HOMEWORK TRACKING SYSTEM

Database Systems - 60612MEEOZ-CME0075-2021-2022-1

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1. Brief Description

This study includes a new database application that will facilitate the exchange and communication of documents in homework and project weighted courses. With the designed database, they will carry out transactions such as sending files and messaging between teachers and learners through the system. The database infrastructure of the program is MsSql.

Thanks to this project, academicians will spend less time in the homework and project evaluation process and will gain time for their other academic or other works.

1.1 Scope Definition

In the teaching process, the instructors want to control the learning status of the students for application-oriented, graphic, coding or other courses. In order to fulfill this function, it assigns students the responsibility of homework and projects to be delivered between certain dates.

The learning group can deliver the assignments or projects directly, as they often do via e-mail. However, confusion occurs in the email box of the instructor due to mails from many classes or from other people.

In the assignments submitted as documents, the mixing of the assignments of different student groups and the paper and printing expenses for the students can be seen as an extra expense. The main purpose of this design will be to save time for the instructor and to reduce the educational expenses of the students.

"Homework Tracking System" can actually be compared to a simple content management system. The teaching and learning group will exchange files and messages between each other and the process will run more effectively thanks to this project.

1.2 Potential Users of the System

After the database design, user screen designs with different authorizations to use the system were made. Database tables were created to meet the needs of three different types of users.

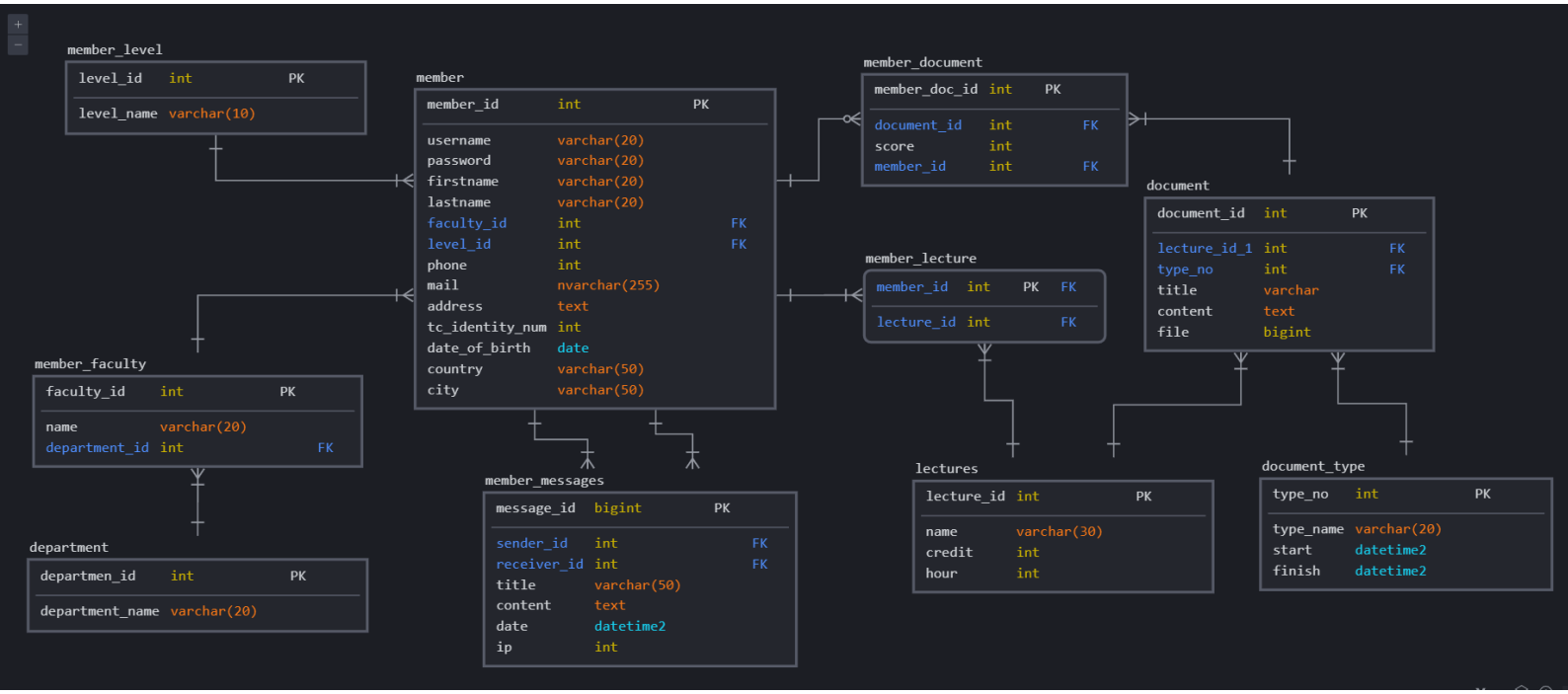
- **Administrator** : The user with administrator privileges is the most authorized user with the authority to add lecturers, students, courses and announcements to the system.

- **Lecturer / Instructor** : The instructor can add his own courses and the information of the students who took this course to the system. In addition, he can write a message to his student group and follow the incoming and outgoing message boxes. The instructor delivers the files related to the assignments and projects given to the students through the system and provides the evaluation processes through the system.

- **Student** : On the student side of the process, the student can see the assignments and projects sent to him on his own screen. After the students have done the necessary work, they can send their homework or projects over the system again. The documents sent are displayed on the instructor screen. When the evaluation is made by grade, students can follow their grades on their own screens.

2. Design of Database System

2.1 Database Design



2.2 Data Dictionary

Table Name	Attribute Name	Contents	Type	Format	Domain	PK/FK	FK Reference
member	member_id	Member ID	int	2,147,483,647		PK	
	username	Username	varchar(20)	xxxxxxxxxxxxx	20		
	password	Password	varchar(20)	xxxxxxxxxxxxx	20		
	firstname	Firstname	varchar(20)	xxxxxxxxxxxxx	20		
	lastname	Lastname	varchar(20)	xxxxxxxxxxxxx	20		
	faculty_id	Faculty ID	int	2,147,483,647		FK	
	level_id	Level ID	int	2,147,483,647		FK	
	phone	Phone Number	int	2,147,483,647			
	mail	E-Mail Adress	nvarchar(255)	xxxxxxxxxxxxx			
	address	Address	text	xxxxxxxxxxxxx			
	tc_identity_num	Turkish Identity Number	int	2,147,483,647			
	date_of_birth	Date of Birth	date	YYYY-MM-DD			
	country	Country	varchar(50)	xxxxxxxxxxxxx	50		
	city	City	varchar(50)	xxxxxxxxxxxxx	50		
member_document	member_doc_id	Member Document ID	int	2,147,483,647		PK	member
	document_id	Document ID	int	2,147,483,647		FK	
	score	Score	int	2,147,483,647			
	member_id	Member ID	int	2,147,483,647		FK	
member_lecture	member_id	Member ID	int	2,147,483,647		PK	member
	lecture_id	Lecture ID	int	2,147,483,647		FK	
member_level	level_id	Level ID	int	2,147,483,647		PK	member
	level_name	Level Name	varchar(20)	xxxxxxxxxxxxx	20		

member_faculty	faculty_id	Faculty ID	int	2,147,483,647		PK	member
	name	Faculty Name	varchar(20)	xxxxxxxxxxxxx	20		
	department_id	Department ID	int	2,147,483,647		FK	
department	department_id	Department ID	int	2,147,483,647		PK	member_faculty
	department_name	Department Name	varchar(20)	xxxxxxxxxxxxx	20		
member_messages	message_id	Message ID	int	2,147,483,647		PK	member
	sender_id	Sender ID	int	2,147,483,647		FK	
	receiver_id	Receiver ID	int	2,147,483,647		FK	
	title	Title	varchar(50)	xxxxxxxxxxxxx	50		
	content	Content	text	xxxxxxxxxxxxx			
	date	Date	dateTime2	YYYY-MM-DD hh:mm:ss[.nnnnnnn]			
	ip	Ip Adress	int	2,147,483,647			
lectures	lecture_id	Lecture ID	int	2,147,483,647		PK	member_lecture
	name	Lecture Name	varchar(30)	xxxxxxxxxxxxx	30		
	credit	Lecture Credit	int	2,147,483,647			
	hour	Lecture Hour	int	2,147,483,647			
document	document_id	Document ID	int	2,147,483,647		PK	member_document
	lecture_id	Lecture ID	int	2,147,483,647			
	type_no	Type Number of Document	int	2,147,483,647			
	title	Title of Document	varchar()	xxxxxxxxxxxxx			
	content	Content of Document	text	xxxxxxxxxxxxx			
	file	File Number	bigint	9,223,372,036, 854,775,807			
document_type	type_no	Type Number of Document	int	2,147,483,647		PK	document
	type_name	Type Name of Document	varchar(20)	xxxxxxxxxxxxx	20		
	start	Start Date for Document	dateTime2	YYYY-MM-DD hh:mm:ss[.nnnnnnn]			
	finish	Due Date for Document	dateTime2	YYYY-MM-DD hh:mm:ss[.nnnnnnn]			