BBM473 Project - Group 2 Course Enrollment System Phase 4 Report

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Introduction

In this phase of our project, we developed a fully-functioning web application for our course registration system. We used PHP for the backend side and MYSQL as our database. We wrote various SQL queries and functions. We also used views, stored procedures and triggers we implemented earlier.

Our Web Application

1. Login Pages

You can access our website from the IP "167.71.66.201".

- Student/Instructor Login Page: http://167.71.66.201/dbms/login.php
- Admin Login Page: http://167.71.66.201/dbms/admin/login.php

The credentials we use for this demo are:

- Student: username -> "981", password -> "Okan123"
- Instructor: username -> "591", password -> "KaanMersin123"
- Admin: username -> "1", password -> "Meric123"

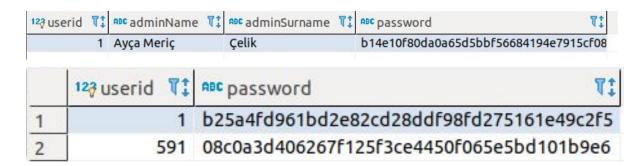
In the student/instructor login page, the user should select his/her role in order to log in successfully.

When a user enters the wrong credentials, the system gives the proper warning and log-in is not succeeded.



2. Encryptions

All passwords are stored in the database in an encrypted format. In the below, you can see admin, instructor and student credentials accordingly.



	123 userid 📆	password T:
1	981 🗗	fb942bdb0f2da6d19a74b83e7bcd852ec7804f22
2	982 ☑	7f4f90a94085467927e0ea3732799ed467aa11ad
3	983 ₺	b25a4fd961bd2e82cd28ddf98fd275161e49c2f5
4	985 ☑	2f6f4d89e3c350f724282f942b80225b2c41d8df
5	994 🗹	dc0a6965e68601a12e5e3ce74daac74651d46cba
6	1,003 🗗	8e237ee76378600152deff71e4ba44be51952f98
7	1,005 🗗	e174fefcbd465da67f47304c336aaa59c47aad45
8	1,006 🗹	dc0337060626a60ea88d21c1a4de2ee0629d0cca
9	1,007 🗗	a4d1ef2b0cb2b9c4224d72d9b134641597500b16
10	1,008 🗹	8446a708d7b7ca63a59cac4e62071ef3961ad7a8

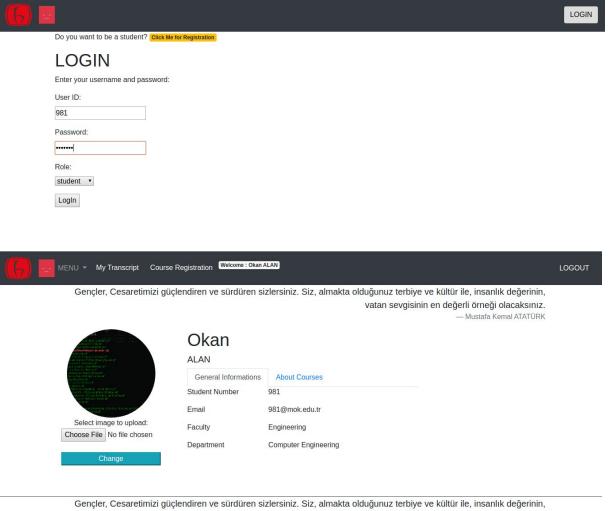
3. User Scenarios - Student

3.1. Student Log-in

Students can log-in by selecting a role as "student" and giving their correct credentials. After login, they are directed to their main page, where they can see their personal and academic records.

In this window, a student can:

- See his/her name, student number, e-mail, faculty, and department,
- See his/her collected credits, collected grades, GPA, transcript, and advisor,
- See his/her profile photo,
- Change his/her profile photo by uploading a new one from his/her computer.



Gençler, Cesaretimizi güçlendiren ve sürdüren sizlersiniz. Siz, almakta olduğunuz terbiye ve kültür ile, insanlık değerinin, vatan sevgisinin en değerli örneği olacaksınız. — Mustata Kemal ATATÜRK

Okan

ALAN

General Informations About Courses

Collected Credits 120

Collected Grade 401

Select image to upload: GPA 3.34

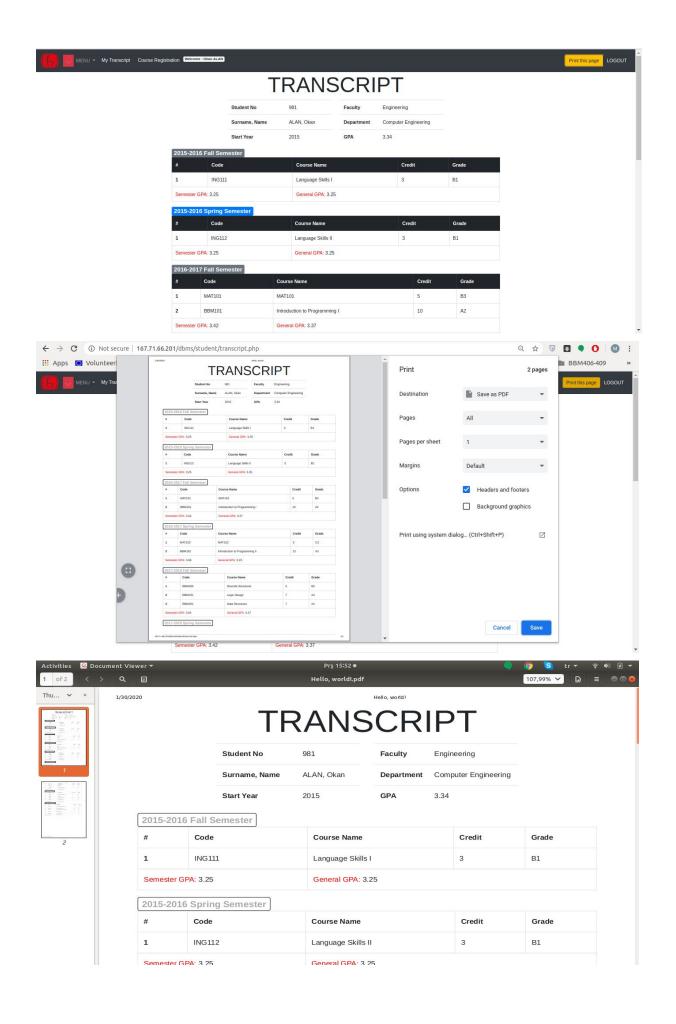
Transcript Click Me To Look Transcript

Change Advisor Kaan Mersin

3.2. Student Transcript

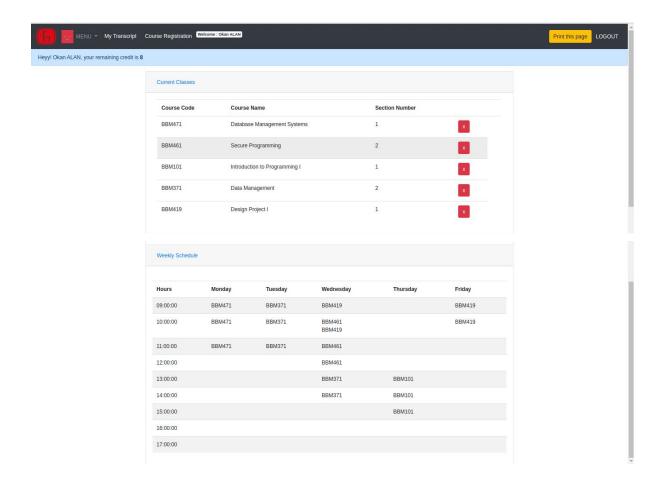
Students can view their transcripts by clicking the yellow-highlighted area. This transcript contains all the courses the student took until now, how these are graded, term GPA and overall GPA.

Students can also save their transcripts in the PDF format by clicking the "Print This Page" button in the upper-right corner.



3.3. Student's Current Courses/Schedule

A student can view the courses in his/her basket and the current weekly schedule by following the path "Menu -> My Classes". In this window, the student can see his/her remaining credit as well.



3.4. Course Registration Dashboard

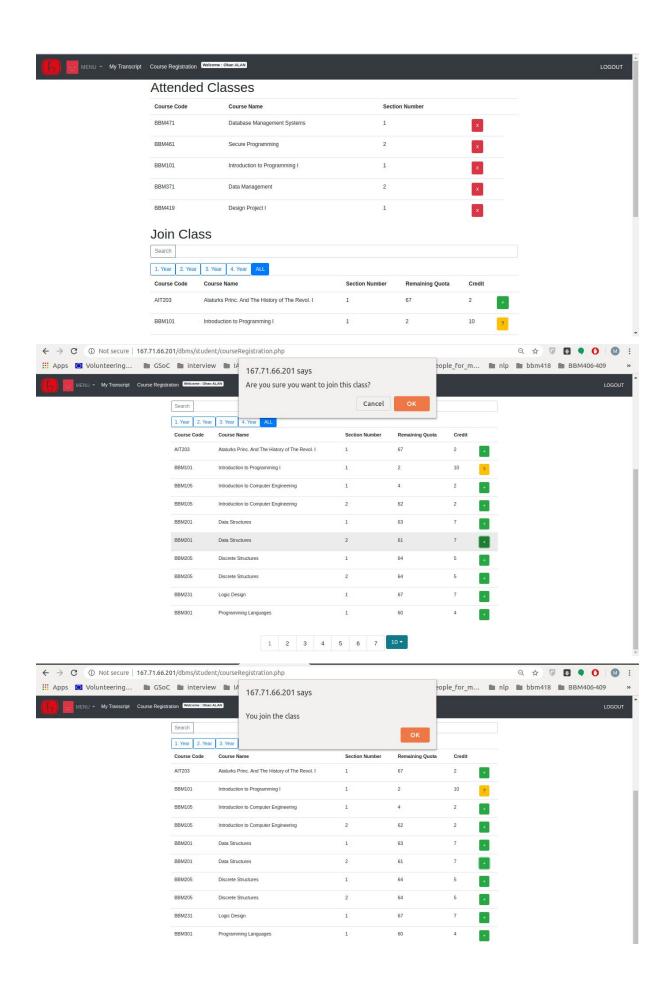
Students can access the course registration dashboard by clicking "Course Registration" button on the top bar. In this view, a student can see the courses in his/her basket, enroll in a new class, dropping a class from his basket, and change the sections of classes he/she enrolled.

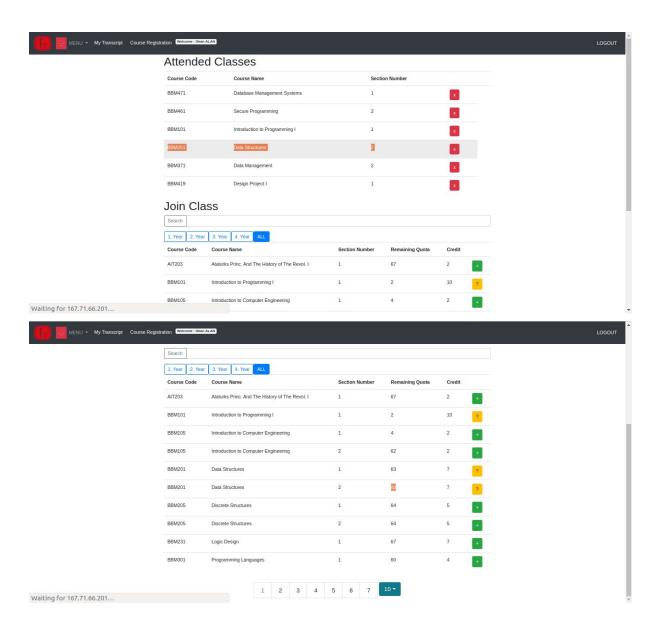
3.5. Enrolling To A Class

To enroll in a class, these requirements should be satisfied:

- The guota of a class should not be exceeded,
- The student should have enough credit left.
- The student should have taken **prerequisite courses** first.

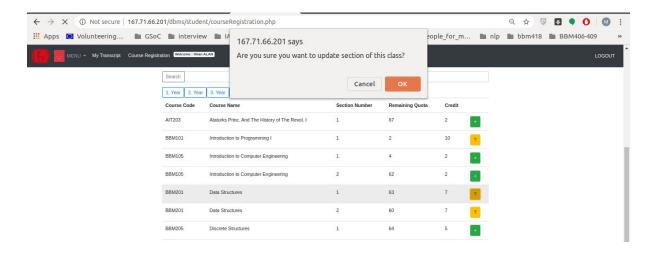
After selecting the course, a confirmation box appears. If the requirements are met, the student enrolls in the course successfully.

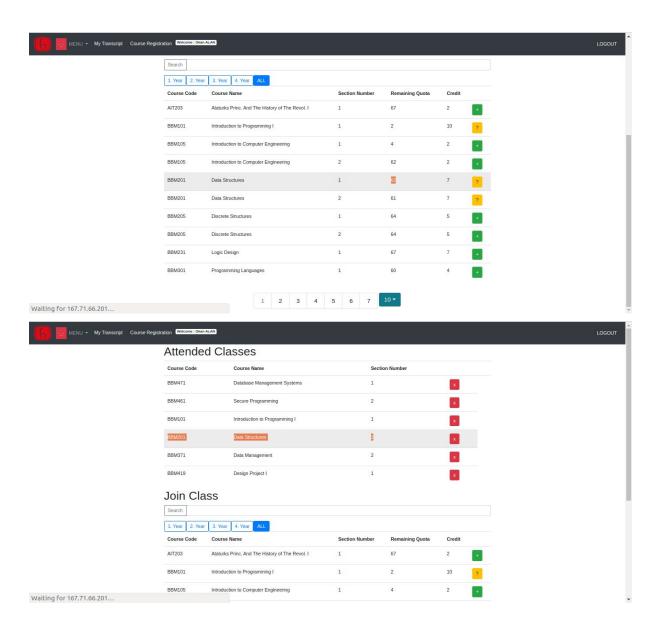




3.6. Changing A Section

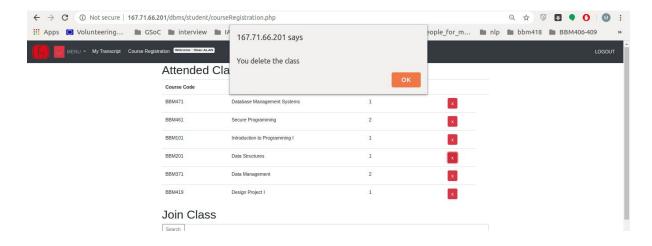
A student can change the section the course he/she enrolled by clicking the yellow "?" symbol near the section he/she wants to switch.

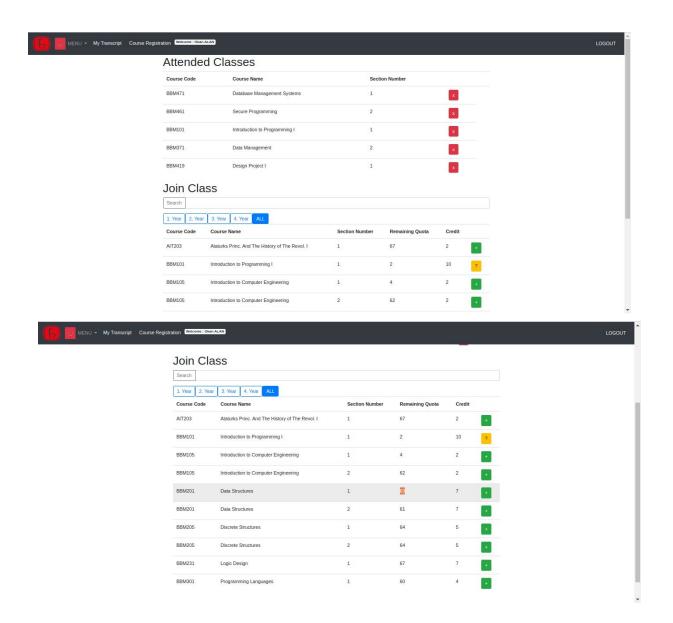




3.7. Dropping A Class

A student can drop a course from his/her basket. After confirming the selection, the success box will appear.

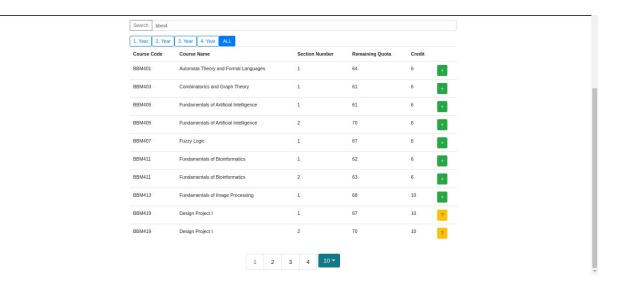




3.8 Search For a Class

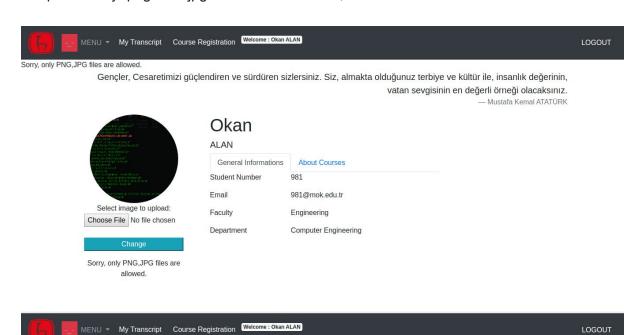
A student can search a class among all classes of his/her department by entering a full string or a substring.





3.9 Changing Profile Picture

A student can change his/her profile picture by uploading a new one from his/her computer. Only .png and .jpg formats are allowed, an alert is thrown otherwise.



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— Mustafa Kemal ATATÜRK



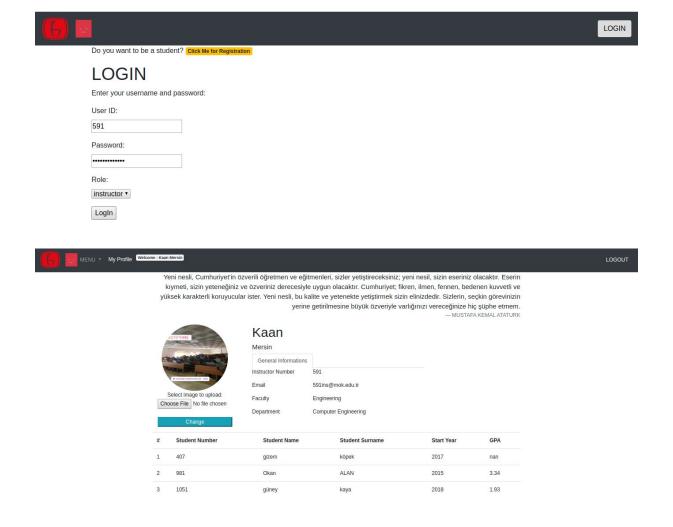
4. User Scenarios - Instructor

4.1. Instructor Log-in

Instructors can log-in by selecting role as "instructor" and giving their correct credentials. After log-in, they are directed to their main page, where they can see their personal records.

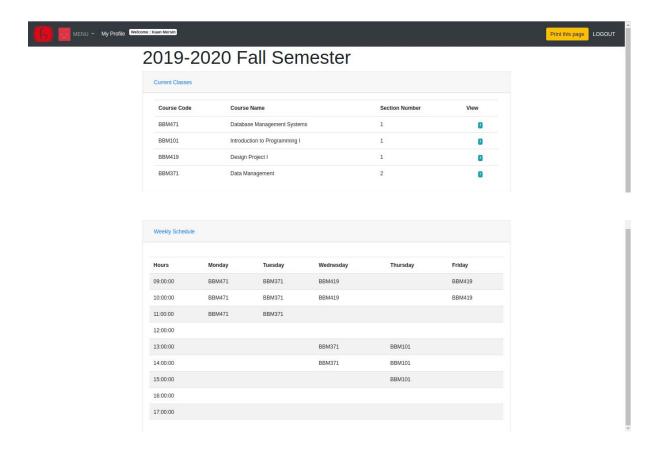
In this window, an instructor can:

- See his/her name, instructor number, faculty and department,
- See the students he/she supervises,
- See his/her profile photo,
- Change his/her profile photo by uploading a new one from his/her computer.

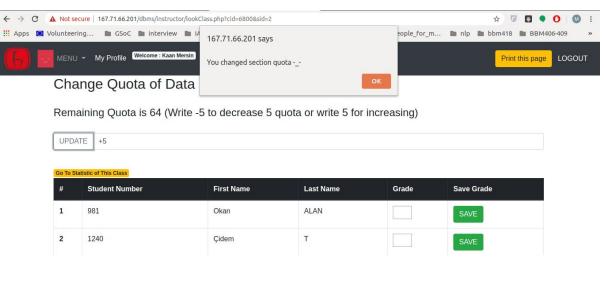


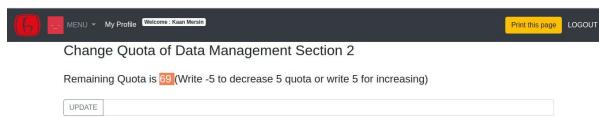
4.2. Instructor's Courses - This Term

Instructors can access this window by following the path "Menu -> My This Semester Class". In this window, an instructor can see the courses & sections he/she opened for this term, and his/her weekly schedule.

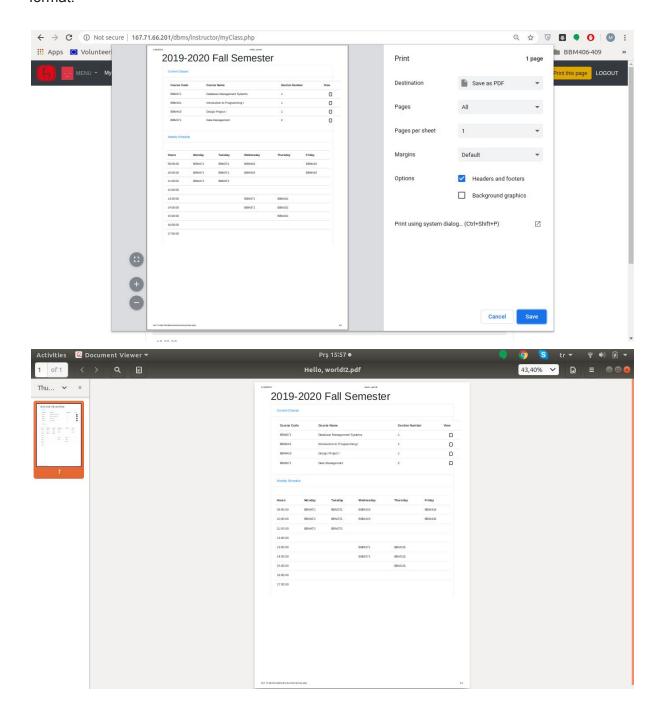


He/she can also update a course quota, and give grades to the students who took this course by clicking the icon next to the course name.



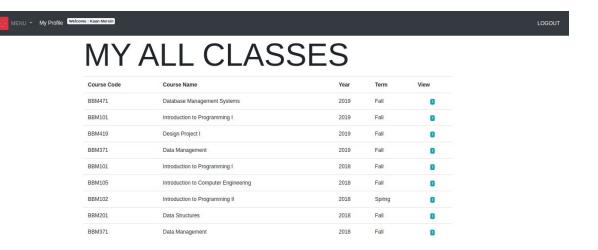


The instructor can also save this semester's information to his/her computer in a PDF format.



4.3. Instructor's Courses - All Time

Instructors can access this window by following the path "Menu -> My All Classes". In this window, an instructor can see all courses & sections he/she opened before.



The instructor can also see the statistics about this course by clicking the icon near class name.

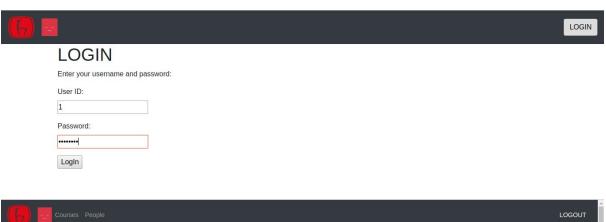


5. User Scenarios - Admin

5.1. Admin Login

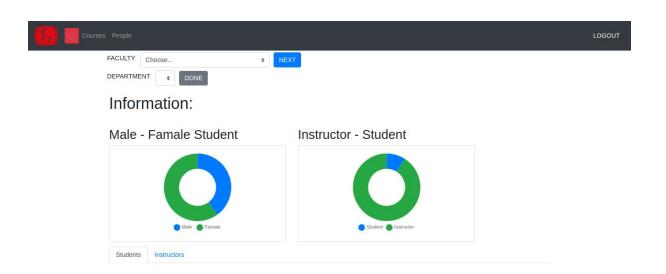
Admins can log-in to the system from different link. After logging in, statistical dashboard appears. In this window, the admin can:

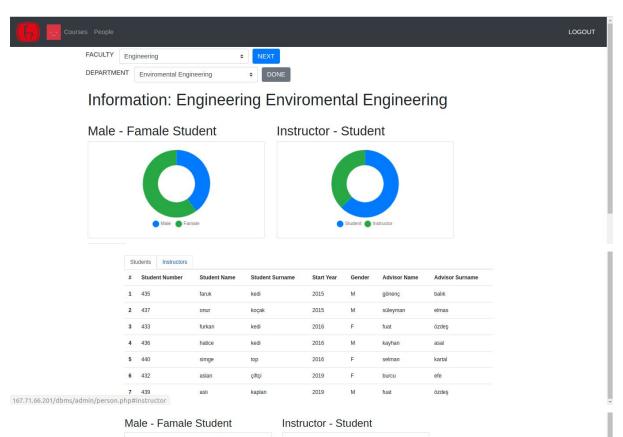
- See the take-drop statistics by department,
- See the take-drop statistics by faculty,
- See the take-drop statistics by course.





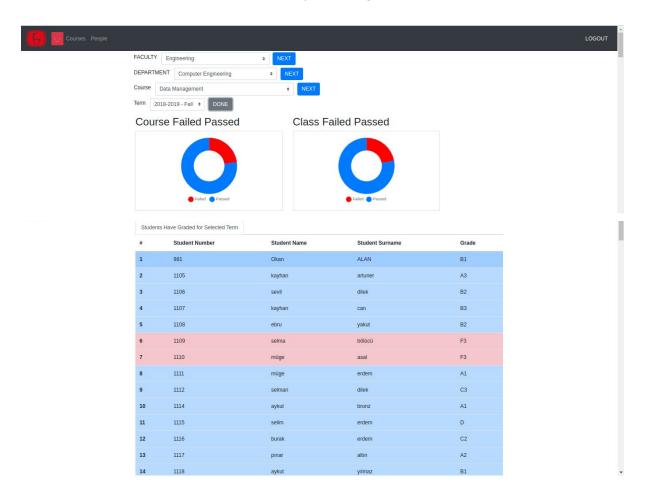
Admins can also see the overall people statistics and filter them by faculties and departments.



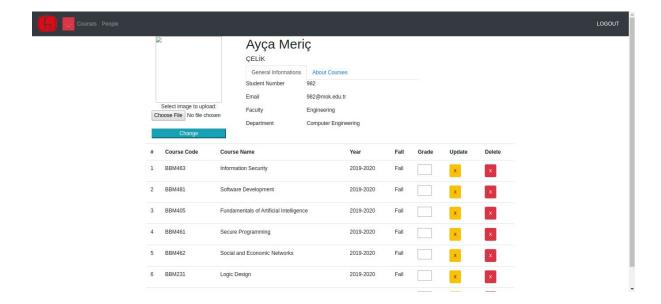




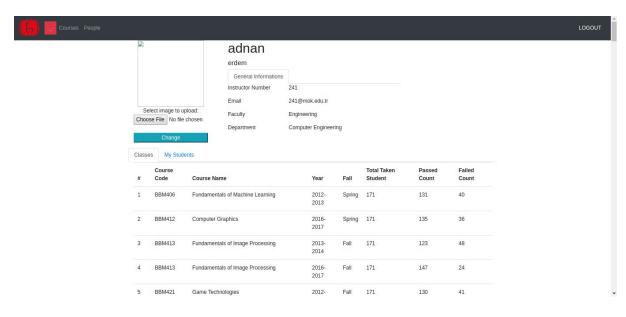
Admins can also see statistics of a course by selecting faculties and departments.

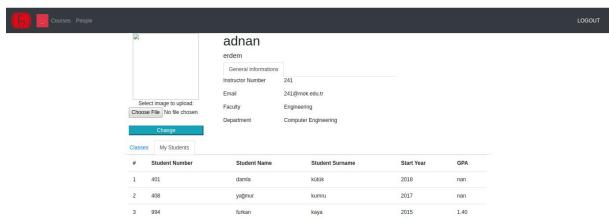


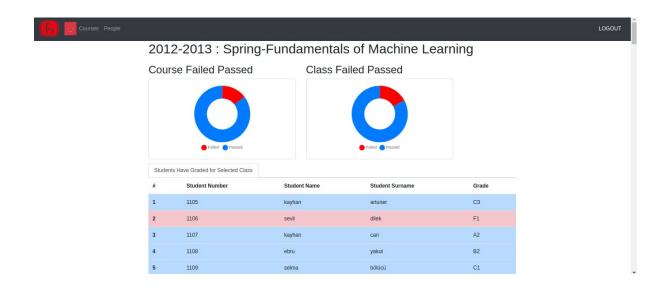
Additionally, admins can select a student and see his/her information. In this panel, they can change their grades, delete students and update their information.



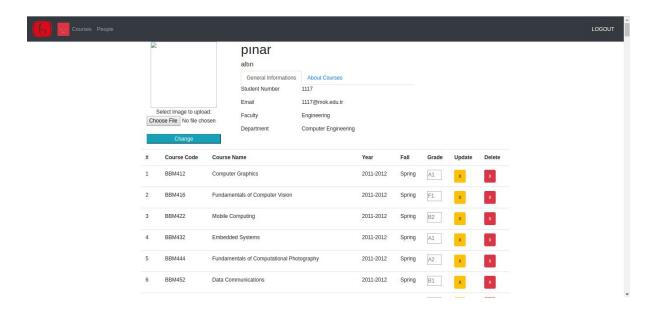
Admins can also select an instructor and see his/her information and current students. In this panel, they can investigate their course statistics by clicking corresponding class.







Finally, admins can see the information of graduated students.



6. Log-out

All users can log-out from the system by clicking the "Log-out" button in the upperright corner. This will redirect them to the login page.

7. SQL Injections



8. Feature Summary

8.1. Encryption

All passwords are encrypted as we mentioned earlier.

8.2. Login screen

We have different login screens for admins and students/instructors.

8.3. Different user login

The users are redirected to different dashboards depending on their roles.

8.4. Picture upload path

Students and instructors can upload pictures and use them as their profile photos. Some requirements are:

- The photo should be in .png or .jpg format,
- The photo size should not exceed 5 MB.

8.5. Data input screen

We have different data input screens; such as instructor's increase quota/assign grade view.

8.6. Listing screen

We have a lot of listing screens; such as transcript page, registration dashboard, instructor's views, etc.

8.7. Reporting

We have PDF reporting for instructors (print this semester's information) and students (print transcript).

8.8. Filtering

We have different filtering functionalities in different views; such as student registration (search course), admin panel (get statistics by faculty and department), etc.

We also have a pagination feature in the course registration page.

8.9. Statistics data

Admins can see overall statistics when instructors can see the statistics on the courses they give.

8.10. Consistent data

All the changes we made in the system changes the database accordingly. All the changes are consistent.

8.11. Dashboard

We have different dashboards for students, instructors, and admins.

8.12. Indexing

Apart from primary keys, CourseName and CourseCode are indexed, because we make a search with these fields a lot.