**Your answer below**

|  |
| --- |
| * To outline the priority of deliverables that should be implemented first as part of a project/ product development. * To develop a common ground to align stakeholders and other teams so that teams implement the most valuable user stories. * To provide flexibility to adapt to new needs and realities. * To improve the accuracy of product release forecast by creating a common denominator across many teams collaborating on one product. * It helps keep track of the development process and review and update the complexity and quality of the work. |

**Marker’s Comments**

|  |
| --- |
|  |

**5. In addition to test-driven development, what are two other tests you should do on your software? [4 Marks](4 - SO:4 AC:1-3)**

**Your answer below**

|  |
| --- |
| * Stress testing – Stress testing is a way to test how reliable a system is under workloads that are unexpected or rare. * Usability testing - This test is done to check if the user interface is friendly, easy to use and to understand concerned with the use of the application. |

**Marker’s Comments**

|  |
| --- |
|  |

**6. Describe two methods that make it easier for user to understand and start using your software [4 Marks](4 - SO:5 AC:1-3)**

**Your answer below**

|  |
| --- |
| Video tutorials that demonstrate and explain how the program work serve as a great, user-friendly way to teach users how to user a program.  Written walkthroughs also greatly help users learn how to user a program, if they are well written, with good screenshots/photos of how to accomplish tasks in the program, they become extremely useful to users. |

**Marker’s Comments**

|  |
| --- |
|  |

**7. Describe the documentation you should provide for a system administrator of some software you develop (hint: look in the #13 Documentation unit) [4 Marks](4 - SO:6 AC:1-4)**

**Your answer below**

|  |
| --- |
| A system administrator’s documents do not need to provide information about how to operate the software. It normally covers installation and updates that help the administrator with maintaining the product. The standard system admin documents are:  Functional description – Describes the functionality of the product  System admin guide – This guide explains how the system behaves differently in different environments and with other systems, and provides troubleshooting information and instructions on how to deal with malfunction situations. |

**Marker’s Comments**

|  |
| --- |
|  |