Software Engineering – Assignment #01 Rymbayeva Anelya

1.6. Explain why the fundamentals software engineering principles of process, dependability, requirements management, and reuse are relevant to all types of software systems.

Because of their interdependencies, the principles of process, dependability, requirements, management, and reuse are interrelated and necessary for the development of any software system. These principles are not specific to one type of program and are more general “best practice” guidelines that help developers with code that is easier to maintain. In more detail, it can be said that the process is the first step in which any company looks to design and develop the software based on the given requirement, i.e., the process for different types of software specifies the set of tasks and functions that are required to be performed by the software. Dependability refers to a certain function or module that must be protected so as to prevent damage from attackers and used as frequently as feasible across the software wherever the specific functionality is required. In the requirements stage, tasks that must be completed to satisfy both client and customer needs by successfully completing the project and meeting the timelines and expectations are analyzed. Use the people and software that are already part of the project and reuse it whenever it is needed to avoid having to program it afresh, which is challenging. For the successful completion of any project within the organization, all the concepts must be put into practice.