Deadline: Monday, March 6, 2023

SE2224 – Software System Analysis Spring, 2022-2023 Assignment-2

1. Write an appropriate example for each requirement category below.

- **A.** What the business needs (business requirements);
- **B.** What the users need to do (user requirements);
- **C.** What the software should do (functional requirements);
- **D.** Characteristics the system should have (nonfunctional requirements); and
- **E.** How the system should be built (system requirements).

2.

Write the appropriate category from *one* of the categories,

- Usability,
- <u>Reliability</u> (including robustness, safety, and security),
- Performance,
- <u>Supportability</u> (including maintainability and portability),
- · Implementation.

Quality requirements for SatWatch: Write the category of each requirement

- Any user who knows how to read a digital watch and understands international time zone abbreviations should be able to use <u>SatWatch</u> without the user manual.
- As the <u>SatWatch</u> has no buttons, no software faults requiring the resetting of the watch should
- <u>SatWatch</u> should display the correct time zone within 5 minutes of the end of a GPS blackout period.

3.

Write the appropriate category from one of the categories,

- Usability,
- · Reliability (including robustness, safety, and security),
- Performance,
- · Supportability (including maintainability and portability),
- · Implementation,
- Interface.
- How many hours should the system be available for use in a day?
- How should the system handle exceptions?
- What documentation should be provided to the user?
- What are the foreseen extensions to the system?

4. Completeness of a requirement: How can the problems in the following requirements be fixed?

Example-1:

- Example of a bad requirement: A professor user will log into the system by providing his username, password, and other relevant information.
- Solution ?

Example-2:

- **Requirement:** It is required to write a program that inputs two integers and outputs the maximum of them.
- Solution ?