

FINAL PROJECT REPORT

Project Name: Classroom Reservation

Name, Surname: Gökay Çetinakdoğan

Student Number: 202111050

19.05.2025

1. Project Information and Objectives

a. Project Scope:

The scope of this project is a web-based system that classroom reservation system that allows instructors to submit and manage classroom reservation requests during academic terms defined by the admin. The admin has full authority to create terms, manage instructors, handle conflicts and holidays, and review feedback. Instructors make class reservations requests and feedbacks then send notifications to the admin for these actions.

The platform supports responsive UI, calendar-based scheduling, conflict detection, feedback collection, and system logging, and it is built using C# with .NET Razor Pages, Entity Framework (MS SQL Server), and Bootstrap.

b. Users:

Those who will primarily benefit from the new system and those who will be affected by the new system include:

Admin: Responsible for term creation, user management, reservation approvals, and system monitoring.

Instructors: Can request, edit, or cancel reservations and submit feedback about classroom conditions.

c. Objectives:

- The system shall provide password-protected access for both admin and instructor roles.
-
- The system shall allow instructors to submit reservation requests via a calendar UI.
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- The system shall flag scheduling conflicts and prevent approval until resolved.
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- The system shall detect public holidays using a third-party API and warn users.
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- The system shall collect 5-star feedback from instructors, linked to specific classes.
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- The system shall log all actions (logins, submissions, approvals, etc.) for auditing.
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- The system shall send email notifications for reservation actions (approval, rejection, etc.)

2. Project Implementation (How does your system work?)
 a. Database Diagram:

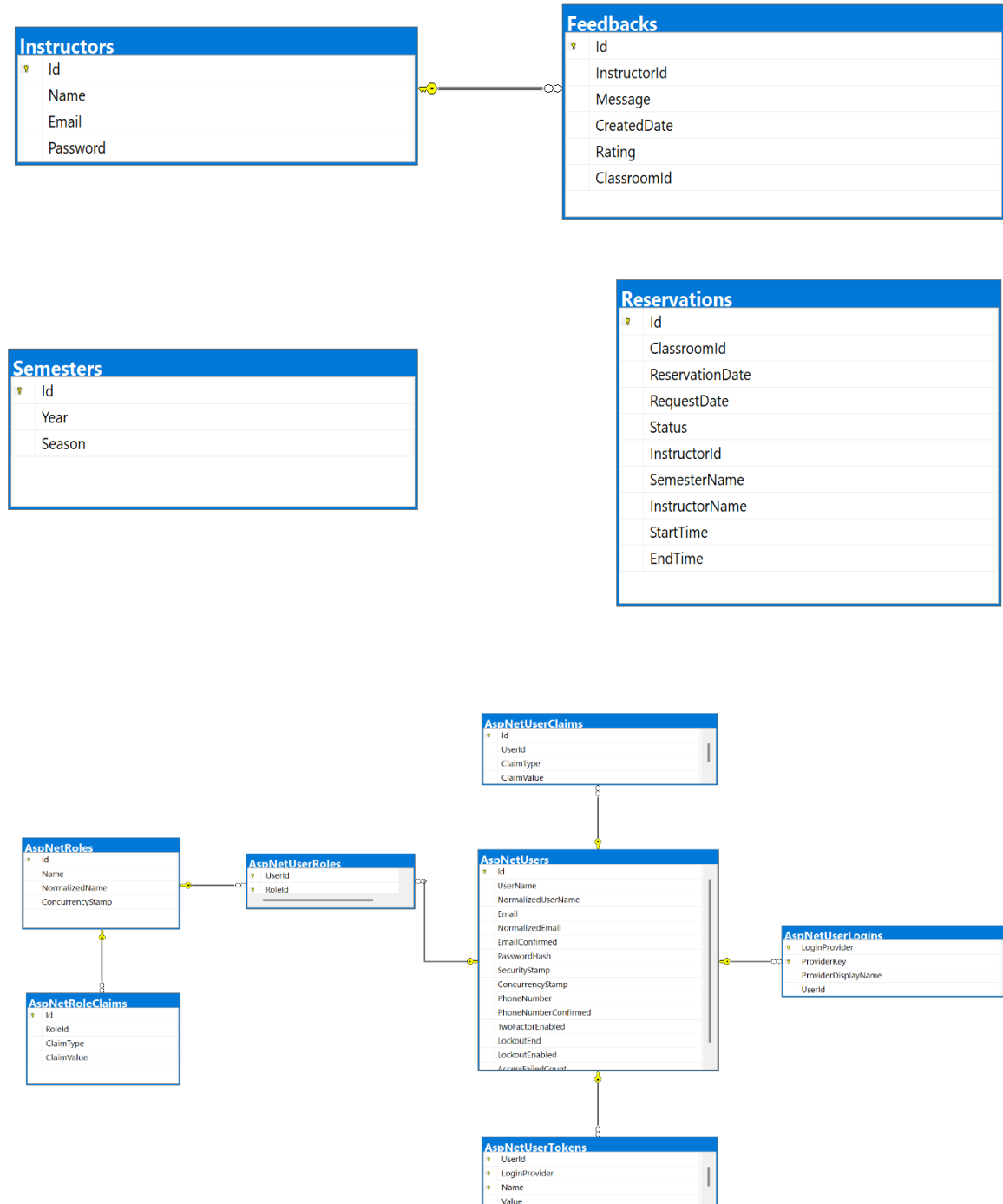


Figure 1. Database diagram

b. Context Diagram:

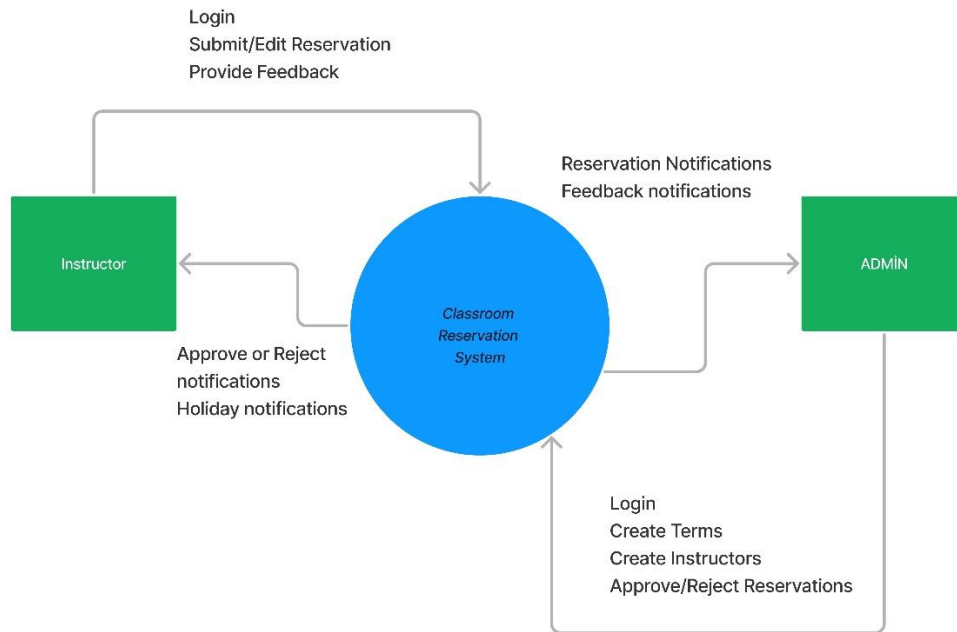


Figure 2. Context Diagram

c. Workflow Diagrams

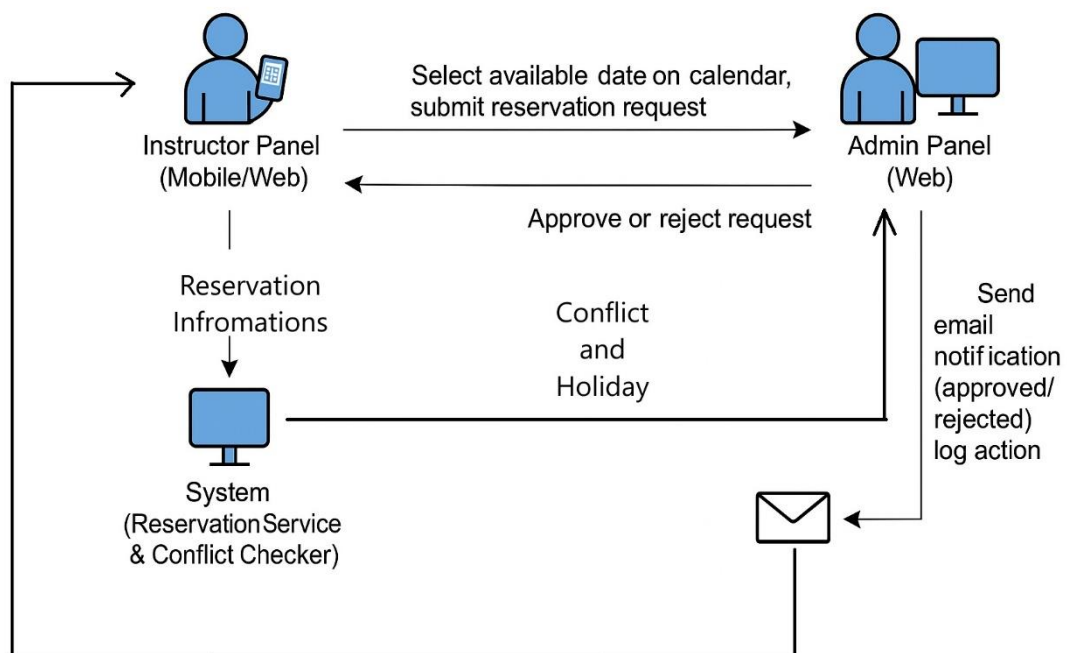



Figure 3: Workflow Diagram

3. Project Results (Screenshots and their explanations)

a. Login page:

ClassroomReservation 

Instructor Login

Admin Login

Instructor Login


Email

Password

Login

Figure 4: Login Page screenshot

b. Admin Panel:

ClassroomReservation  Logout

Admin Panel

Add Academic Term

Year

Select Year

Season

Select Season

Add Term

Add Instructor

Name

Email

Password

Add Instructor

Classrooms And Feedbacks

Instructors

Id	Name	Email	Actions
4	Gökay	gokaycetin10@gmail.com	<div>EditDelete Instructor</div>
5	ayse	ayse@gmail.com	<div>EditDelete Instructor</div>

Reservation Requests

Figure 5: Admin Panel screenshot

Reservation Requests

Classroom	Semester Name	Instructor Name	Instructor ID	Request Date	Reservation Date	Start Time	End Time	Status	Actions
C	2025 - Spring	ayse	5	15.05.2025	22.05.2025	07:11	09:11	Rejected	Approve Rejected
E	2026 - Fall	ayse	5	15.05.2025	23.10.2026	07:56	12:33	Approved	Approved Reject
B	2025 - Spring	Gökay	4	15.05.2025	21.05.2025	09:45	11:41	Pending	Approve Reject
C	2025 - Spring	Gökay	4	15.05.2025	21.05.2025	12:40	13:56	Pending	Cannot Approve Reject
Time conflict detected! This reservation overlaps with another reservation in the same classroom during the same semester.									
A	2025 - Spring	Gökay	4	15.05.2025	19.05.2025	10:02	12:57	Pending	Approve Reject
Warning: This reservation falls on a public holiday in Turkey!									
D	2025 - Spring	Gökay	4	15.05.2025	28.05.2025	13:59	15:58	Approved	Approved Reject
C	2025 - Spring	ayse	5	16.05.2025	21.05.2025	13:20	15:00	Pending	Cannot Approve Reject
Time conflict detected! This reservation overlaps with another reservation in the same classroom during the same semester.									

Figure 6: Admin Panel screenshot

Time conflict detected! This reservation overlaps with another reservation in the same classroom during the same semester.									
A	2025 - Spring	Gökay	4	15.05.2025	19.05.2025	10:02	12:57	Pending	Approve Reject
Warning: This reservation falls on a public holiday in Turkey!									
D	2025 - Spring	Gökay	4	15.05.2025	28.05.2025	13:59	15:58	Approved	Approved Reject
C	2025 - Spring	ayse	5	16.05.2025	21.05.2025	13:20	15:00	Pending	Cannot Approve Reject
Time conflict detected! This reservation overlaps with another reservation in the same classroom during the same semester.									

Academic Terms

Year	Season	Actions
2025	Spring	Edit Delete Semester
2026	Fall	Edit Delete Semester

Figure 7: Admin Panel screenshot

c. Admin Panel -Feedback and Classroom page:

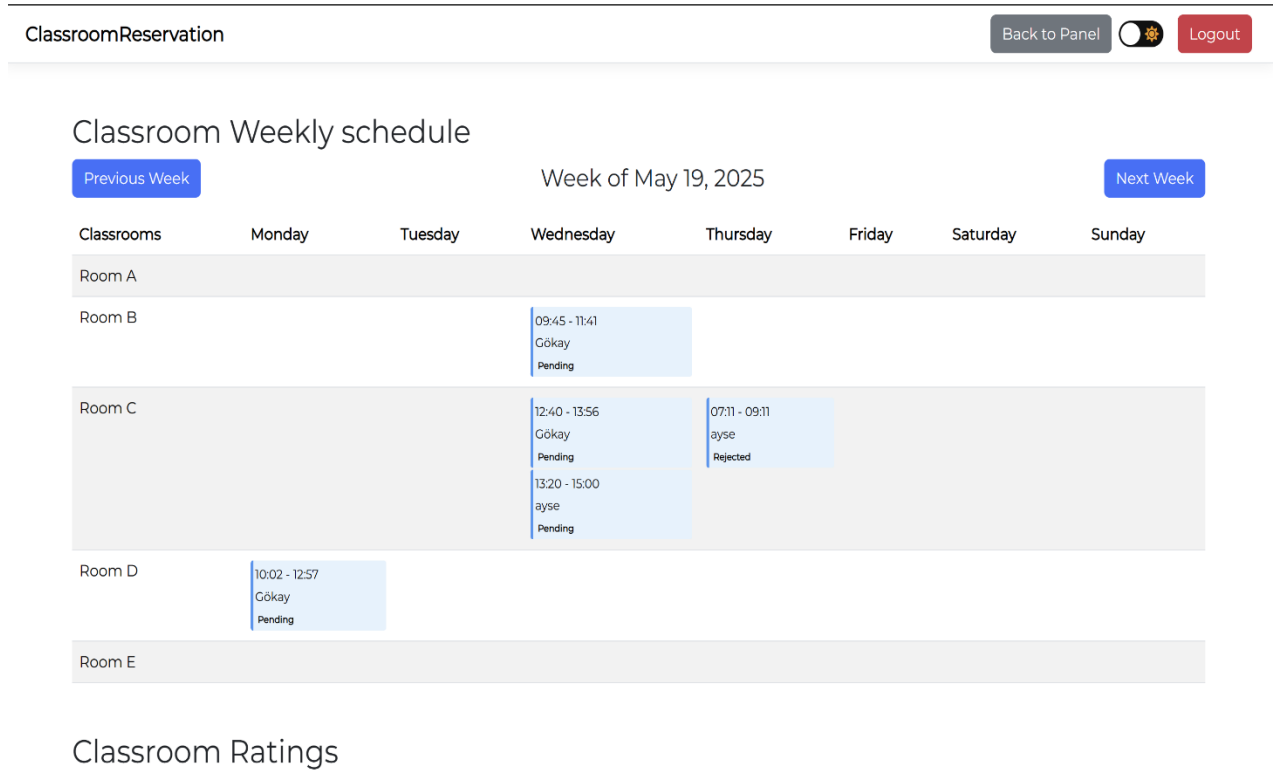


Figure 8: *Weekly schedule* screenshot

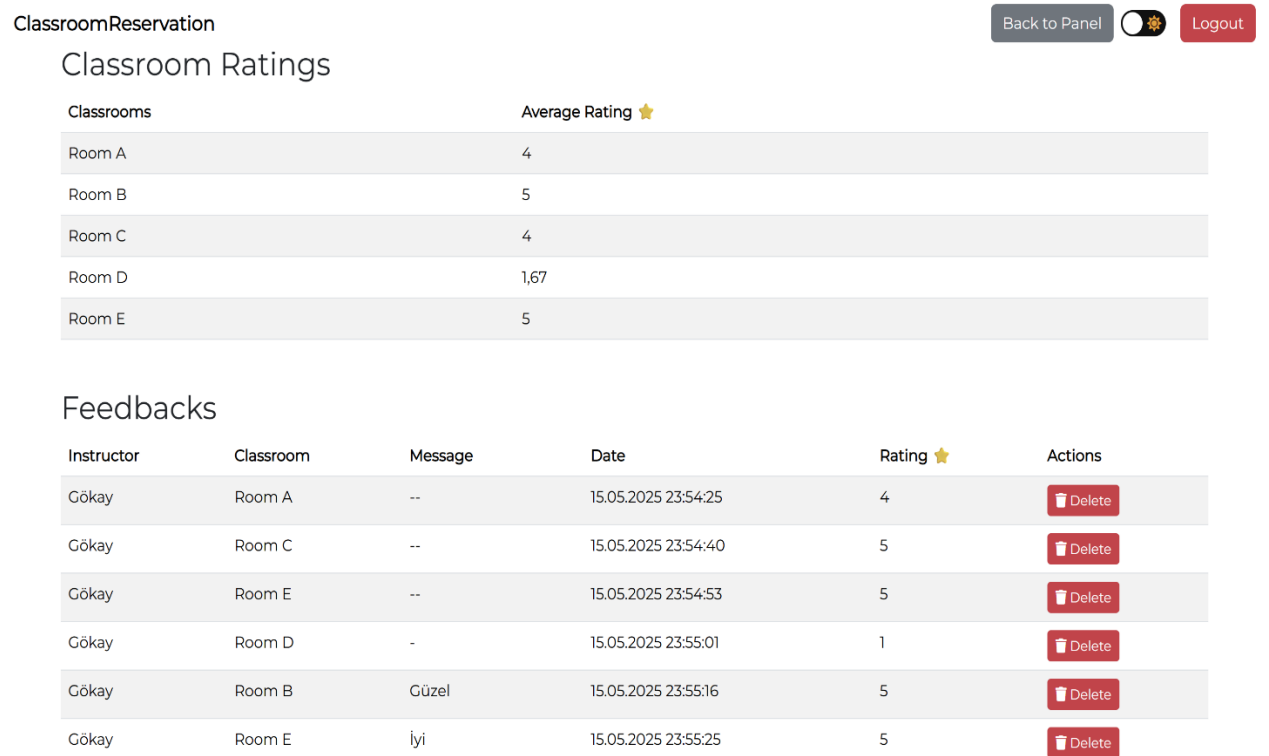


Figure 9: *Classroom Rating and Feedbacks* screenshot

d. Instructor Panel:

ClassroomReservation

Submit Reservation Request

Semester

Select Semester

ClassroomId

Room A

Date

gg.aa.yyyy

StartTime

--:--

EndTime

--:--

Submit

Contact Us

Classroom

Select a classroom

Message

Rating

★★★★★

Submit Feedback

My Reservations

Classroom	Date	Time	Status	Semester
Room D	28.05.2025	13:59 - 15:58	Approved	2025 - Spring
Room A	19.05.2025	10:02 - 12:57	Pending	2025 - Spring
Room C	21.05.2025	12:40 - 13:56	Pending	2025 - Spring

Figure 10: *Instructor Panel* screenshot

ClassroomReservation

< > today

May 2025

month week

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24

● 10:02a - 12:57 Room: A

● 9:45a - 11:41 Room: B
● 12:40p - 13:56 Room: C
● 1:20p - 15:00 Room: C

● 7:11a - 09:11 Room: C

Figure 11: *Instructor Panel* screenshot

7

e. Dark-Mode:

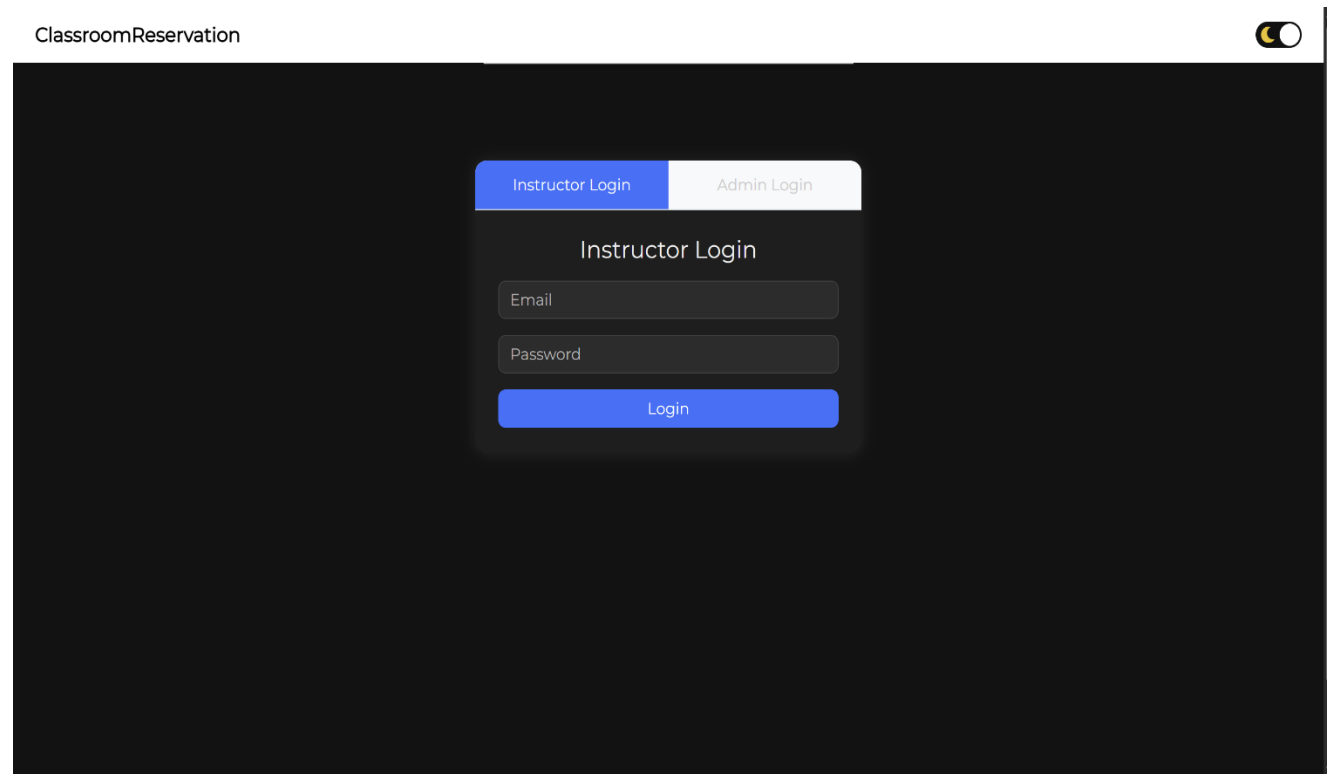


Figure 12: Login Dark Mode screenshot

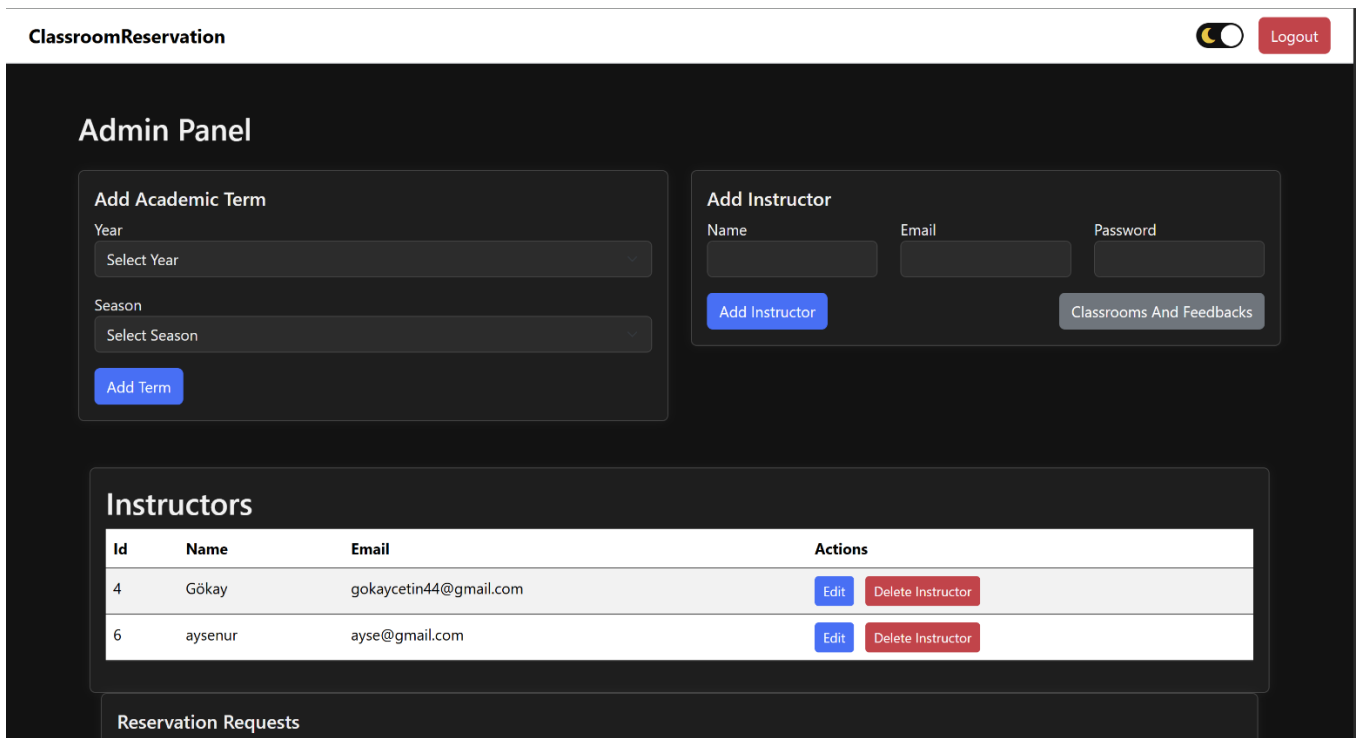


Figure 13: Admin Panel Dark Mode screenshot

ClassroomReservation

Logout

Submit Reservation Request

Semester
Select Semester

ClassroomId
Room A

Date
gg.aa.yyyy

StartTime
--:--

EndTime
--:--

Submit

Contact Us

Classroom
Select a classroom

Message

Rating
★★★★★

Submit Feedback

My Reservations

Classroom	Date	Time	Status	Semester
Room C	25.05.2025	03:52 - 04:53	Pending	2025 - Spring
Room B	19.05.2025	19:46 - 20:47	Pending	2025 - Spring
Room C	20.05.2025	10:00 - 12:15	Pending	2025 - Spring

Figure 14: Instructor Panel Dark Mode screenshot

Herhangi bir zaman
Eki olan
Kime
Okunmamış
Gelişmiş arama

En alakalı 8 satırdan 1-8 arası

<input type="checkbox"/>	☆	ben	Gelen Kutusu	New Feedback Submitted - A new feedback has been submitted by Gökay for Room B. Message: m...	02:52
<input type="checkbox"/>	☆	ben	Gelen Kutusu	New Reservation Request - A new reservation request has been submitted by Gökay for Room C on...	02:51
<input type="checkbox"/>	☆	ben 6		Reservation on Holiday - Your reservation for classroom B on 19.05.2025 falls on an official holiday.	02:49
<input type="checkbox"/>	☆	ben	Gelen Kutusu	New Reservation Request - A new reservation request has been submitted by Gökay for Room B ...	02:44
<input type="checkbox"/>	☆	ben		Reservation Rejected - Your reservation for classroom C on 19.05.2025 from 10:40:00 to 11:40:00 has been rejec...	02:44
<input type="checkbox"/>	☆	ben	Gelen Kutusu	New Feedback Submitted - A new feedback has been submitted by Gökay for Room B. Message: ...	02:38
<input type="checkbox"/>	☆	ben	Gelen Kutusu	New Reservation Request - A new reservation request has been submitted by Gökay for Room C on...	02:37

New Feedback Submitted

Gelen Kutusu x

G

gokaycetin10@gmail.com

Alıcı: ben

02:52 (15 dakika önce)

☆

😊

↩

⋮

A new feedback has been submitted by Gökay for Room B. Message: message.

↩ Yanıtla

➡ Yönlendir

😊

Figure 15: Admin Mail screenshot

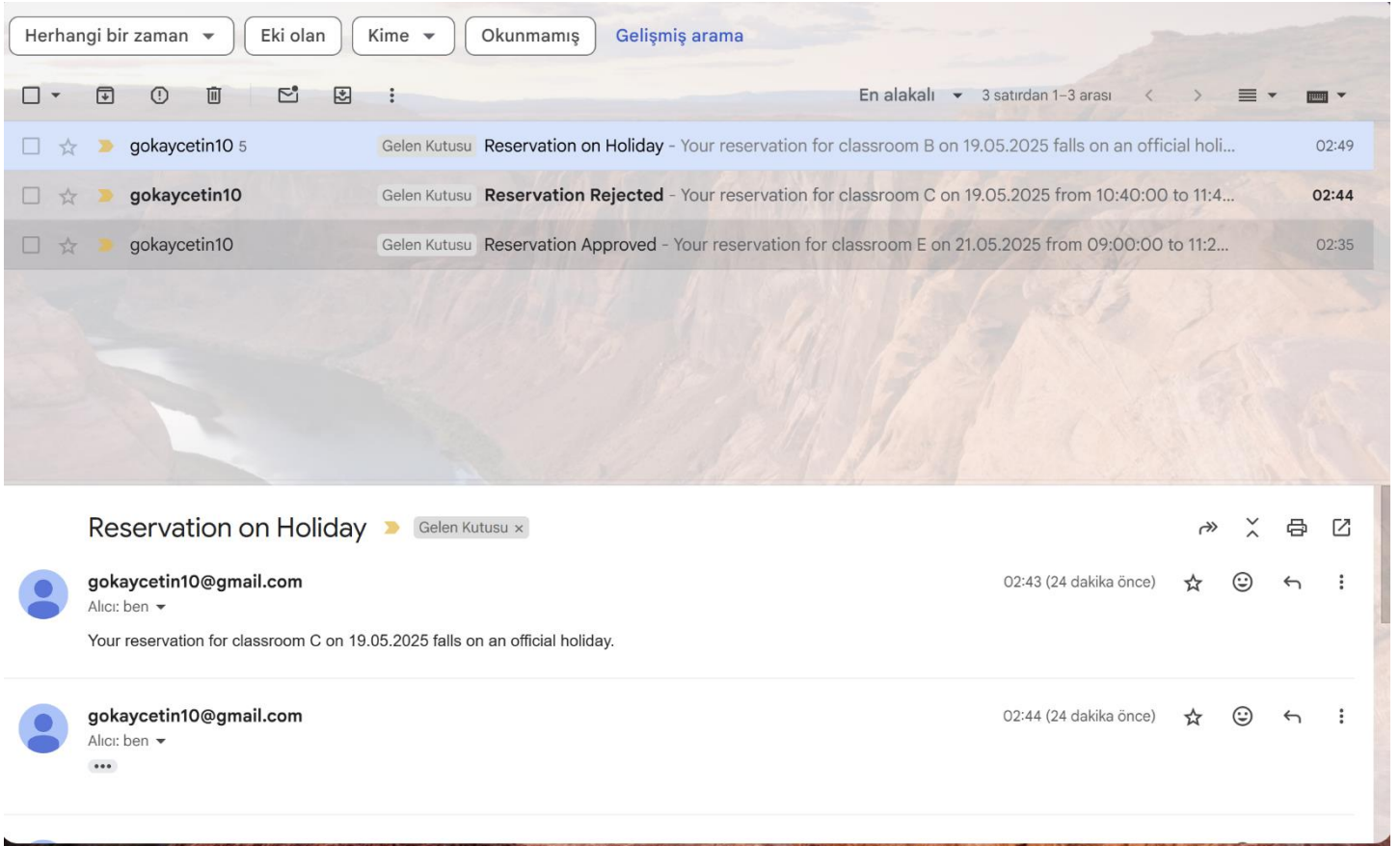


Figure 16: Instructor Mail screenshot

4.Demo Video

<https://www.youtube.com/watch?v=EILZPPQVvg8>