Generated using <u>SQL Data Dictionary</u> demo version.

•

Examination_System

Views:

dbo.Branch_Details_View
This View shows the Branch details such as Branch_ID, Branch_Name.
dbo.Course_Details_View
This View shows the Course details such as Course_ID, Course_Name, Min_Degree, Max_Degree.
dbo.Department_Details_View
This View shows the Department details such as Department_ID, Department_Name, Instuctor_Manager
dbo.Exam_Details_View
This View shows the details of the Exam such as : Exam_ID, Exam_Type, Allowance_Options, Total_Time, Start_Time, End_Time, Exam_Year, Intake_ID, Track_ID, Course_ID, Instructor_ID.
dbo.exam_metadata
dbo.Exam_Question_Details_View
This View shows the details of the Exam_Question such as : Exam_Question_ID, Exam_ID, Question_ID
dbo.Instructor_Course_Details_View
This View shows the details of the Student_Exam_Instructor such as : Student_Exam_Instructor_ID, Student_ID, Instructor_ID, Exam_ID, Student_Answer.
dbo.Instructor_Details_View
This View shows the details of the Instructor_Course such as Instuctor_Course_ID, Instuctor_ID, Course_ID, Year.
dbo.Intake_Details_View
This View shows the Details of the Intake such as Intake_ID, Intake_Name, Intake_Year.
dbo.Question_MCQ_Qptions_View10
This View shows the details of the MCQ Options in the Exam such as : $Question_Mcq_Options$, $Question_Id$, Mcq_Option .
dbo.Question_Pool_Details_View 1
This View shows the details of the Question_Pool such as : Question_ID, Question_Name, Question_Type, Correct_Answer, Mcq_Options, Question_Degree, Course_ID.
dbo.show_exam
dbo.Student_Course_Details_View
This View shows the details of the Student_Course such as : Student_Course_ID, Student_ID, Course_ID
dbo.Student_Details_View14
This View shows the details of the Student such as : Student_ID, Student_Name, Student_Email, Student_Phone, Intake_ID, Branch_ID, Track_ID
dbo.Track_Details_View
This View shows the Track details such as Track_ID, Track_Name, Department_ID.
Procedures:
dbo.AddBranch
This Procedure will check if this branch and the year exists will show a message , If not it will add the Branch and the

dbo.AddNewIntake 1
This Procedure will check if this intake and the year exists will show a message , If not it will add the intake and the year $\frac{1}{2}$
dbo.correction
Correction Name: correction Type: Stored ProcedureUsage: Exam correction
dbo.create_exam
create_exam SP Name: create_exam Type: Stored Procedure Usage: takes exam metadata as: exam type, allowance options, start time, end time, branch id, track id, course id and instructor id
dbo.DeleteCourse
The procedure deletes course based on the course id
dbo.DeleteInsCou
This procedure used to delete from the table Instuctor_Course
dbo.DeleteInstructor
The procedure deletes instructor based on the instructor id
dbo.display_exam2
This procedure takes student id then:
dbo.editBranch
This Procedure will check if this Branch and the year exists will show a message , If not it will add the Branch and the
dbo.insert_Track25
-This Procedure will check if this Track and the year exists will show a message , If not it will add the Track and the ye
dbo.InsertCourse
The procedure insert new course
dbo.InsertInsCou27
this procedure inserts a course for an instructor for a certain year All values are required
dbo.InsertInstructor
The procedure insert new instructor ALL VALUES ARE REQUIRED
dbo.rank_students
This procedure takes course id and display all student details that enrolled in this course
dbo.select_Qustion
select_Question SP Name: select_Question Type: Stored Procedure Usage: this sp takes from instructor the number of needed questions or
dbo.select_student
select_student SP Name: select_student Type: Stored Procedure Usage: this sp takes all for select all students in this course or specific student
dbo.show_quetion
show_question SP Name: show_question Type: Stored Procedure Usage: this sp retrieves all course questions in details as Question ID,
dbo.show_Student
show_Student SP Name: show_Student Type: Stored Procedure Usage: shows all students that enrolled in

ibo.take_answer	34
This procedure takes student id and student answer then checks:	
dbo.Track_info	35
-This Procedure will check if this Track and the year exists will show a message , If not it will add the Γ rack and the	
lbo.Track_update	36
This Procedure will check if this Track and the year exists will show a message , If not it will add the Track and the	ck
lbo.update_instructor_salaries	37
This procedure takes department number and salary increase amount for this department	
lbo.UpdateCourse	38
you need to input a valid course id to update the 3 other inputs are not all required only input a value fowhat you want to update NOTE max needs to be more than min degree with at least 5 numbers and both more than 0	
dbo.UpdateInsCou	39
This procedure used to update table Instuctor_Course	
dbo.UpdateInstructor	40
You need to input a valid instructor id to update all the other inputs are not required only input what you need to update	ı
dbo.usp_AddStudent4	41
add students, and define their personal data, intake, branch, and track.	
Functions:	
dbo.CheckValidEmail4	42
dbo.CheckValidPhone	43
lbo.GetStudentGrades	44
lbo.GetStudentGradestoInstructor	45
lbo.GetStudentGradestoManager	46
lbo.text_grade	47

Views:

View dbo.Branch_Details_View

This View shows the Branch details such as Branch_ID, Branch_Name.

Column	Data Type	Nullable
Branch_ID	int	
Branch_Name	varchar(20)	X

View dbo.Course_Details_View

This View shows the Course details such as Course_ID, Course_Name, Min_Degree, Max_Degree.

Column	Data Type	Nullable
Course_ID	int	
Course_Name	varchar(20)	X
Min_Degree	int	X
Max_Degree	int	X

<u>View dbo.Department_Details_View</u>

This View shows the Department details such as Department_ID, Department_Name, Instuctor_Manager..

Column	Data Type	Nullable
Department_ID	int	
Department_Name	varchar(20)	Х
Instuctor_Manager	int	Х

View dbo.Exam_Details_View

This View shows the details of the Exam such as : Exam_ID, Exam_Type, Allowance_Options, Total_Time, Start_Time, End_Time, Exam_Year, Intake_ID, Track_ID, Course_ID, Instructor_ID.

Column	Data Type	Nullable
Exam_ID	int	
Exam_Type	varchar(20)	X
Allowance_Options	varchar(30)	X
Total_Time	int	X
Start_Time	time	X
End_Time	time	X
Exam_Year	int	X
Intake_ID	int	Х
Track_ID	int	X
Course_ID	int	X
Instructor_ID	int	Х

View dbo.exam_metadata

Column	Data Type	Nullable
Exam_Type	varchar(20)	X
Course_Name	varchar(20)	X
Allowance_Options	varchar(30)	Х
Total_Time	int	Χ
Exam_Year	int	Х

View dbo.Exam_Question_Details_View

This View shows the details of the Exam_Question such as : Exam_Question_ID, Exam_ID, Question_ID

Column	Data Type	Nullable
Exam_Question_ID	int	
Exam_ID	int	Х
Question_ID	int	Χ

<u>View dbo.Instructor_Course_Details_View</u>

This View shows the details of the Student_Exam_Instructor such as : Student_Exam_Instructor_ID, Student_ID, Instructor_ID, Exam_ID, Student_Answer.

Column	Data Type	Nullable
Instuctor_Course_ID	int	
Instuctor_ID	int	Х
Course_ID	int	Х
Year	int	Х

View dbo.Instructor_Details_View

This View shows the details of the Instructor_Course such as Instuctor_Course_ID, Instuctor_ID, Course_ID, Year.

Column	Data Type	Nullable
Instructor_ID	int	
Instructor_Name	varchar(20)	X
Instructor_Email	varchar(255)	X
Instructor_Phone	varchar(11)	X
Instructor_Salary	int	Х
Department_ID	int	Х

View dbo.Intake_Details_View

This View shows the Details of the Intake such as Intake_ID, Intake_Name, Intake_Year.

Column	Data Type	Nullable
Intake_ID	int	
Intake_Name	varchar(20)	Х
Intake_Year	int	Х

<u>View dbo.Question_MCQ_Qptions_View</u>

This View shows the details of the MCQ Options in the Exam such as: Question_Mcq_Options, Question_Id, Mcq_Option.

Column	Data Type	Nullable
Question_Mcq_Options	int	
Question_Id	int	X
Mcq_Option	varchar(100)	X

<u>View dbo.Question_Pool_Details_View</u>

This View shows the details of the Question_Pool such as : Question_ID, Question_Name, Question_Type, Correct_Answer, Mcq_Options, Question_Degree, Course_ID.

Column	Data Type	Nullable
Question_ID	int	
Question_Name	varchar(255)	Χ
Question_Type	varchar(15)	Χ
Correct_Answer	varchar(255)	Χ
Question_Degree	int	Χ
Course_ID	int	X

View dbo.show_exam

Column	Data Type	Nullable
Question_Id	int	
Question_Name	varchar(255)	X
Question_Type	varchar(15)	Х
mcq_options	varchar(8000)	Х
Question_Degree	int	Х

View dbo.Student_Course_Details_View

This View shows the details of the Student_Course such as : Student_Course_ID, Student_ID, Course_ID

Column	Data Type	Nullable
Student_Course_ID	int	
Student_ID	int	X
Course_ID	int	Х

View dbo.Student_Details_View

This View shows the details of the Student such as : Student_ID, Student_Name, Student_Email, Student_Phone, Intake_ID, Branch_ID, Track_ID

Column	Data Type	Nullable
Student_ID	int	
Student_Name	varchar(20)	Х
Student_Email	varchar(255)	Х
Student_Phone	varchar(11)	Х
Intake_ID	int	Х
Branch_ID	int	Х
Track_ID	int	Х

View dbo.Track_Details_View

This View shows the Track details such as Track_ID, Track_Name, Department_ID.

Column	Data Type	Nullable
Track_ID	int	
Track_Name	varchar(20)	Х
Department_ID	int	Х

Procedures:

Procedure dbo.AddBranch

This Procedure will check if this branch and the year exists will show a message , If not it will add the Branch and the

Parameter	Data Type	Default	Is Output
@Branch_Id	int		
@Branch_Name	varchar(20)		

Procedure dbo.AddNewIntake

--This Procedure will check if this intake and the year exists will show a message , If not it will add the intake and the year

Parameter	Data Type	Default	Is Output
@IntakeName	varchar(255)		
@IntakeYear	int		

Procedure dbo.correction

Correction Name: correction Type: Stored ProcedureUsage: Exam correction

No parameters.

Procedure dbo.create_exam

create_exam SP Name: create_exam Type: Stored Procedure Usage: takes exam metadata as: exam type, allowance options, start time, end time, branch id, track id, course id and instructor id

Parameter	Data Type	Default	Is Output
@exam_type	varchar(20)		
@allowance_option	varchar(100)		
@start_time	time		
@end_timd	time		
@intake_id	int		
@Branch_Id	int		
@track_id	int		
@course_id	int		
@instructor_id	int		

Column	Data Type	Nullable
(No column name)	varchar(17)	

Procedure dbo.DeleteCourse

The procedure deletes course based on the course id

Parameter	Data Type	Default	Is Output
@course_id	int		

Procedure dbo.DeleteInsCou

This procedure used to delete from the table Instuctor_Course

Parameter	Data Type	Default	Is Output
@course_id	int	-	
@instructor_id	int	-	
@delete_all	int	-	
@year	int	-	

Procedure dbo.DeleteInstructor

The procedure deletes instructor based on the instructor id

Parameter	Data Type	Default	Is Output
@ins_id	int		

Procedure dbo.display_exam

This procedure takes student id then:

	Parameter	Data Type	Default	Is Output
(@st_id	int		

Column	Data Type	Nullable
Exam_Type	varchar(20)	X
Course_Name	varchar(20)	X
Allowance_Options	varchar(30)	Х
Total_Time	int	Х
Exam_Year	int	Х

Procedure dbo.editBranch

This Procedure will check if this Branch and the year exists will show a message , If not it will add the Branch and the

Parameter	Data Type	Default	Is Output
@Branch_Id	int		
@new_Branch_Name	varchar(20)		

Procedure dbo.insert_Track

-This Procedure will check if this Track and the year exists will show a message , If not it will add the Track and the ye

Parameter	Data Type	Default	Is Output
@Track_Name	varchar(20)		

Procedure dbo.InsertCourse

The procedure insert new course

Parameter	Data Type	Default	Is Output
@cre_name	varchar(20)		
@mx_degree	int	100	
@mn_degree	int	0	

Procedure dbo.InsertInsCou

this procedure inserts a course for an instructor for a certain year All values are required

Parameter	Data Type	Default	Is Output
@course_id	int		
@instructor_id	int		
@year	int		

Procedure dbo.InsertInstructor

The procedure insert new instructor ALL VALUES ARE REQUIRED

Parameter	Data Type	Default	Is Output
@ins_name	varchar(20)		
@ins_email	varchar(50)		
@ins_salary	int		
@ins_phone	varchar(11)		
@dept_id	int		

Column	Data Type	Nullable
ERROR	varchar(98)	

Procedure dbo.rank_students

This procedure takes course id and display all student details that enrolled in this course

	Parameter	Data Type	Default	Is Output
@	crs_id	int		

Column	Data Type	Nullable
Student_Id	int	
Student_Name	varchar(20)	X
Student_Email	varchar(255)	X
Student_Phone	varchar(11)	X
Course_Name	varchar(20)	Х
Grade	int	X
Track_Name	varchar(20)	X
Branch_Name	varchar(20)	X
Intake_Name	varchar(20)	X
Rank	bigint	Х

Procedure dbo.select_Qustion

select_Question SP Name: select_Question Type: Stored Procedure Usage: this sp takes from instructor the number of needed questions or

Parameter	Data Type	Default	Is Output
@needs	varchar(300)		

Column	Data Type	Nullable
(No column name)	varchar(31)	

Procedure dbo.select_student

select_student SP Name: select_student Type: Stored Procedure Usage: this sp takes all for select all students in this course or specific student

Parameter	Data Type	Default	Is Output
@student_id	varchar(300)		

Procedure dbo.show_quetion

show_question SP Name: show_question Type: Stored Procedure Usage: this sp retrieves all course questions in details as Question ID,

No parameters.

Column	Data Type	Nullable
Question_Id	int	
Question_Name	varchar(255)	X
Question_Type	varchar(15)	Х
Question_Degree	int	X

Procedure dbo.show_Student

show_Student SP Name: show_Student Type: Stored Procedure Usage: shows all students that enrolled in this course to make instructor select all / some of them to do the exam

No parameters.

Column	Data Type	Nullable
Student_Id	int	
Student_Name	varchar(20)	Х

Procedure dbo.take_answer

This procedure takes student id and student answer then checks:

Parameter	Data Type	Default	Is Output
@st_id	int		
@ans	varchar(max)		

Procedure dbo.Track_info

-This Procedure will check if this Track and the year exists will show a message , If not it will add the Track and the

Parameter	Data Type	Default	Is Output
@Track_Id	int		
@Track_Name	varchar(20)		

Procedure dbo.Track_update

This Procedure will check if this Track and the year exists will show a message , If not it will add the Track and the

Parameter	Data Type	Default	Is Output
@Track_Id	int		
@newTrack_Name	varchar(20)		

Procedure dbo.update_instructor_salaries

This procedure takes department number and salary increase amount for this department

Parameter	Data Type	Default	Is Output
@dnum	int		
@amount	int		

Procedure dbo.UpdateCourse

you need to input a valid course id to update the 3 other inputs are not all required only input a value for what you want to update NOTE -- max needs to be more than min degree with at least 5 numbers and both more than 0

Parameter	Data Type	Default	Is Output
@crs_id	int		
@cre_name	varchar(20)	"	
@mx_degree	int	0	
@mn_degree	int	-	

Column	Data Type	Nullable
ERROR	varchar(56)	

Procedure dbo.UpdateInsCou

This procedure used to update table Instuctor_Course

Parameter	Data Type	Default	Is Output
@course_id	int		
@instructor_id	int		
@new_instructor_id	int	-	
@new_course_id	int	-	
@year	int	-	

Procedure dbo.UpdateInstructor

You need to input a valid instructor id to update all the other inputs are not required only input what you need to update

Parameter	Data Type	Default	Is Output
@ins_id	int		
@ins_name	varchar(20)	'-1'	
@ins_email	varchar(255)	'-1'	
@ins_phone	varchar(11)	'-1'	
@ins_salary	int		
@ins_dep	int	-	

Column	Data Type	Nullable
ERROR	varchar(56)	

Procedure dbo.usp_AddStudent

add students, and define their personal data, intake, branch, and track.

Parameter	Data Type	Default	Is Output
@Student_Name	varchar(20)		
@Student_Email	varchar(255)		
@Student_Phone	varchar(11)		
@Intake_Id	int		
@Branch_Id	int		
@Track_Id	int		

Functions:

Scalar Function dbo.CheckValidEmail

Parameter	Data Type	Default
@email	varchar(255)	

Data Type	Nullable
bit	X

Scalar Function dbo.CheckValidPhone

	Parameter	Data Type	Default
@phone		varchar(11)	

Data Type	Nullable
bit	Х

Inline Table Valued Function dbo.GetStudentGrades

Parameter	Data Type	Default
@StudentID	int	

Column	Data Type	Nullable
Student_Name	varchar(20)	X
Course_Name	varchar(20)	X
Grade	int	Х

Inline Table Valued Function dbo.GetStudentGradestoInstructor

Parameter	Data Type	Default
@InstructorID	int	

Column	Data Type	Nullable
Student_Name	varchar(20)	X
Course_Name	varchar(20)	X
Grade	int	X
Instructor_Name	varchar(20)	X

Inline Table Valued Function dbo.GetStudentGradestoManager

No parameters.

Column	Data Type	Nullable
Student_Name	varchar(20)	X
Course_Name	varchar(20)	Х
Grade	int	Х
Instructor_Name	varchar(20)	Х
Department_Name	varchar(20)	Х

Scalar Function dbo.text_grade

Parameter	Data Type	Default
@best_answer	varchar(255)	
@student_answer	varchar(255)	
@q_grade	int	

Data Type	Nullable
float	X