**BAHRIA UNIVERSITY, Karachi Campus)**

# Department of Software Engineering

# ASSIGNMENT # 01 – Spring 2024 Description of Software Quality Models CLO 02

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| Course Title: **Software Quality Engineering** |  | Course Code: **SEC-311** |
| Class: **BSE – 6(B)** |  | Shift: **Morning** |
| Course Instructor: **Engr. Misbah Perveen** |  | Date: **12th March 2024** |
| Due Date: **07th March 2024** |  | Max. Marks: **5.0 Marks** |

**Instructions:**

1. Use only A4 size blank white paper for printing.
2. Use only Times New Roman size 12 font.
3. Do not use color printer to print this title page or assignment.
4. Each heading (underlined, bold and in capital letters) and example must start from a new line.
5. Submit hard copy of your assignment and upload softcopy on LMS as a DOCX file.
6. Do not enclose your assignment in file/folder, staple assignment pages only at the left-top corner.
7. Do not edit (this) assignment file given as a pdf file.
8. Last page of your assignment must contain sources/references (use IEEE referencing style).
9. Assignments will only be accepted in the scheduled class/room.
10. No makeup assignments will be given.
11. Violation of any of the instructions mentioned here will result in marks deduction.

1. Suppose you have to ensure the quality of an online LMS System. You may consider various quality models to address this situation. Keep LMS in mind, describe (separately) each of the Software quality models as given below with respect to the following questions:

[3]

1. ***What*** are they?
2. ***Where*** are they used?
3. ***Why*** are they used?
4. ***How*** are they ensured / implemented?

1. FURPS
2. Dromey
3. ISO 9126
4. Boehm

Follow the format/sample as mentioned below to answer this question:

**FURPS**

**WHAT?**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

**WHERE?**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

**WHY?**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

**HOW?**

…………………………………………………………………………………………………

…………………………………………………………………………………………………

Follow the above-mentioned format to answer a, b, c, & d.

While describing/answering each of the above, you may use relevant diagrams and examples to support your answer.

1. Summarize the five software quality models (as mentioned in the following table) with respect to the quality factors/attributes available in all the five models (write them in the first column). In the next five columns, mention which quality factor/attribute is available in which model. Sample is given in RED. Complete the following table. [1]

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Quality  Factor/Attribute | McCall | Boehm | FURPS | DROMEY | ISO 9126 |
| Testability | ✓ | ✓ |  |  | ✓ |
| … | … | … | … | … | … |
| … | … | … | … | … | … |
| … | … | … | … | … | … |
| … | … | … | … | … | … |

1. Briefly explain how one can measure the manufacturer’s view of software quality. [1]