

ITM321: SOFTWARE DOCUMENTATION

Class Quiz

Total Marks: 15

Time: 25 minutes

Name: _____

ID: _____

Scenario: Daffodil International University (DIU) is developing LIBSYS, a library management system. During requirements elicitation, the librarian gave this high-level statement:

"LIBSYS shall keep track of all data required by copyright licensing for DIU research papers and elsewhere."

The development team refined it into the following detailed requirements:

1. The requestor shall be presented with a form recording details of the user and the request made.
2. LIBSYS request forms shall be stored for 5 years from the date of request.
3. All forms must be indexed by user, by material name, and by supplier.
4. LIBSYS shall maintain a log of all requests made to the system.
5. For materials where authors' lending rights apply, loan details shall be sent monthly to registered copyright licensing agencies.

The librarian also listed these expectations for the system:

- *"The system should be easy to use for new students."*
- *"Searching for a research paper should be fast."*
- *"The system should recover quickly if it crashes."*
- *"The system should be available whenever students need it."*

During a review meeting, the librarian said LIBSYS must **"support all views."** The librarian meant support for all document types (PDF, Word, images, spreadsheets). The developer took it to mean a responsive interface for screens of every size.

(a) Differentiate between *user requirements* and *system requirements* with reference to the LIBSYS scenario. Your answer should cover the audience, the level of detail and one example of each. **[4 Marks]**

(b) Define *requirements imprecision* and **explain** how the "support all views" statement in the scenario shows this problem and what it could cost the project. **[3 Marks]**

(c) Describe how a non-functional requirement can be made testable. **Distinguish** between a *goal* and a *verifiable non-functional requirement* in your answer. **[2 Marks]**

(d) The four librarian expectations listed in the scenario are goals, not verifiable requirements. **Transform** each one into a verifiable non-functional requirement with a measurable metric. **[4 Marks]**

(e) Justify when natural language is appropriate for writing user requirements, and when tables or diagrams should be used instead. Support your answer with one example from LIBSYS. **[2 Marks]**