CS403P – Database Management System (Practical)
Assignment No.1 (Graded)

Maximum Marks: 20
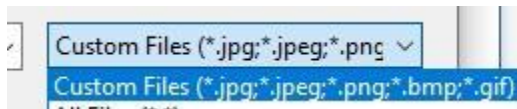
Instructions

Due Date: 13 November 2023

The purpose of this assignment is to give your hands-on practice. It is expected that students will solve the assignment themselves. The following rules will apply during the evaluation of the assignment.

- Cheating from any source will result in zero marks in the assignment.
- The submitted assignment does NOT open or the file is corrupted.
- No assignment after the due date will be accepted
- Students can submit HTML, Images and Plain text only in this inline Mode. Table can also be drawn in the interface.
- DOC/pdf File uploading option will not be available) in inline assignment submission.
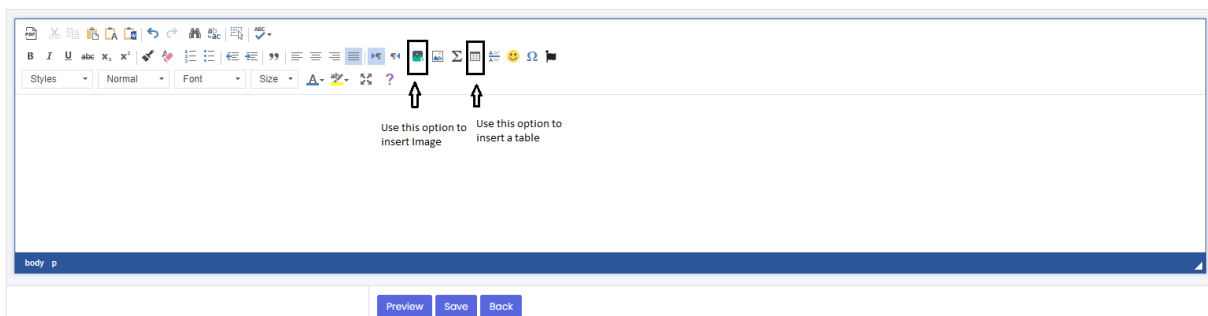
Uploading Assignment Instruction

Follow the given instructions to submit inline assignments.

- Any drawing tool such as MS Visio, MS Paint etc. can be used for drawing the ERD Diagram etc.
- Online tools can also be used for Drawing like https://app.diagrams.net/.
- Images of the following formats can be inserted in the inline assignment interface.

- Images and tables can be inserted using the following highlighted option in the interface.

Objective & Learning Outcome

The objective of this assignment is to

- Provide an understanding of a comprehensive Entity Relationship Diagram (ERD).

After completing the assignment, the student will be able to draw the ERD diagram after analyzing the given case study

Lectures/Topics Covered

This assignment covers contents covered in Lab 1-3

Question No. 1   (20 Marks = 10+10)

Healthcare Appointment Management System

The healthcare system has several medical professionals including surgeons, physicians, cardiologists, radiologists, and physical therapists. This system streamlines the process of scheduling medical appointments, managing payments, and optimizing the allocation of resources.

Patients can book appointments online with their chosen specialist, factoring in the specific time slots available, and can complete the payment for the medical services online. Patients can select a convenient date and time for their appointment. They may also specify the reason for the visit or provide additional information about their medical condition. Patients can visit the doctor for a checkup in the appointed date and time. If the attending doctor prescribes any medical tests or procedures, patients can schedule these through the same platform. The system provides available time slots for tests and procedures, allowing patients to choose the most convenient time.

Patients have the option to pay for the appointment online. The system securely processes payments, issues invoices or receipts, and provides payment confirmation.

Tasks:

Considering the above given scenario and perform the following given tasks:

Task No. 01:
- Identify all possible entities of the given system.
- Identify attributes related to all entities.

Task No. 02:
- You will have to make a final comprehensive Entity Relationship Diagram (ERD) of the system showing all entities, their attributes and relationships identified in Task 1.
- Your ERD must show all minimum and maximum cardinalities clearly.

Drawing Final ER Data Model:
You can use **MS Word** or **MS Visio** for drawing the final ER Diagram.

Guidelines:
1. Use Standard UML notations for entities, attributes, relationships, and cardinalities.
2. Use Proper naming conventions for entities, attributes, and relations.

Note: **Plagiarism will be checked for each question. Please answer the questions in your own words and marks will be awarded based on your answer and plagiarism report.**

For any query about the assignment, contact at email CS403P@vu.edu.pk