What is the purpose of software requirements specification documentation?

The purpose of software requirements specification documentation is to describe the behaviour of a system to be developed so the developers know what to develop and the testers know what to test and expect from the features they are trying to test. This ensures that the product satisfies what the client needs. (Kruger, 2018)

How are functional and non-functional requirements addressed in the documentation?

Functional requirements describe the functionality of the system. It details what the system does. For example, the system has to output the user’s input five times. These requirements have a well-defined satisfaction criteria. With our example, we can easily check whether the output is correct.

Non-functional requirements on the other hand, refer to a system’s non-functional properties and qualities such as security, accuracy, performance, usability, etc. Unlike functional requirements, non-functional requirements don’t always have clear satisfaction criteria. For example, let’s say that the system should perform the computation quickly. It is non-functional requirement since it has something to do with the speed of the system. But it is not clear how to satisfy this requirement. How do we know whether the system is fast enough or not? What we have to do is we have to refine the requirements so they become verifiable. Using the last example, we can change it to the system should perform the computation under a millisecond. (QRA Team, 2019)