Farai Makomborero Matsika

T2128646Y

Software Engineering 2:2 2023

Programming 3 Assignment 1

**Question 1**

What is programming – it is the process of telling a computer what to do and how to do it using a set of instructions which signify a certain meaning when converted into machine language. Programming usually requires us to understand at least one programming language to be able to give instructions to the computer

**Question 2.**

**How do you ask technical questions.**

As the world is moving to an era where technology is no everywhere. It means that during the ourse of using the technology, technical faults become common to an extend that almost eah and every technical fault I experience someone, somewhere also experienced it so asking technical questions becomes easy. There are many platforms which can be used by programmers like the stack overflow which is a website with a huge memory of questions and their answers from technical experts and this platform have a huge information on this. You can actually find the fault matching with yours and try to solve it using explanations from experts who have experience in the field. This have helped many people and you just have to post a detailed question which is straight to the point to get a good answer.

**Question 3**

High level languages are programming languages which are closer to human language and can be understood easily by humans. The high-level language programs are less independent of a particular computer and are portable. They are generally described as a higher abstraction from the computer.

Some good examples are C#, Java and python. Programmers find it easy to use high level languages than low level languages as they are easy to understand.

**Question 4**

**Interpreted Languages.**

These are languages which require a software called interpreter to execute their programs. Interpreters directly convert high – level source code into machine readable form. Interpreted languages’ code is interpreted and executed line by line at the same time and there is no need of creating an executable file as what compiled languages do.

Compiled languages use a special software called compiler. The code is interpreted into machine readable form and converted into an executable file which can be understood by the digital computer’s CPU. However, compiled code is hardware independent.

**Question 5**

**Source code management systems.**

Source code management systems are great tools for software versioning which have become common as technology is advancing and as a result, the software should follow the trends of the new environments. I have used GitLab and GitHub which are the most common. With GitHub:

* It helps developers to showcase their skills to recruiters as their source code and coding style can be rated through their contributions on GitHub.
* It is a tool which provide backup for a developer’s code, whereby the code is stored on the server and if the machine is damaged, the repositories can be pulled and cloned and it won’t affect the developer’s work.
* GitHub allows developers to work remotely without being forced to use one machine for development as they can access their code anywhere as long as there is an internet connection.
* With GitHub, source code can be improved easily through collaboration.
* When multiple people collaborate on a project, it’s hard to keep track revisions—who changed what, when, and where those files are stored. GitHub takes care of this problem by keeping track of all the changes that have been pushed to the repository.