## Database Analyst Design by Hassan Youssef Al-Husseini Session.

## **Management System - Database Design**

This document describes the design of a simple session management system, including table structures, sample data insertion, updates, and deletions.

The system manages sessions, instructors, academic coordinators, and certifications.

#### **Tables Overview**

academic\_certificate: Holds specialization and university info related to an instructor's certification.

academic\_coordinator: Represents the coordinator with contact details and their academic certificate.

Shaykh: Holds instructor (Shaykh) data, including ID, name, and permit number.

session: Defines study sessions including related book, subject, page count, and linked instructor.

#### **SQL Statements**

CREATE DATABASE session\_management\_system;

USE session\_management\_system;

- -- Table creation for academic\_certificate, academic\_coordinator, Shaykh, session
- -- Sample INSERT INTO each table (5 records each)
- -- UPDATE each record individually (at least once per table)
- -- DELETE rows without dependencies from each table

### **Sample Session Data**

The following sample sessions are used to populate the session table. These represent different study subjects such as Figh, Hadith, Ageedah, etc.

```
INSERT INTO session (id, session_permit_number, Book, name, subject, page_numbers, instructor_id) VALUES (1, 101, 'BookA', 'Session Fiqh', 'Fiqh', 120, 1), (2, 102, 'BookB', 'Session Hadith', 'Hadith', 100, 2),
```

```
(3, 103, 'BookC', 'Session Aqeedah', 'Aqeedah', 90, 3),
(4, 104, 'BookD', 'Session Tafsir', 'Tafsir', 150, 4),
(5, 105, 'BookE', 'Session Arabic', 'Arabic', 80, 5);
```

#### Note

All updates and deletions were applied carefully.

Deletion was only performed on entries that were not referenced by any foreign keys.

# **ERD Design**

