

# **Hospital Appointment System**

## **CME 3201 Database Management Systems**

### **Term Project Report**

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**Phase 3  
2020-2021 FALL**

#### **30th Group Members**

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## **Abstract**

In the first stage of the project, it is useful to create a diagram first. Therefore, the ER diagram was created in the first phase of the project. Entity relationship is shown in this ER diagram.

In the second stage, research was made on the tools we will use. In this way, it was aimed to be faster in the project. These tools are ASP.NET and MSSQL. These tools were preferred due to the ease of use of ASP.NET and the compatibility of MSSQL with ASP.NET.

In the third stage, the creation of the database started because there is a lot of data in the project. All transactions were planned to be done in the database.

## 1. Completion Report

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Creating Diagrams	1 day / 2 days (both of group members) <b>(Completed)</b>
Searching and learning ASP.NET and MSSQL	1 week / 2 weeks (both of group members) <b>(Completed)</b>
Creating database and functions	2 weeks <b>(Completed)</b>
Creating web pages and functions	4 weeks / 5 weeks (both of group members) <b>(Completed)</b>

ER diagram and searching for tools that we will use are completed. In the database phase, creating the database is completed. Created tables are ADMIN, DOCTOR, PATIENT, APPOINTMENT, MESSAGE, FEEDBACK.

Creating database and functions are completed.

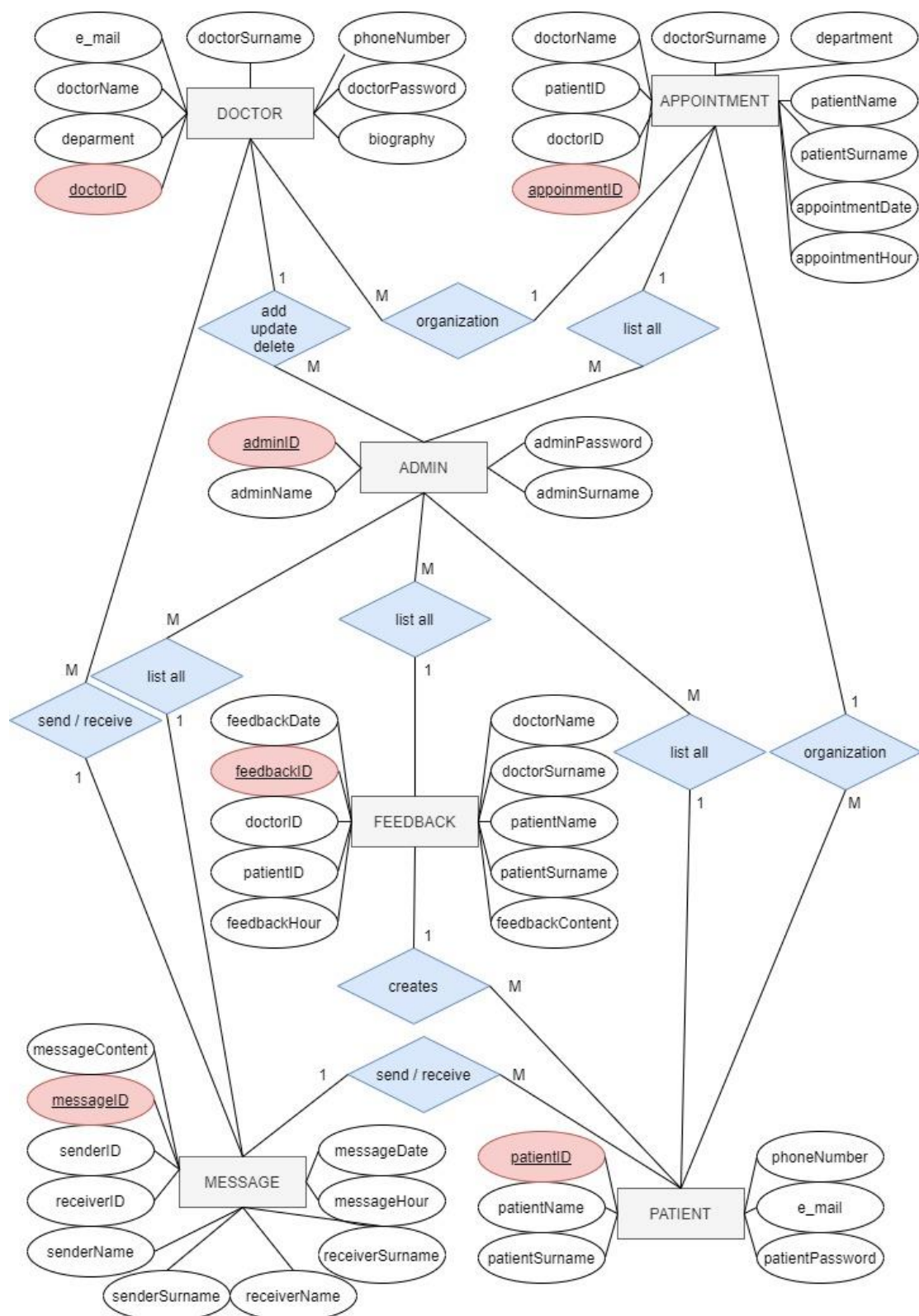
Admin can manipulate the data. Admin can add, edit, delete a doctor to system, list and delete patients, list appointments and feedbacks.

Patient can add appointment, add feedback and send message.

Doctor can add, edit, delete an appointments, list feedbacks and send message.

## 2. Functional Decomposition

ER Diagram:



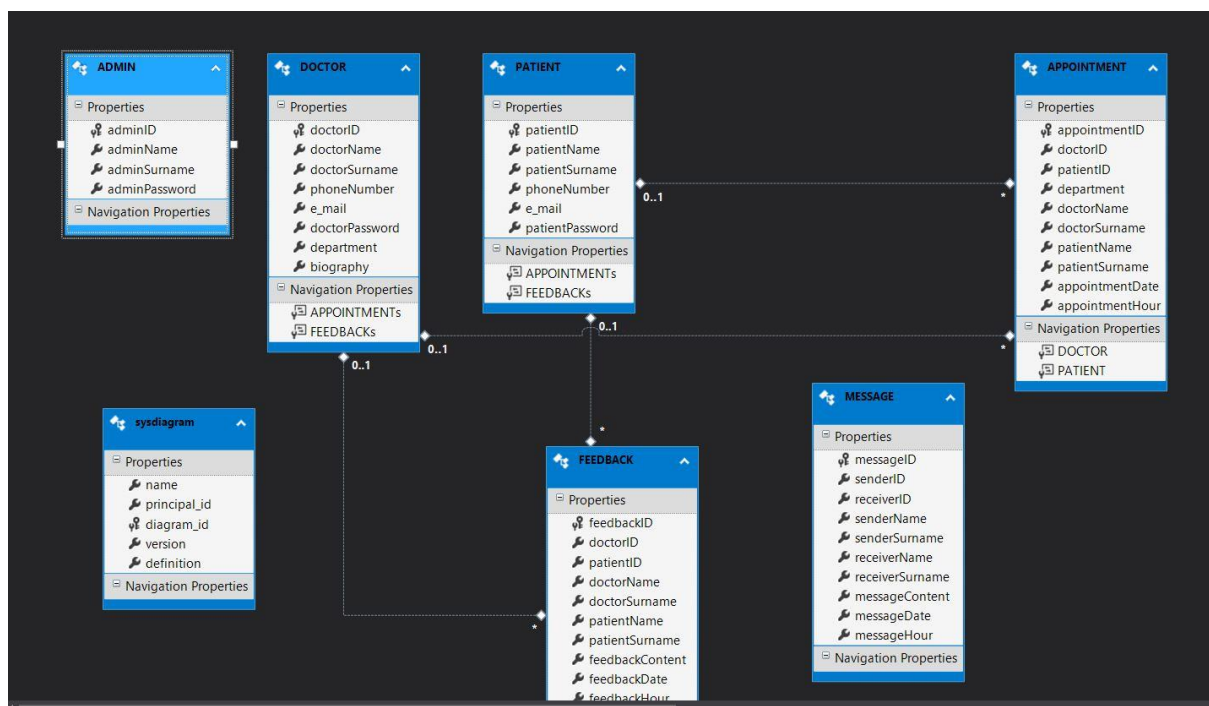
## MVC:

The main logic in MVC structure is the separation of Model and View structure. We call the bridge that provides communication between these two structures as a controller.

Data is stored in the model layer. In this project, we stored the data using Microsoft SQL Server. There are ADMIN, APPOINTMENT, DOCTOR, FEEDBACK, MESSAGE, PATIENT tables.

View is the part where the user interface is designed. In this section, there are forms for entering data, buttons for page transitions, search boxes. Tables are also displayed.

Controller Performs operations between Model and View. It transfers the data received by the operations performed by the users through View to the Model, and displays the data received from the Model to the user over the View.



### 3. High-Level Organization

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On the start page, there is information about hospital. At the same time, information of the doctors at the hospital can be accessed from the top left corner of the start page.

Admin, doctor and patient entries are made from the upper right corner. The patient clicks on the Appointment option to log in.

Admin can go to doctor, patient, feedback and contacts tabs in the upper left corner of the admin page. Admin can update and delete doctor information on doctor page. Admin can view and delete patients on the patient page. Admin makes a listing on the feedback and contents page.

Admin can log out by clicking the LOGOUT bot in the upper right corner.

The doctor can see the appointments on the first page in the entrance. You can switch between appointment, message and feedback tabs in the upper left corner. On the appointment page, the doctor must write his name-surname in the search boxes to view and edit his own appointments. On the feedback page, the doctor must write his name-surname in the search boxes to view his own feedback. On the contact page, the doctor must enter the name of the patient for whom a message is waiting to see the messages received. If he wants to send a message, he must click the button at the bottom of the page to switch to the Add Contact page. By entering the message information on the Add Contact page and clicking the button, the message is sent / added to the database.

Doctor can log out by clicking the LOGOUT bot in the upper right corner.

The patient can log in or become a member. By clicking the Register button on the patient entry screen, they can enter their information and become a member. They can login by clicking the Login button. When the patient logs in, he can view all appointments. If the patient wants to add an appointment, they can view the doctor's information from the Doctor List button in order to enter the doctor's information. The patient can add an appointment by clicking the button at the bottom of the appointment page. The patient can switch between contacts and feedback from the upper left corner. The patient can view the messages sent to him on the contact page by entering the doctor's name, and at the same time, he can send a message by clicking the button at the end of the screen and entering the information from the page that opens. The

patient can view and display feedback from the feedback page. If the patient wishes, he / she can click the button at the end of the page to switch to the add feedback page and add feedback by entering feedback information.

Patient can log out by clicking the LOGOUT bot in the upper right corner.

## 4. Clickstreams

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**DELETE:** Admin can delete doctor, patient. Doctor and patient can delete message.

**UPDATE:** Admin can update doctor. Doctor can update appointment.

**ADD:** Admin can add doctor. Doctor and patient can add contact. Patient can add feedback and appointment.

**LOGOUT:** Log out for admin, doctor and patient.

**REGISTER:** Patient register.

**LIST:** List for doctors on patient appointment page.

**SEARCH:** Search information about search boxes' intent.



## 5. Layout

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Views:

AdminHome

AdminHomeAppointment

AdminHomeFeedback

AdminHomePatient

AdminLogin

These are for after admin login.

DoctorAppointments

DoctorContact

DoctorHome

DoctorLogin

These are for after doctor login

PatientHome

PatientHomeContact

PatientHomeFeedback

PatientLogin

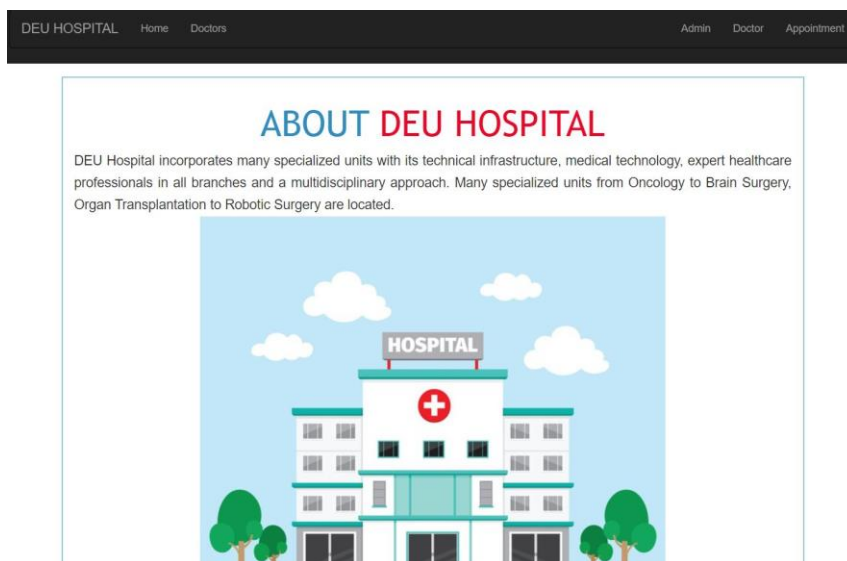
These are for after patient login.

StartPage

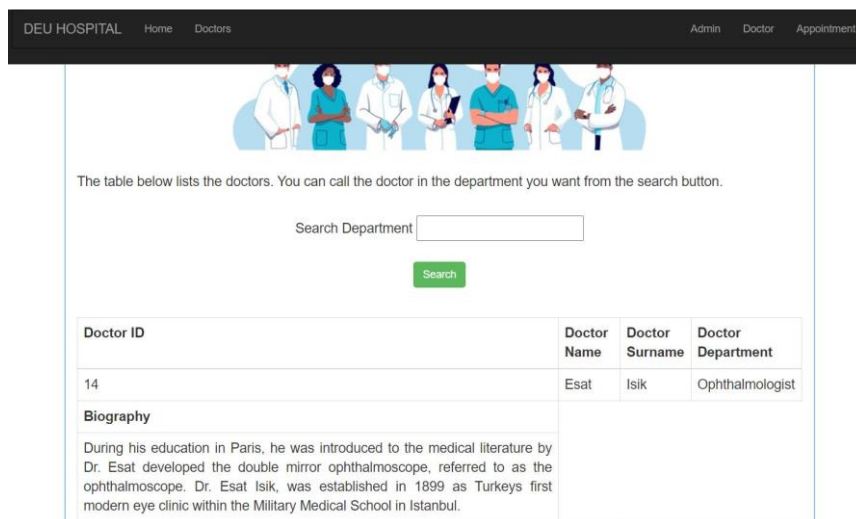
StartPageDoctorList

There are without login.

## 6. Implementation



Start page. It has information about DEU Hospital.



Doctors tab without login. It has information about doctors.

DEU HOSPITAL
Doctors
Patients
Appointment
Feedback
LOGOUT

Department
Name
Search

Doctor ID	Doctor Name	Doctor Surname	Doctor Department		
14	Esat	Isik	Ophthalmologist	DELETE	UPDATE
<b>Biography</b> During his education in Paris, he was introduced to the medical literature by Dr. Esat developed the double mirror ophthalmoscope, referred to as the ophthalmoscope. Dr. Esat Isik, was established in 1899 as Turkey's first modern eye clinic within the Military Medical School in Istanbul.					
15	Suheyli	Unver	Internal Diseases	DELETE	UPDATE
<b>Biography</b> Suheyli Unver, who graduated from Darülfunun Faculty of Medicine, worked in Gureba and Haseki hospitals. He specialized abroad. He established the Medical History Institute of Istanbul University and the Department of Medical History and Deontology at the Cerrahpasa Faculty of Medicine. Unver, who is a member of 18 scientific organizations; He has published around 2500 books and articles on the history of medicine, history of science and culture.					
16	Hulusi	Behcet	Dermatology	DELETE	UPDATE
<b>Biography</b>					

After admin login. It has doctor information. Admin can ADD,DELETE,UPDATE on this page and search doctor.

DEU HOSPITAL
Doctors
Patients
Appointment
Feedback
LOGOUT

Search Patient
Search

Patient ID	Patient Name	Patient Surname	Patient PhoneNumber	Delete
6	Ayşe	Yılmaz	12345	DELETE
7	Ali	Kara	12345	DELETE
8	Mahmut	Tek	12345	DELETE
9	Zeynep	Kırmızı	12345	DELETE
10	Nilay	Turan	12345	DELETE
11	Hasan	Durmaz	12345	DELETE
12	Tahir	Burgucu	12345	DELETE
13	Melek	Temiz	12345	DELETE
14	Batuhan	Comert	12345	DELETE

After admin login. Admin can DELETE and search patient.

DEU HOSPITAL	Doctors	Patients	Appointment	Feedback	LOGOUT
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Appointment ID	Doctor Name	Doctor Surname	Patient Name	Patient Surname	Department	Appointment Date	Appointment Hour
20	Esat	Isik	Ayşe	Yilmaz	Ophthalmologist	20.01.2021 00:00:00	14:00:00
21	Mahsar Osman	Umsal	Ali	Kara	Psychiatry	25.01.2021 00:00:00	12:00:00
22	Cemil	Topuzlu	Nilay	Turan	General Surgeon	26.01.2021 00:00:00	12:30:00
23	Ozlem	Tureci	Batuhan	Comert	Covid-19	22.01.2021 00:00:00	11:40:00

After admin login. Admin list appointments.

DEU HOSPITAL	Doctors	Patients	Appointment	Feedback	LOGOUT
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Feedback ID	Doctor Name	Doctor Surname	Patient Name	Patient Surname	Feedback Date	Feedback Hour
2	Mehmet	Oz	Zeynep	Kirmizi	14.05.2020 00:00:00	09:00:00
<b>Feedback Content</b>						
He is a very successful doctor. I am very pleased.						
3	Turkan	Saylan	Mahmut	Tek	3.01.2021 00:00:00	10:00:00
<b>Feedback Content</b>						
She was a very gentle person and took care of me very well.						
4	Ugur	Sahin	Hasan	Durmaz	10.01.2021 00:00:00	11:00:00
<b>Feedback Content</b>						
Absolutely successful and kind.						

After admin login. Admin list feedbacks.

DEU HOSPITAL	Home	Doctors	Admin	Doctor	Appointment
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Patient Login

patientName

patientPassword

Login Clear Register

Patient login.

DEU HOSPITAL   Home   Doctors

Admin   Doctor   Appointment

Admin Login

adminName

adminPassword

Admin login.

DEU HOSPITAL   Home   Doctors

Admin   Doctor   Appointment

Patient Name

Patient Surname

Patient Number

E Mail

Patient Password

Patient register.

DEU HOSPITAL   Home   Doctors

Admin   Doctor   Appointment

Doctor Login

doctorName

doctorPassword

Doctor login.


DEU HOSPITAL

Booking

Contact

Feedback

LOGOUT




The table below lists doctors' full appointments. Please make an appointment at a suitable time for you.

Search Doctor Name  Search Department  Search Date

Doctor ID	Doctor Name	Doctor Surname	Doctor Department	Appointment Date	Appointment Hour
14	Esat	Isik	Ophthalmologist	20.01.2021 00:00:00	14:00:00
18	Mahsar Osman	Umsal	Psychiatry	25.01.2021 00:00:00	12:00:00
20	Cemil	Topuzlu	General Surgeon	26.01.2021 00:00:00	12:30:00
25	Ozlem	Tureci	Covid-19	22.01.2021 00:00:00	11:40:00

After patient login. Patient can search appointment about doctor and ADD appointment.

DEU HOSPITAL
Booking
Contact
Feedback
LOGOUT



You can write a feedback about your appointment.

Feedback ID	Doctor Name	Doctor Surname	Feedback Date	Feedback Hour
2	Mehmet	Oz	14.05.2020 00:00:00	09:00:00
<b>Feedback Content</b> He is a very successful doctor. I am very pleased.				
3	Turkan	Saylan	3.01.2021 00:00:00	10:00:00
<b>Feedback Content</b> She was a very gentle person and took care of me very well.				
4	Ugur	Sahin	10.01.2021 00:00:00	11:00:00
<b>Feedback Content</b> Absolutely successful and kind.				

Add Feedback

After patient login. Patient can list feedbacks and add feedback.

DEU HOSPITAL
Appointments
Contact
LOGOUT

## APPOINTMENTS

Enter your Name-Surname to see your appointments.

Doctor Name 
Doctor Surname

Search

Doctor ID	Doctor Name	Doctor Surname	Doctor Department	Appointment Date	Appointment Hour		
14	Esat	Isik	Ophthalmologist	20.01.2021 00:00:00	14:00:00	DELETE	UPDATE
18	Mahsar Osman	Umsal	Psychiatry	25.01.2021 00:00:00	12:00:00	DELETE	UPDATE
20	Cemil	Topuzlu	General Surgeon	26.01.2021 00:00:00	12:30:00	DELETE	UPDATE

After doctor login. Doctor can search appointment with name and surname and DELETE,UPDATE a appointment.

DEU HOSPITAL

Appointments

Contact

LOGOUT

## CONTACTS

Enter the name of the patient whose message you want to see.

Search Patient

Search

Sender ID	Sender Name	Sender Surname	Receiver Name	Receiver Surname	Message Content	Message Date	Message Hour	DELETE
6	Ayşe	Yılmaz	Hulusi	Behcet	My skin is very sensitive and it doesn't help whatever I apply. I use your prescribed medications regularly.	3.11.2020 00:00:00	09:45:00	DELETE
12	Tahir	Burgucu	Tefvik	Saglam	How often should I use probiotics?	12.01.2021 00:00:00	15:00:00	DELETE

After doctor login. Doctor can search patient with name and DELETE,ADD a message.



## 7. Future Work

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It has been worked in cooperation at every milestones of the project. Each stage was carried out with common participation.

With the digitalization of everything, hospital systems now operate online. The project can be developed by adding many new functions. The decrease in the density in the hospital, especially with the pandemic in our period, is a great advantage. Online appointment systems are becoming widespread every day.