

Advanced SQL Project

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Tables:

- Course
- Department
- Exam
- Inst_Course
- Instructor
- Question
- Std_Course
- Student
- Student_Exam_Course
- Student_Exam_Question

Tables Stored Procedures:

Table Name	Select	Insert	Update	Delete
Course	SP_Select_Course	SP_Insert_Course	SP_Update_Course	SP_Delete_Course
Question	SP_Select_Question	SP_Insert_Question	SP_Update_Question	SP_Delete_Question
Instructor	SP_Select_Instructor	SP_Insert_Instructor	SP_Update_Instructor	SP_Delete_Instructor
Student	Show_All_Students	Insert_Student	Update_Student	Delete_Student
Instructor_Course Department	SP_Get_Instructor_Courses Show_All_Departments	SP_Insert_Department	Update_Department	Delete_Department
Student_Exam_Course	Show_All_Student_Exam_Course	Insert_Student_Exam_Course	Update_Student_Exam_Course	Delete_Student_Exam_Course
Topic	SP_Select_Topic	SP_Insert_Topic	SP_Update_Topic	SP_Delete_Topic
Exam	SP_Select_Exam	SP_Insert_Exam	SP_Update_Exam	SP_Delete_Exam
Student_Exam_Question	SP_Select_StdQuestionsAnswer	SP_Insert_StdQuestionsAnswer	SP_Update_StdQuestionsAnswer	SP_Delete_StdQuestionsAnswer
Department	Show_All_Departments	Insert_Department	Update_Department	Delete_Department

Exam Stored Procedures:

1-Exam Generation

- **[dbo.Making Exam]**

Used for generation of a new exam for a specific student in a specific course

On 3 steps

1- Inserting a new record in [dbo.Exam] table

using [dbo.SP_Insert_Exam] stored procedure

2- Getting Random 10 Questions from [dbo.Question] table

with certain number of mcq and true/false questions

then Inserting New Records in [dbo.Student_Exam_Question]

with null in [Answer] column

3- Inserting a new record in [dbo.Student_Exam_Course]

with id of student , exam , course

specifying this exam information

with null in [Grade] column

2-Comparison between Student Answer and Model Answer

- **[dbo.GetAnswers]**

Used to get Student Answer vs Model Answer & Question Score (1 for true/false , 2 for MCQ)

3-Calculation of Student's Result in a Specific Exam

- **[dbo.CalcResult]**

Used to Calculate Student Result in the Exam by Comparing Student's Answer vs Model Answer for Every Question and Specifying Student's Score according the the Sum of Questions Scores which the Student managed to answer correctly

4-Submitting Student's Grade in a Specific Exam

- **[dbo. SubmitGrade]**

Used to submit student's grade in a specific exam in a specific course in [dbo.Student_Exam_Course] table

using [dbo.Update_Student_Exam_Course] stored procedure

Reports: using (SSRS & Report Builder)

- **Report Sp_StudentInfo_Report : Get Students from Department Using Department ID**
- **Report SP_GetTopics_From_Course_Report: with Parameter CId using Course ID**
- **Report SP_Get_Exam_Questions_Report : Get the questions of Exam using Exam ID**
- **Report SP_Get_Student_Grade_Report : Get the Grade of Student using Student ID**
- **Report SP_Get_Questions_Answers_Report : Get the Answers of Exam Questions using Exam ID**
- **Report SP_Instructor_Course_Report : Get the Instructor of Specific Course using Instructor Id**