**Corey - List five characteristics of "software quality." Three unique credible sources are cited. Prioritize the five characteristics and provide examples of each.**

(McConnell, 2004)

(Virginia Tech University, n.d.)

(Balci, 1998)

(Schach, 1999)

**Five of the characteristics of software quality:**

**The five characteristics I have chosen to talk about today are:** Maintainability, Correctness, Reusability, Portability, and Efficiency as described in the course materials, and by Virginia Tech University. Please note, there are many more characteristics of software quality, and this is not a complete list, as the term is relatively subjective.

**Maintainability**: Software that is maintainable is developed in a way that makes it simple to alter to integrate new concepts or ideas. This mainly refers to integrating new content, and fixing errors while developing said content, and not necessarily refactoring old code.

**Correctness**: Software that is “correct”, for lack of a better term, operates within established constraints or deadlines. This refers to how well the software executes its purpose all while staying within the boundaries set upon project designation. Examples of this may include software that runs within a specified time window, draws only a certain amount of power from various computer components, or takes up minimal space on a computer’s storage solution.

**Five of the characteristics of software quality (continued):**

**Reusability**: Software that incorporates the reusability characteristic makes decent effort to incorporate various functions or modules that can be reused for the sake of conserving space or heightening efficiency, or software that may itself be used for various purposes to achieve different goals.

**Portability**: Software that is portable provides an easy way to alter the program to run on an environment that it was not originally intended for. An example of this could be a program by the name of Discord used for speech, video-sharing, and text, that operates originally in a desktop client, but can also be used via a web browser, or various other devices.

**Efficiency**: Software that is efficient runs within established goals while minimizing the required resources to obtain the same output. High efficiency software may be able to maximize available computers, and dismiss a need for specific devices due to the low cost of running said software. This works to increase accessibility for the program’s end user, and possibly for the business utilizing the software.

# References

Balci, O. (1998). *Software Engineering Qualities*. Retrieved from Virginia Tech: https://courses.cs.vt.edu/csonline/SE/Lessons/Qualities/index.html

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Schach, S. (1999). *Software Engineering Fourth Edition*. Retrieved from McGraw-Hill: https://www.biblio.com/book/software-engineering-practitioners-approach-4th-edition/d/862325738

Virginia Tech University. (n.d.). *Software Quality Characteristics*. Retrieved from courses.cs.vt.edu: https://courses.cs.vt.edu/csonline/SE/Lessons/Qualities/index.html