# **Examination System SQL Documentation**

**Examination System** 



Author Team 1 : Nashed Fekry

Mahmoud Nagy

Esraa saber

Created: August, 2023

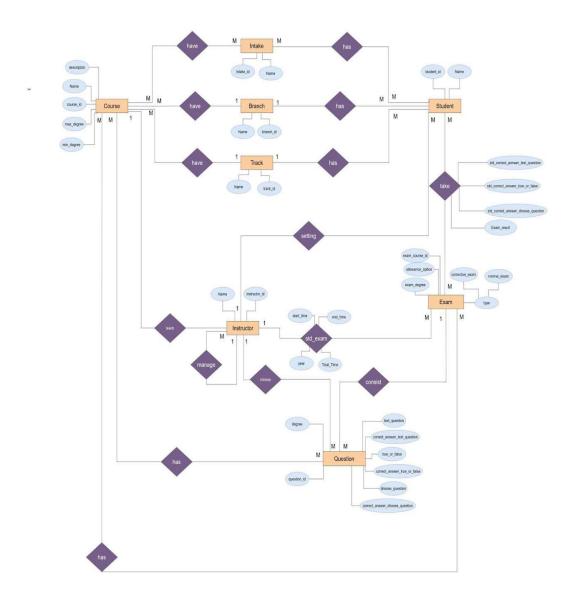
**Tools: Sql Server** 

# **Examination System SQL**

You can use a file Query for testing To test this System

A system that contains many permissions, including student permissions, administrator permissions, and teacher permissions
Where the director can control the branch, track, subject, teacher, and students of the department he manages
Where you can add, modify or remove any item in its section
The teacher can set exams for students studying his subject
In the system, the student can answer the exam, and then the teacher returns and corrects the exam and assigns the student's grade
The system is integrated and designed in a simple and easy way

# **ERD**



# **Mapping**

Red = PK

**Blue** = FK

$\sim$	
1 0	urse
	лос

Course_ID	Name	Min_Degree	Max_Degree	Description

### Branch

Branch	<u>ID</u>	Branch_Name
_		<u> </u>

### Course\_Branch (composite primary key)

Course_ID	Branch_ID

### Track

Track_ID	Track_Name
----------	------------

### Course\_Track (composite primary key)

Course_ID	Track_ID

### Intake

Intake ID	Intake Name
Intake_ID	Intake_Name

### Course\_Intake (composite primary key)

Course_ID	Intake_ID

### Instructor

Ins_ID	Age	Inst_Name	Mgr_ID
--------	-----	-----------	--------

### Instructor\_Teach\_Course (composite primary key)

Course ID	Inst ID

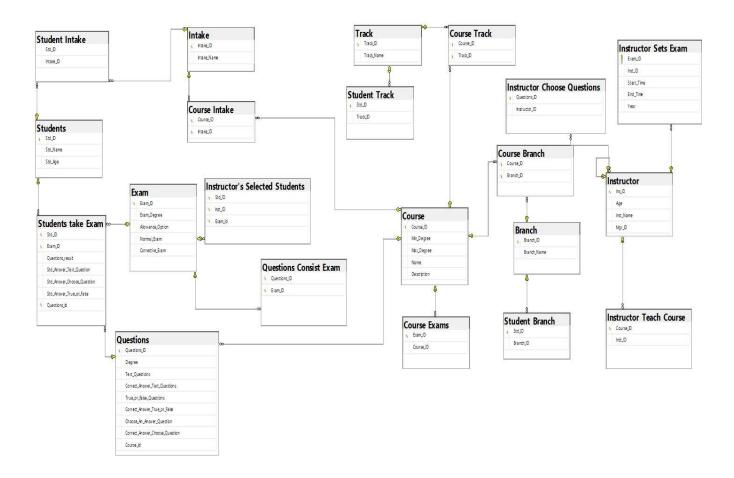
Questions
Questions_ID
Degree
Text_Questions
Correct_Answer_Text_Questions
True_or_False_Questions
Correct_Answer_True_or_False
Choose_An_Answer_Question
Correct_Answer_Choose_Question
Course_Id

### Instructor\_Choose\_Questions

Questions ID Instru	ctor ID
---------------------	---------

Questions_Cor	nsist_Exam (con	nposit	e primary	key)			
Questions ID			Exam_ID				
Exam							
Exam_ID	Exam_Degree	e .	Allowance_	_Option	Nor	mal_Exam	Corrective_Exam
Course Every	. (composito pri	imanı	kov)				
Course_Exams (composite primary key)  Exam ID  Course ID				ID			
<u>Exam_IB</u>				<u>course</u>	<u>,10</u>		
Instructor_Sets	s_Exam						
Exam_ID	Inst_ID		Start_Ti	me	End_	_Time	Year
Students							
Std_ID		Std_	Name		Std_Age		
Students take	_Exam (compos	ite pri	mary key)				
Std_ID		•					
Exam_ID							
Questions_Id							
Questions_res	sult						
Std_Answer_	Text_Question						
Std_Answer_	Choose_Questic	on					
Std_Answer_	True_or_False						
Student Branc	h (composite pr	imarv	kov)				
Student_Branch (composite primary key)  Std_ID			Branch_ID				
Student_Track	(composite prin	nary k	ey)				
Std_ID			Track_ID				
Student Intake	e (composite prin	nary k	(ev)				
Student_Intake (composite primary key)  Std_ID			Intake_I	<u>D</u>			
Managoria Sal	lected Students	(com	nosito prir	many kový			
Std_ID	iedieu_Siudents		(composite primary key)  Inst_ID			Exam Id	
		<u> </u>					

# **Diagram**



### **Table of Contents**

- dbo.Branch.Table
- dbo.Course.Table
- **⊞**dbo.Course\_Branch.Table
- **⊞dbo.Course\_Exams.Table**
- **⊞**dbo.Course\_Intake.Table
- **dbo.Course\_Track.Table**
- **⊞**dbo.Exam.Table
- **⊞**dbo.Instructor.Table
- **⊞**dbo.Instructor\_Choose\_Questions.Table
- **⊞dbo.Instructor\_Sets\_Exam.Table**
- **⊞**dbo.Instructor\_Teach\_Course.Table
- **⊞**dbo.Intake.Table
- **⊞dbo.Manager's\_Selected\_Students.Table**
- dbo.Questions.Table
- **⊞**dbo.Questions\_Consist\_Exam.Table
- **⊞dbo.Student\_Branch.Table**
- **##**dbo.Student\_Intake.Table
- **⊞**dbo.Student\_Track.Table
- dbo.Students.Table
- **⊞**dbo.Students\_take\_Exam.Table
- **⊞**dbo.Track.Table

# **Stored Procedures:**

```
[dbo].[StudentAnswerExamQuestion]
[dbo].[add_New_Branch]
[dbo].[Branch_Action_Update_Or_Delete]
[dbo].[add_New_Course]
[dbo].[delete_Course]
[dbo].[update_Course_Name]
[dbo].[update_Course_Description]
[dbo].[update_Course_min_Max_Degree]
[dbo].[Enter_INST_ID_To_Display_Branch_Track_Intake_Info]
[dbo].[Enter_INST_ID_To_Display_Name_CourseName_Info]
[dbo].[GenerateRandomExam]
[dbo].[add_New_Instructor]
[dbo].[Update_Instructor_Age]
[dbo].[Update_Instructor_Name]
[dbo].[delete_Instructor]
[dbo].[add_New_Intake]
[dbo].[Intake_Action_Update_Or_Delete]
[dbo].[add_New_track]
[dbo].[upadte_track_Name]
[dbo].[delete_track]
[dbo].[Enter_STD_ID_To_Display_Branch_Track_Intake_Info]
[dbo].[CorrectExamForStudent]
[dbo].[add_New_Question]
[dbo].[Update_Question]
[dbo].[delete_Question]
```

[dbo].[add\_New\_Student]

[dbo].[update\_Student\_Name]

[dbo].[update\_Student\_Age]

[dbo].[delete\_Student]

[dbo].[Enter\_STD\_Name\_Fro\_Garde\_and\_Exam\_Number]

[dbo].[Enter\_STD\_ID\_To\_Display\_Name\_Age\_CourseName]

[dbo].[Set\_Student\_To\_Exam]

# Views:

- [dbo].[All\_Branch\_Tarck\_Intake]
- [dbo].[branch\_view]
- [dbo].[track\_view]
- [dbo].[Intake\_view]
- [dbo].[Students\_With\_Exam\_and\_Grade]
- [dbo].[All\_Students\_And\_His\_Course]
- [dbo].[All\_Student]
- [dbo].[questions\_view]
- [dbo].[instructo\_view]
- [dbo].[STD\_Show\_Questions\_Exam]
- [dbo].[All\_Instructor]
- [dbo].[Course\_view]
- [dbo].[exam\_view]
- [dbo].[Students\_take\_Exam\_view]
- [dbo].[student\_view]

### Index:

- Search by Mgr\_ID
- Search by Question\_Degree
- Search by Student\_Result
- Search\_by\_Exam

# **Function:**

- Calc Total\_Student
- Calc Total Courses
- Calc Total\_Instructor
- Calc Total\_Grades

# **Triggers:**

ddlt\_PreventDDLDropTable

## Job:

MaintenancePlan.Subplan\_1

Brief description for all objects in DB

Stored Procedure	description
[dbo].[add_New_Branch]	proc to add new branch in branch table
[dbo].[add_New_Course]	proc to add new Course in Course table
[dbo].[add_New_Instructor]	proc to add new Instructor in Instructor table
[dbo].[add_New_Intake]	proc to add new Intake in Intake table
[dbo].[add_New_Question]	proc to add new Question in Question table
[dbo].[add_New_Student]	proc to add new Student in Student table
[dbo].[add_New_track]	proc to add new track in track table
[dbo].[Branch_Action_Update_Or_Delete]	proc to update or delete in branch table
[dbo].[CorrectExamForStudent]	proc to Correct Exam For Student
[dbo].[delete_Course]	proc to delete in Course table
[dbo].[delete_Instructor]	proc to delete in Instructor table
[dbo].[delete_Question]	proc to delete in Question table
[dbo].[delete_Student]	proc to delete in Student table
[dbo].[delete_track]	proc to delete in track table
[dbo].[Enter_INST_ID_To_Display_Branch_Track_Intake_Info]	proc to Get info about Instructor
[dbo].[Enter_INST_ID_To_Display_Name_CourseName_Info]	proc to Get info about Instructor
[dbo].[Enter_STD_ID_To_Display_Branch_Track_Intake_Info]	proc to Get info about Student
[dbo].[Enter_STD_ID_To_Display_Name_Age_CourseName]	proc to Get info about Student
[dbo].[Enter_STD_Name_Fro_Garde_and_Exam_Number]	proc to Get info about Student
[dbo].[GenerateRandomExam]	proc to set exam
[dbo].[Intake_Action_Update_Or_Delete]	proc to update or delete in Intake table
[dbo].[Set_Student_To_Exam]	proc to select Student to Exam
[dbo].[StudentAnswerExamQuestion]	proc to Student Answer Exam Question
[dbo].[upadte_track_Name]	proc to update in Track table
[dbo].[update_Course_Description]	proc to update in Course table
[dbo].[update_Course_min_Max_Degree]	proc to update in Course table
[dbo].[update_Course_Name]	proc to update in Course table
[dbo].[Update_Instructor_Age]	proc to update in Instructor table
[dbo].[Update_Instructor_Name]	proc to update in Instructor table
[dbo].[Update_Question]	proc to update in Question table
[dbo].[update_Student_Age]	proc to update in Student table
[dbo].[update_Student_Name]	proc to update in Student table

view	description
[dbo].[All_Branch_Tarck_Intake]	View to display All Branchs in system
[dbo].[All_Instructor]	View to display All Instructor in system
[dbo].[All_Student]	View to display All Student in system
[dbo].[All_Students_And_His_Course]	View to display All Students And His Course
[dbo].[STD_Show_Questions_Exam]	view to display Questions Exam
[dbo].[Students_take_Exam_view]	view to display Student with his exam
[dbo].[Students_With_Exam_and_Grade]	view to display Student with his exam and grade
[dbo].[branch_view]	view to display branch info
[dbo].[track_view]	view to display track info
[dbo].[Intake_view]	view to display Intake info
[dbo].[instructo_view]	view to display Instructor info
[dbo].[student_view]	view to display Student info
[dbo].[Course_view]	view to display Course info
[dbo].[exam_view]	view to display Exam info
[dbo].[questions_view]	view to display Question info

Functoin	description
Calc Total_Student	Func To Get Number All Students
Calc Total Courses	Func To Get Number All Courses
Calc Total_Instructor	Func To Get Number All Instructor
Calc Total_Grades	Func To Calc Grades

Trigger	description
[ddlt_PreventDDLDropTable]	Trigger to prevent drop any Table from system

Job	description
[MaintenancePlan.Subplan_1]	Job to ececute dialy Backup

# **Users**

Login name	Password
AdminUser	123
Manger	123
Instructor	123
student	123