SEN-221-SOFTWARE DESIGN & ARCHITECTURE SPRING 2022

COURSE INSTRUCTOR
ENGR. MAJID KALEEM

Assignment No.	02
Assignment Title	Description of various Architectural Styles
Course Learning Outcome	CLO-03 *"Apply design models using modeling and object-oriented programming languages."*
Full Name	
Semester	BSE 4 B
Submission Deadline	26th April 2022

☞ **INSTRUCTIONS:**

- ☐ USE ONLY TIMES NEW ROMAN SIZE 12 FONT.
- ☐ EACH HEADING (UNDERLINED, BOLD AND IN CAPITAL LETTERS) AND EXAMPLE MUST START FROM A NEW LINE.
- ☐ UPLOAD SOFTCOPY ON LMS AS A PDF FILE.
- ☐ DO NOT EDIT (THIS) ASSIGNMENT FILE GIVEN AS A PDF FILE.
- ☐ LAST PAGE OF YOUR ASSIGNMENT MUST CONTAIN SOURCES/REFERENCES (USE IEEE REFERENCING STYLE).
- ☐ NO MAKEUP ASSIGNMENTS WILL BE GIVEN & DATE WILL NOT BE EXTENDED.
- ☐ VIOLATION OF ANY OF THE INSTRUCTIONS MENTIONED HERE WILL RESULT IN MARKS DEDUCTION.

BAHRIA UNIVERSITY (KARACHI CAMPUS)
Software Design & Architecture (SEN-221)
ASSIGNMENT # 2 – Spring 2022
Based on: CLO-3

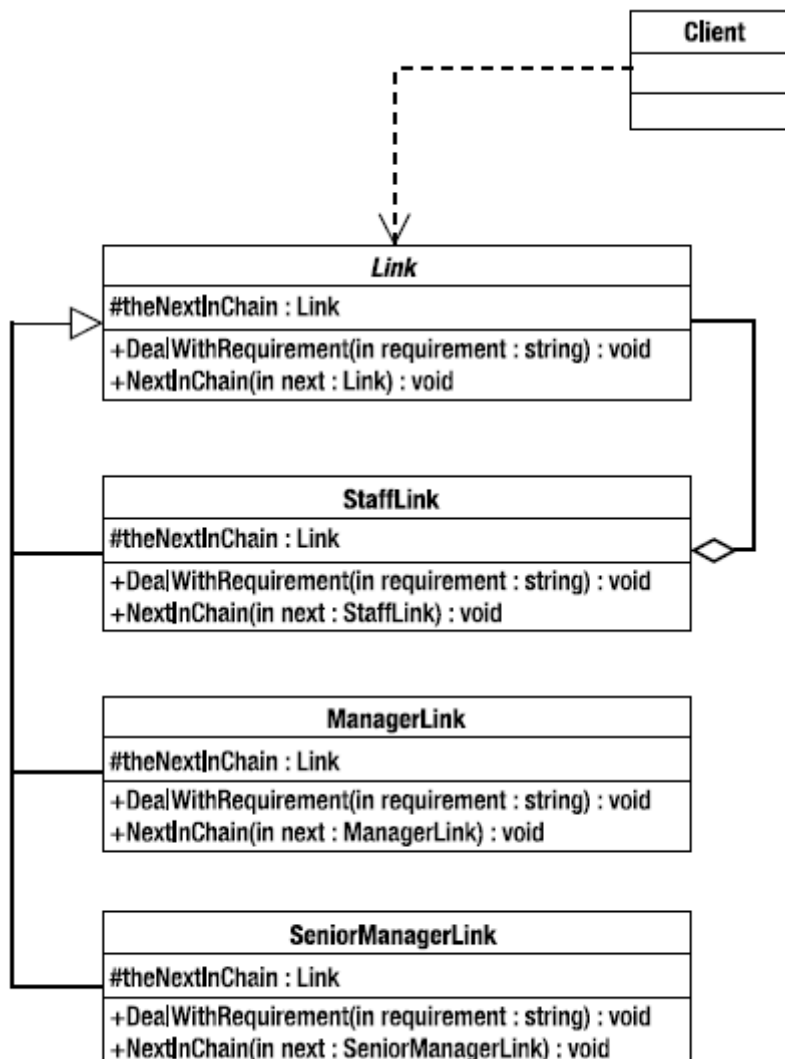Class: **BSE-4B**   Submission Deadline: **26ᵗʰ April 22**

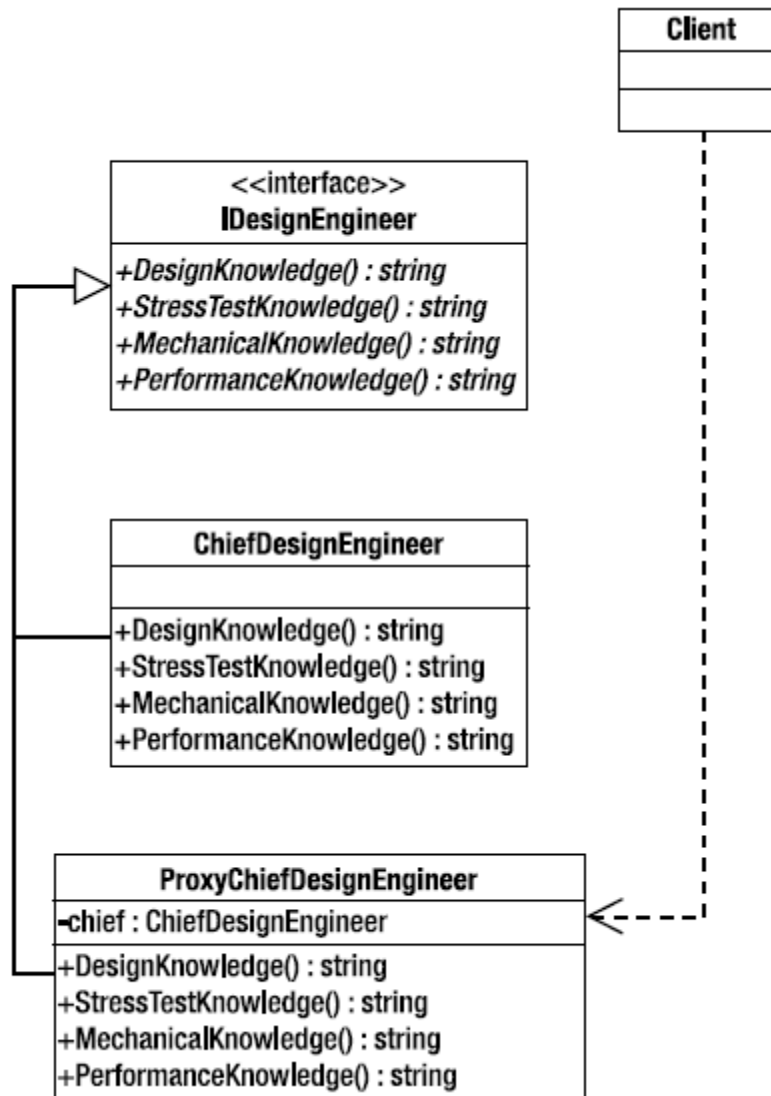Course Instructor: **ENGR. MAJID KALEEM**   Max Marks: **05**

1. Designing software applications is a serious job which requires experience and expertise. Suppose you start your professional software engineering career as a developer and you are given the following designs by your senior team members. Your task is to convert (*produce code in C Sharp*) the following designs into code. Please write the code in Visual Studio.

(a)

(b)

Client

<<interface>>
IDesignEngineer

+*DesignKnowledge() : string*
+*StressTestKnowledge() : string*
+*MechanicalKnowledge() : string*
+*PerformanceKnowledge() : string*

ChiefDesignEngineer

+DesignKnowledge() : string
+StressTestKnowledge() : string
+MechanicalKnowledge() : string
+PerformanceKnowledge() : string

ProxyChiefDesignEngineer

-chief : ChiefDesignEngineer

+DesignKnowledge() : string
+StressTestKnowledge() : string
+MechanicalKnowledge() : string
+PerformanceKnowledge() : string

G☺☹d Luck!