



**FATİH
SULTAN
MEHMET**
VAKIF ÜNİVERSİTESİ

COMPUTER PROGRAMMING 2 TERM PROJECT

STUDENT NAME	HAMZA ALAHMEDI
STUDENT NUMBER	2021221358
COURSE NAME	COMPUTER PROGRAMMING 2
TUTOR	Dr.Öğr. Üyesi SHAABAN A.I.SAHMOUD Arş. Gör. Tuğçe GÖKSU
PROJECT TITLE	
DATE	02.01.2023

İçindekiler

1- Özet	1
2- Proje Konusu.....	1
3- Proje İş Akış Şeması	2
4- Proje Tasarım.....	2
5- Proje Çıktıları ve Başarı Ölçütleri	8
6- Proje Süresince Yapılanlar	9
7- Ek Açıklamalar	9
8- Kaynakça.....	9



T.C.
FATİH
SULTAN
MEHMET
VAKIF ÜNİVERSİTESİ
2010

1- Özet

By using java swing and SQL database I create this (Experiment Tracking System), which contain two different types of users.

The first user is (STUDENT) the student can create a new account by entering its information's, then he can login by its id and password.

Student profile contain 4 different fields

- 1- Student profile: here the student can see his information and add a picture to his profile
- 2- My experiments: in this field the students can see the experiments that he did before (and the feedback form the teacher if the teacher has sent a feedback).
- 3- View other Experiment: in the field the student can search about any experiment he wants to do and see the equipment to be used.
- 4- Add a new experiment: here the student can add a new experiment and send it with his conclusion and comments.

The second user is the TEACHER:

The Teacher main frame also contain many different fields:

- 1- Search about Student: the teacher can search about any student and see their information
- 2- View students' experiments: the teacher can search by student id and see the experiments that have been sent from the student.
- 3- See details: the Teacher can see student's information in detail, like the comment.
- 4- Give Feedback: the teacher can write a feedback and Grade student's experiments and send them.

After that when the student enters his experiments, he can see the feedback and grade.

2- Proje Konusu

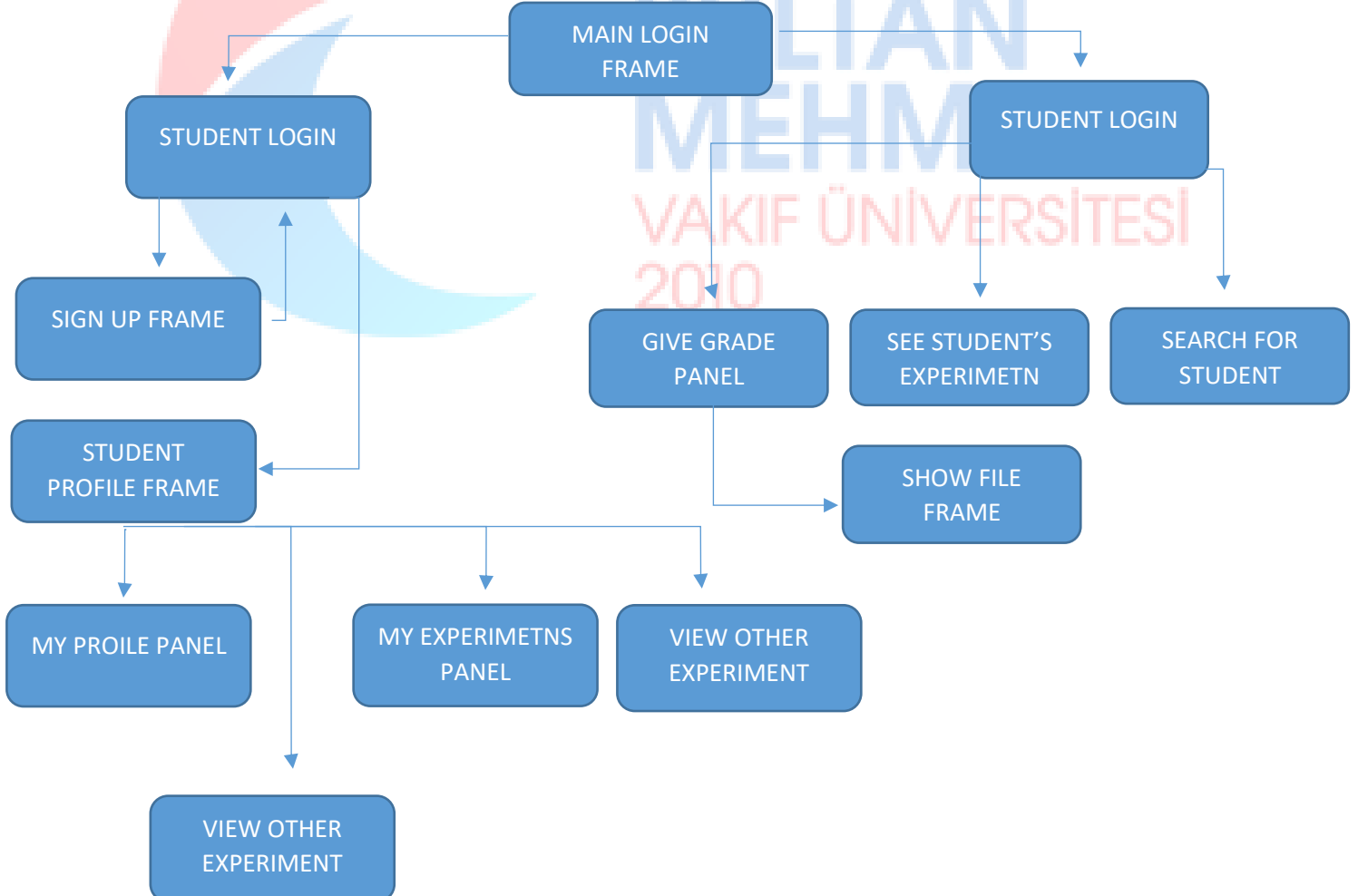
Deney Takip Sistemi

FAHİR
SULTAN
MEHMET
VAKIF ÜNİVERSİTESİ
2010

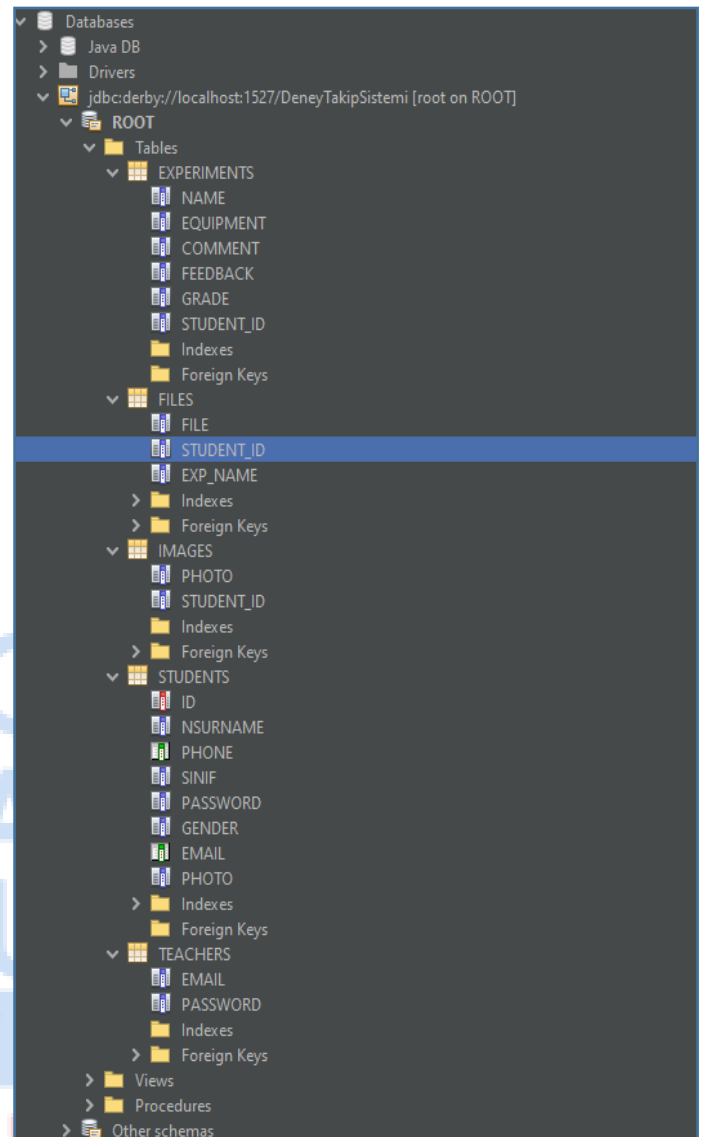
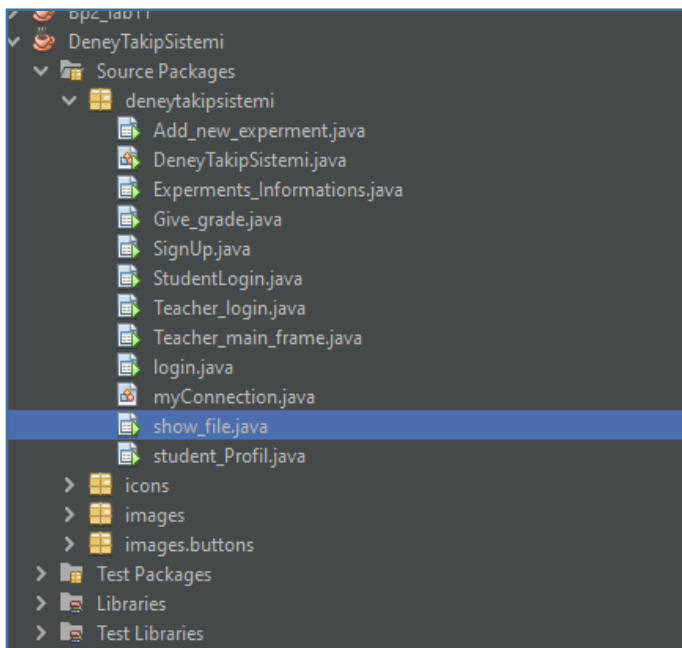
3- Proje İş Akış Şeması

İşin Tanımı	ARALIK							OCAK
	1-10	10-15	15-17	17-22	22-25	25-27	27-31	01
1. Literatür ve Örnek Taraması								
2 Design database and table								
3 design the GUI								
4 writing code and functions								
Testing and handling exceptions								
Final testing and adding the last touch								
6. Raporu hazırlama								

4- Proje Tasarım



DATABASE TABLES:



FILES TABLE

SELECT * FROM ROOT.FILES ... X

Max. rows: 100 | Fetched Rows: 3

#	FILE	STUDENT_ID	EXP_NAME
1	<BLOB 154 kB>	2030405060	SIMPLE PENDULUM
2	<BLOB 240 kB>	1234	ATWOOD MACHINE
3	<BLOB 240 kB>	2007010600	FREE FALL

EXPERIMENTS TABLE

SELECT * FROM ROOT.EXPERI... X

Max. rows: 100 | Fetched Rows: 6

#	NAME	EQUIPMENT	COMMENT	FEEDBACK	GRADE	STUDENT_ID
1	FRICTIONAL FORCE	Solid body, Metal road, Meter, Stopwatch.	<NULL>	<NULL>		
2	ATWOOD MACHINE	Pulley system, Hanger, Rope, Various object...	<NULL>	<NULL>		
3	FREE FALL	Meter, Stopwatch, Plastic ball.	<NULL>	<NULL>		
4	LENGTH MEASUREMENTS	Vernier caliper, Micrometer, Cylinders of vari...	<NULL>	<NULL>		
5	SIMPLE PENDULUM	Rope, Solid body with known mass, Stopwat...	<NULL>	<NULL>		
6	FREE FALL	<NULL>	IT WAS VERY FUN I REALLY ENJOY IT.	your are so smart	88	2007010600

IMAGES TABLE

SELECT * FROM ROOT.IMAGES... X

Max. rows: 100 | Fetched Rows: 3

#	PHOTO	STUDENT_ID
1	<BLOB 240 kB>	1234
2	<BLOB 240 kB>	2030405060
3	<BLOB 240 kB>	2007010600

TEACHERS TABLE

SELECT * FROM ROOT.TEACHE... X

Max. rows: 100 | Fetched Rows: 2

#	EMAIL	PASSWORD
1	teacher.test@gmail.com	12345
2	test	1111

STUDENTS TABLE

SELECT * FROM ROOT.STUDEN... X

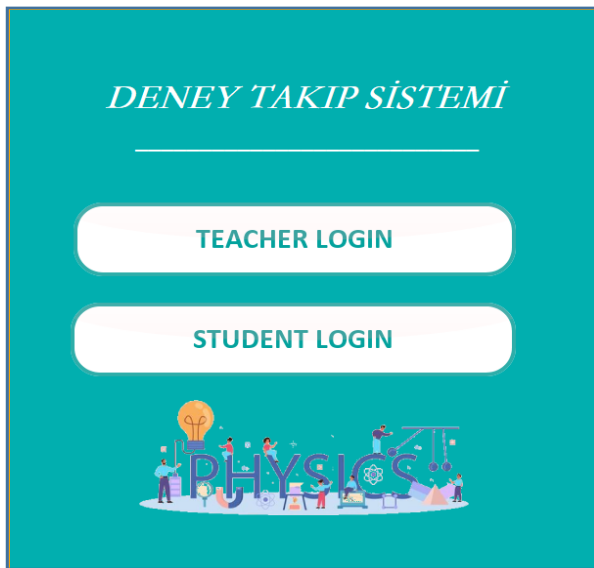
jdbc:derby://localhost:1527/DeneyTakipSistemi [root on ROOT]

			PHONE	SINIF	PASSWORD	GENDER	EMAIL	PHOTO
1	SELECT * FROM ROOT.STUDENTS FETCH FIRST 100 ROWS ONLY		055-2345754	THEIRD	12345	Male	hassan123@gmail.com	<NULL>
2	1234	test	1111	2	1234	male	test@gmail.com	<NULL>
3	2030405060	hamza ahmedi	055-2223334	SECOND	123456	Male	hamza123@gmail.com	<NULL>

2010

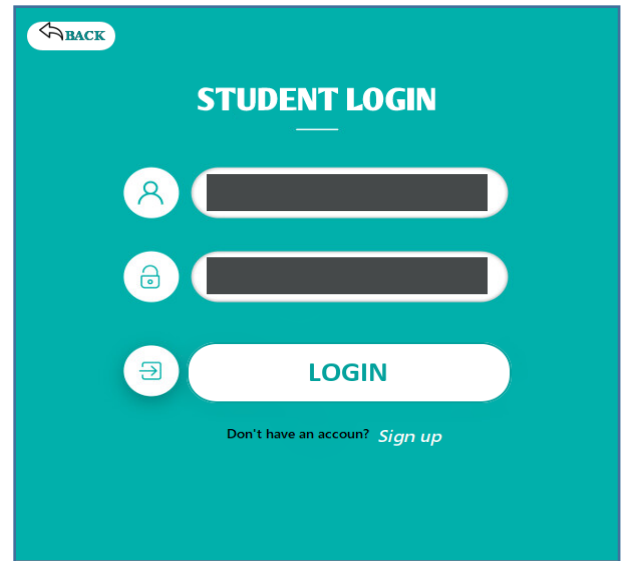
GUI DESIGN

MAIN FRAME



The main frame has a teal background. At the top, the text "DENEY TAKIP SİSTEMİ" is written in a white, italicized serif font, underlined. Below it are two white, rounded rectangular buttons with teal text: "TEACHER LOGIN" and "STUDENT LOGIN". At the bottom, there is a colorful illustration of students in a physics lab, with the word "PHYSICS" in large, stylized letters.

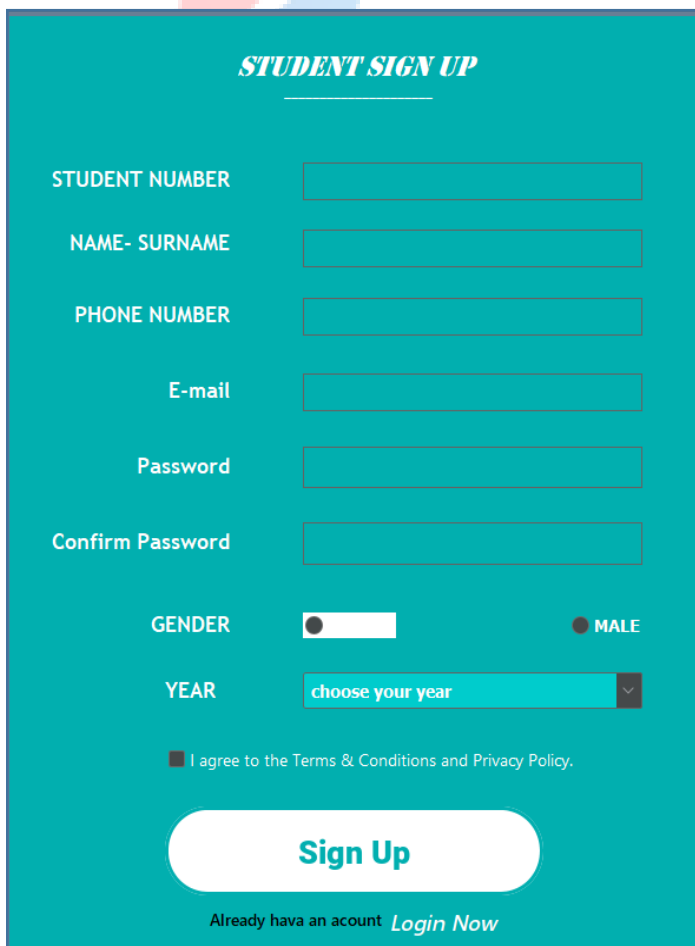
STUDENT LOG IN FRAME



The student login frame has a teal background. At the top left is a "BACK" button with a left arrow icon. The title "STUDENT LOGIN" is centered at the top. Below it are three input fields: a username field with a person icon, a password field with a lock icon, and a "LOGIN" button with a right arrow icon. At the bottom, there is a link: "Don't have an account? [Sign up](#)".

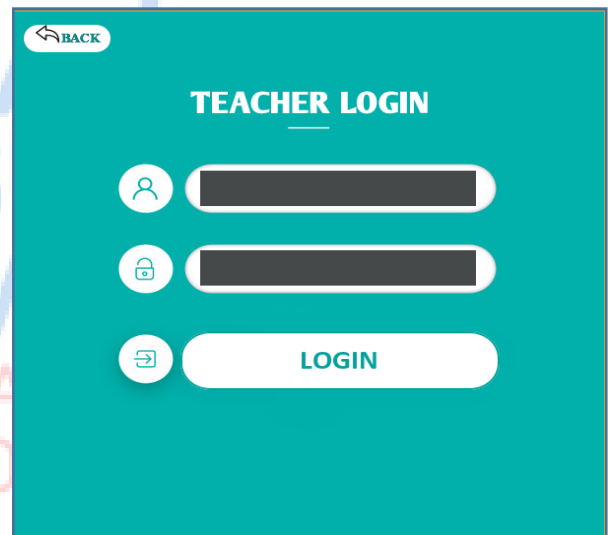
SIGN UP FRAME FOR STUDENT

BY Entering all the information below
With the conditions in the regex,
The student can create an account.



The student sign up frame has a teal background. The title "STUDENT SIGN UP" is centered at the top. Below it are several input fields: "STUDENT NUMBER", "NAME- SURNAME", "PHONE NUMBER", "E-mail", "Password", and "Confirm Password". Below these is a "GENDER" section with two radio buttons, one of which is selected and labeled "MALE". There is also a "YEAR" dropdown menu with the text "choose your year". Below the form fields is a checkbox labeled "I agree to the Terms & Conditions and Privacy Policy." At the bottom is a large "Sign Up" button. At the very bottom, there is a link: "Already hava an account [Login Now](#)".

TEACHER LOG IN FRAME



The teacher login frame has a teal background. At the top left is a "BACK" button with a left arrow icon. The title "TEACHER LOGIN" is centered at the top. Below it are three input fields: a username field with a person icon, a password field with a lock icon, and a "LOGIN" button with a right arrow icon.

Here the student can see his information's, and can chooser a photo to his profile by file chooser dialog, save button to save the photo in database.

File Edit

DENY TAKIP SİSTEM
STUDENT

MY PROFILE

MY EXPERIMENTS

VIEW OTHE EXPERIME...

ADD NEW EXPERIMENT

change photo save

NAME-SURNAME

STUDENT NUMBER

GENDER

YEAR

PHONE NUMBER

FIRST

LAST

MY EXPERIMENTS FRAME

By clicking (show my experiments) all the experiments that the student did will be shown in the table below the its grade and feedback if it was there.

File Edit

DENY TAKIP SİSTEM
STUDENT

MY PROFILE

MY EXPERIMENTS

VIEW OTHE EXPERIME...

ADD NEW EXPERIMENT

SHOW MY EXPERIMENTS

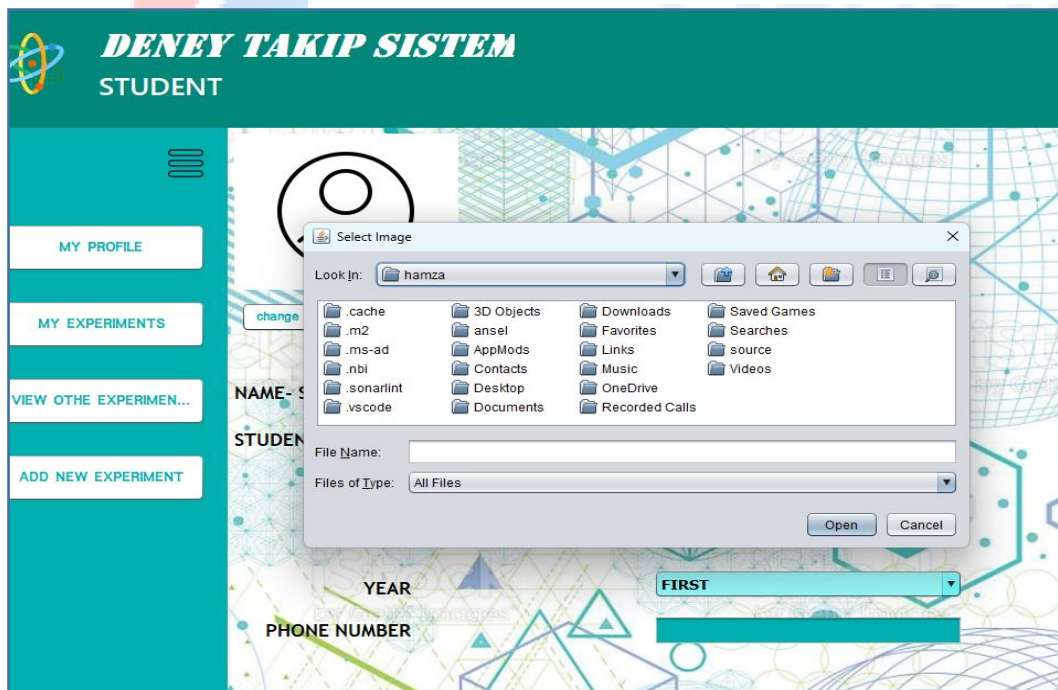
Title 1	Title 2	Title 3
---------	---------	---------

SEARCHING FOR OTHER EXPERIMENT TO DO:

Searching by experiment name to see the equipment to be used.



FILECHOOSE TO SET A PICTURE IN STUDENT PROFILE



TEACHER MAIN FRAME: SEARCHING FOR STUDENT TO SEE INFORMATIONS

The teacher will enter any student number to see his info.

The screenshot shows the 'DENEY TAKIP SISTEM TEACHER' interface. At the top, there is a green header with the system name and a 'TEACHER' label. Below the header, there are two tabs: 'STUDENTS INFO' and 'STUDENT EXPERIMENTS'. The 'STUDENT EXPERIMENTS' tab is active. The main area has a background with geometric patterns. It contains several input fields for student information: 'STUDENT ID', 'NAME-SURNAME', 'E-mail', 'GENDER', 'YEAR', and 'PHONE NUMBER'. A 'SEARCH' button is located to the right of the 'STUDENT ID' field. A user profile icon is in the top right corner.

SEARCHING FOR STUDENT'S EXPERIMENTS TO GRADE AND GIVE FEEDBACK

The teacher will enter student number to see his experiments and choose an experiment to see the details like file and comments, the writing a feedback in the text area and send it with the grade that the teacher decided the student deserve it.

The screenshot shows the 'DENEY TAKIP SISTEM TEACHER' interface with the 'STUDENT EXPERIMENTS' tab active. It displays a search bar for 'STUDENT ID' and a 'search' button. Below this, there is a table with columns 'Title 1', 'Title 2', and 'Title 3'. To the right of the table, there are buttons for 'Experiment Name', 'view file', and 'show file'. Below the table, there is a large text area for 'Comments and conclusion'. At the bottom, there is a 'WRITE FEEDBACK' section with a text area and a 'SEND FEEDBACK' button. A 'See Details' button is also present at the bottom left.

5- Proje Çıktıları ve Başarı Ölçütleri

- 1- The program is working safety and speed.
- 2- The UI if the program has been designed to look perfect and comfortable for the user.
- 3- The data transferred between the frames easily.
- 4- The data saved in database without any problems.

6- Proje Süresince Yapılanlar

This program took me a lot of time to finish, but I learned a lot while working on it.

- 1- I started by drawing the first simple UI on a piece of paper, then making that possible on the NetBeans,
- 2- I created the structure of the program without any extra design.
- 3- I started with the design and I wanted it to look good, so it took more then 5 days to learn how to do .
- 4- I started writing the code and it took about 5 days too.
- 5- Every time I add a new thing or write a new function, I test the program from the beginning.

7- Ek Açıklamalar

While working on this program I faced some problem and it took sometime to learn how to fix,

- 1- Filechooser: I get an error every time I tried to save a file in database, then I changed the type of the file while saving it, that fixed the problem.
- 2- I faced some errors when I want to transfer data from frame to other.

8- Kaynakça

- 1- The Knowlge I have learned in the course and the lab lechers.
- 2- <https://www.google.com/>
- 3- <https://stackoverflow.com/>
- 4- <https://www.geeksforgeeks.org/>
- 5- <https://www.youtube.com/> and specially the Indian teachers the explain a lot to me.
- 6- <https://github.com/>
- 7- <https://www.programiz.com/>
- 8- <https://docs.oracle.com/javase/8/docs/api/java/lang/reflect/Method.html>