

Entity	Attribute	Data type	Required?	Field length	Constraint		Description
Student	St_id	int	y	auto	primary key, identity		id of the student
	St_name	varchar(30)	y	30			name of the student
	St_faculty	varchar(30)	y	30			faculty of the student
	Birthdate	date	n	auto			birthdate of the student
	Dep_id	int	y	auto	foreign key		department of the student and it's a foreign key from department table
Instructor	Ins_id	int	y	auto	primary key, identity		id of instructor
	Ins_name	varchar(20)	y	20			name of instructor
Course	Crs_id	int	y	auto	primary key, identity		id of course
	Crs_name	varchar(20)	y	20			name of the course
	Hours	int	n	auto			teaching hours of the course
	Ins_id	int	n	auto	foreign key		instructor that teaches the course and it's forign key from instructor table
Department	Dept_id	int	y	auto	primary key, identity		the id of departments
	Dept_name	varchar(20)	y	20			the names of existed departments
	Ins_id	int	y	auto	foreign key		the id of instructor that supervise that department
Topic	Top_id	int	y	auto	primary key, identity		id of the topic
	Top_name	varchar(20)	y	20			name of the topic
	Crs_id	int	y	auto	foreign key		id of the course that includes topics, and it's a foreign key from the course table
Exam	Exam_id	int	y	auto	primary key, identity		
	Duration	int	n	auto			
	Score	float	y	auto			
	Ins_id	int	n	auto	foreign key		instructor who generated exam and it's foreign key from instructor table
	Crs_id	int	n	auto	foreign key		id of the course that exam belongs to, and it's a foreign key from the course table
Questions	Q_id	int	y	auto	primary key, identity		id of the question
	Q_text	nvarchar(400)	y	400			the question text
	Crs_id	int	y	auto	foreign key		id of the course that question belongs to, and it's a foreign key from the course ta
	flag	int	y	auto	check constraint		flag of the question that indicates whether it's mcq question or true and false que
	option_a	varchar(200)	n	200			First choice of question
	option_b	varchar(200)	n	200			second choice of question
	option_c	varchar(200)	n	200			Third choice of question
	option_d	varchar(200)	n	200			Fourth choice of question
	Answer	char(1)	y	1	check constraint		model answer of the question
Student_Course	St_id	int	y	auto	foreign key	primary key	id of the student that take courses , and it's a foreign key from the student table
	Crs_id	int	y	auto	foreign key		id of the course that the student take , and it's a foreign key from the course table
Student_Exam	St_id	int	y	auto	foreign key	primary key	id of the student that take exam , and it's a foreign key from the student table
	Exam_id	int	y	auto	foreign key		id of the exam that student take , and it's a foreign key from the student table exa
	Grade	int	n	auto			Grade of the student exam
Student_Answer	St_id	int	y	auto	foreign key	Primary key	id of student and it's a foreign key from student table
	Exam_id	int	y	auto	foreign key		id of Exam and it's a foreign key from Exam table
	Q_id	int	y	auto	foreign key		id of Question and it's a foreign key from Question table
	Answer	char(1)	n	1			the answer of student
Exam_Questions	Exam_id	int	y	auto	foreign key	primary key	id of the exam and it's foreign key from exam table
	Q_id	int	y	auto	foreign key		id of the question and it's foreign key from questions table