CCCCXXXX – Software Verification & Validation

Case Study Requirements Management:
Understanding User Requirements

Scenario

SoftRight Inc., has outbid major competitors to build an Open Source Hospital Management System. This is a major software development project, totaling 3.5 million dollars in revenue, and it is the Product Manager's (the leader of your team's) first multi-million dollar project. She has handled many projects with lesser dollar amounts and feels that this project will not be that difficult. At the first brief meeting with the Director of Hospital Software Systems, the Product Manager is given a document consisting of a list of requirements. A sample of the given requirements are as follows:

1. Authorized users should have easy access to the patient records.
2. The database should be able to reliably store patients' records.
3. Database query results should be available as soon as possible.
4. The system should be able to generate a wide variety of types of reports
5. Periodically the database should be backed-up
6. …
7. …

Your Product Manager calls your team for a meeting so that work on the software can begin as soon as possible.

OBJECTIVES

Upon completion of this module, students will be able to meet the following **ABET Criterion 3 Outcomes:**

1. **Outcome 2**: *Graduates will have an ability to design and conduct experiments, as well as to analyze and interpret data*.
2. **Outcome 6**: *Graduates will have an understanding of professional and ethical responsibilities.*
3. **Outcome 7**: *Graduates will have an ability to communicate effectively*.
4. **Outcome 8**: *Graduates will have the broad education necessary to understand the impact of engineering solutions in a global and societal context.*

Step by step:
- Read Lecture Slides on Requirements
- Work in teams of 2
- Answer the Questions listed below.
- Be ready to discuss your findings in 30 minutes

Exercise:

- ■ Read the given sample requirements and answer the following questions:
    - ■ Do you understand the requirements?
    - ■ Given the requirements as stated, are you able to design and develop what is requested?
- ■ Define Software Requirements
- ■ Define the Software Requirements for this customer

(Assume appropriate information when necessary!)

Remarks:

Discuss thoroughly in teams. Remember this is not a Calculus problem.

Source:

Lecture slides,

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