## • <u>Technical requirements:</u>

- o Implement your database in files and files groups according to data size and your estimation.
- o Choose the right datatype for each column, and use naming conventions in naming of all objects.
- o Implement Indexes for your database to get best performance for your DB.
- o Use constraints and triggers to make sure of data integrity and users' access.
- o Use procedures and functions to do all system tasks, and views to show any results, so system users not need to write any query to do any task, and only use created objects.
- o Make Different options for the users to search and display results with different criteria.
- o Four accounts are needed for the system, one admin account that perform admin tasks only, account for training manager, account for instructors and account for students.
- o Each account can deal and work with his related tasks only and cannot access others' tasks and objects (implement SQL users and their permissions).
- o The system should make a daily back up (automatically).

## • **Project Deliveries:**

- o System Requirement sheet.
- o System ERD (Image or Word format).
- o Database Files.
- o SQL Server solution that has script file for each team member contain queries and code he done, and one script file for all database structure, objects and data.
- o Text file containing name and brief description for all objects in DB (Views, Proc, Functions, Triggers, etc.).
- o Test sheets that contain test queries, its result and comment.
- o Text file contains all accounts for the database and passwords.