



BAHRIA UNIVERSITY (KARACHI CAMPUS)
Software Design & Architecture (SEN-221)
ASSIGNMENT # 3 – Spring 2023
Problem-Based Learning (PBL)
Based on: CLO-4

Class: **BSE-4B**

Submission Deadline: **10th Jun 23**

Course Instructor: **ENGR. MAJID KALEEM**

Max Marks: **08**

INSTRUCTIONS:

You have to complete this assignment in a group; maximum of three (03) students. This assignment is based on the following PBL attributes:

- a) The problem should involve **real world scenarios**.
 - b) The problem should require students to make **reasoned decisions** and to defend them (investigation and critical analysis).
 - c) If used for a **group activity**, the problem should involve collaboration and group discussions.
- Present your understanding in the class and upload your findings on LMS as an assignment in **.DOCX** format.
 - Assignment will be done in a group; however, each member must upload it on LMS individually.

Scenario:

Online collaborative applications are software tools or platforms that enable people to work together on shared tasks or projects over the internet, regardless of their physical location. These applications typically provide a range of features and functionalities to support collaboration, such as real-time communication tools, document sharing and editing capabilities, project management tools, and version control systems.

Examples of online collaborative applications include:

1. ***Project management tools*** such as Trello, Asana, and Basecamp that allow teams to manage and track project progress, assign tasks, and collaborate on project-related documents.

2. ***Communication tools*** such as Slack, Microsoft Teams, and Zoom that enable real-time communication and collaboration through text, voice, and video chat.
3. ***Document sharing and editing tools*** such as Google Docs, Dropbox, and OneDrive that allow multiple users to collaborate on documents simultaneously, track changes, and provide feedback.
4. ***Code collaboration tools*** such as GitHub, Bitbucket, and GitLab that enable developers to collaborate on code repositories, manage code versions, and track changes.
5. ***Online collaborative applications*** have become increasingly popular in recent years, as more and more people work remotely or in geographically distributed teams. These applications can help increase productivity, reduce communication barriers, and improve teamwork by providing a centralized platform for collaboration.

Suppose you have designed an online collaborative application. Now want to make sure that the architecture for the application you have selected is correct. For this purpose, you want to apply any of the architecture evaluation techniques.

List down the names and merits & demerits of various (*at least 5*) architecture evaluation techniques and what do you think which architecture evaluation technique is well suited for this type of software application?

---Good Luck!---