

SABANCI University

Faculty of Engineering and Natural Sciences

Fall 2021

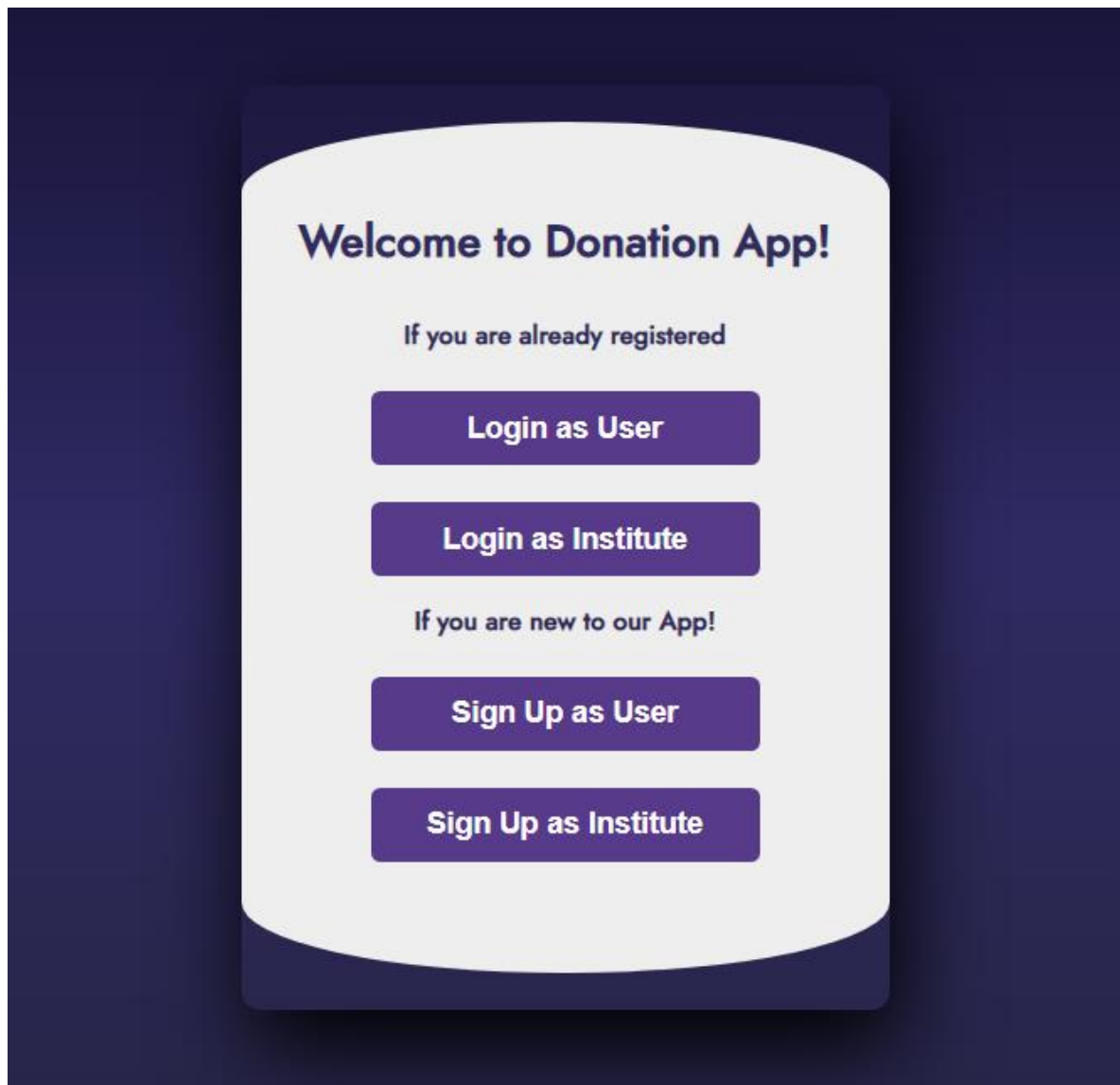
CS306 Database Systems

Ege Erdoğan 25331

TERM PROJECT

Donate for Better Future (DBF)

INDEX (WELCOME) WEB PAGE

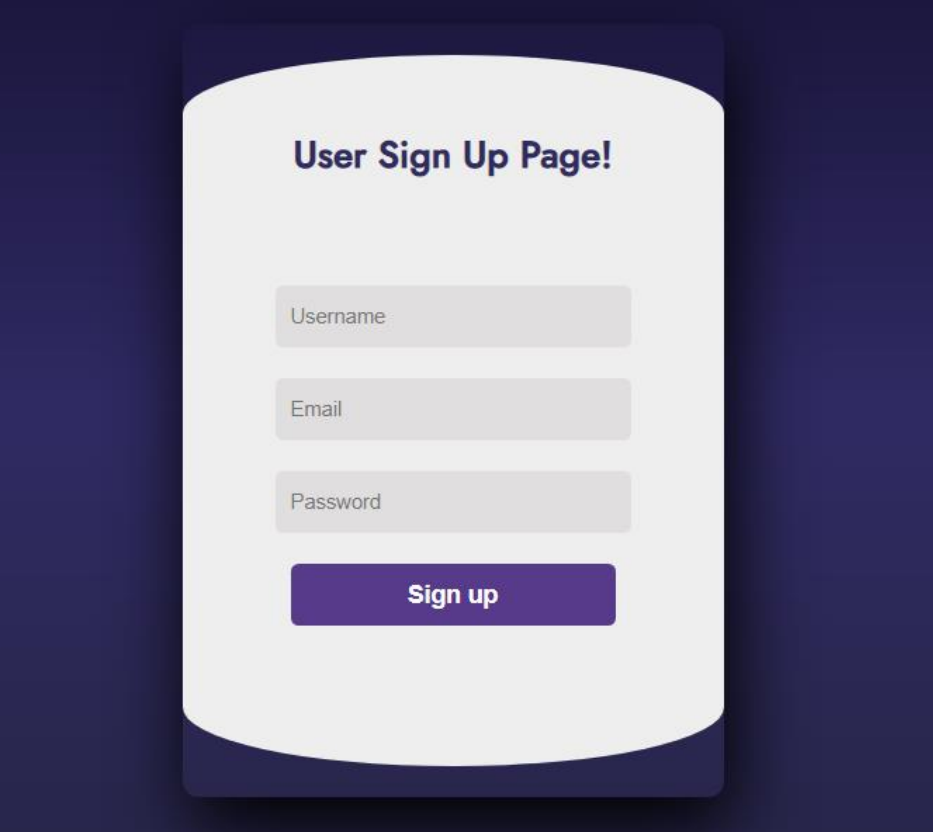


This is the Welcoming page of my application. Part of the styling, css, is taken from internet.

In the application, there are two different users who are normal people and institutes, so we have two different login ways to application. If the user of the application does not hold an account, it can sign up to application.

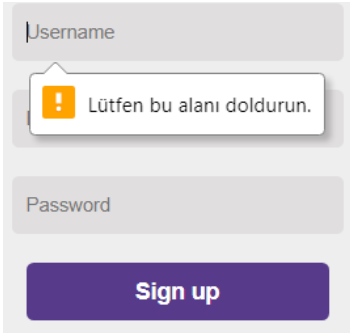
Sign Up as User

If the **sign up as user** is button clicked in the welcome page:



A screenshot of a 'User Sign Up Page!' form. The form is white with rounded corners and is centered on a dark blue background. It contains three input fields: 'Username', 'Email', and 'Password', each with a light gray border. Below these fields is a purple button with the text 'Sign up' in white. The title 'User Sign Up Page!' is at the top of the form in a bold, dark blue font.

Each input field should be filled before clicking Sign Up button. Otherwise, the following prompt is shown:



A screenshot of the 'User Sign Up Page!' form with an error message. The 'Username' input field is empty, and a white error prompt with a yellow exclamation mark icon is displayed above it. The prompt contains the text 'Lütfen bu alanı doldurun.' (Please fill this field). The 'Email' and 'Password' fields are also visible, and the 'Sign up' button is at the bottom.

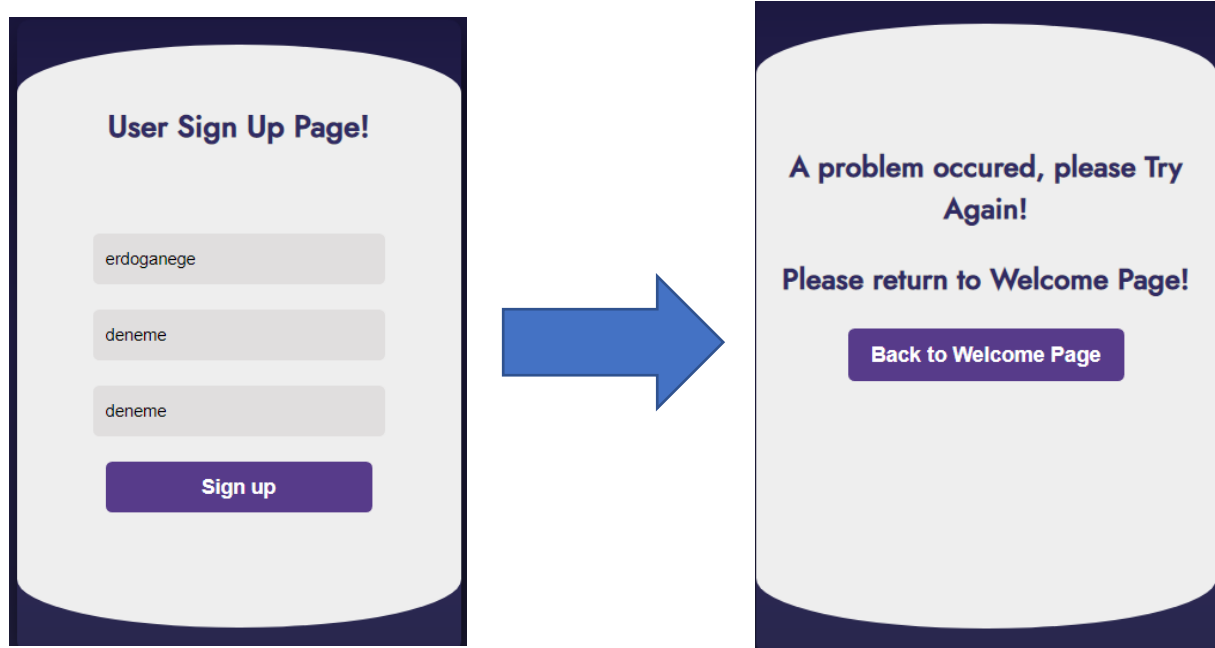
After filling all required information about signing up, if the inputs do not violate the table restrictions, new user will be added to the database of the application.

Previously user relation in database:

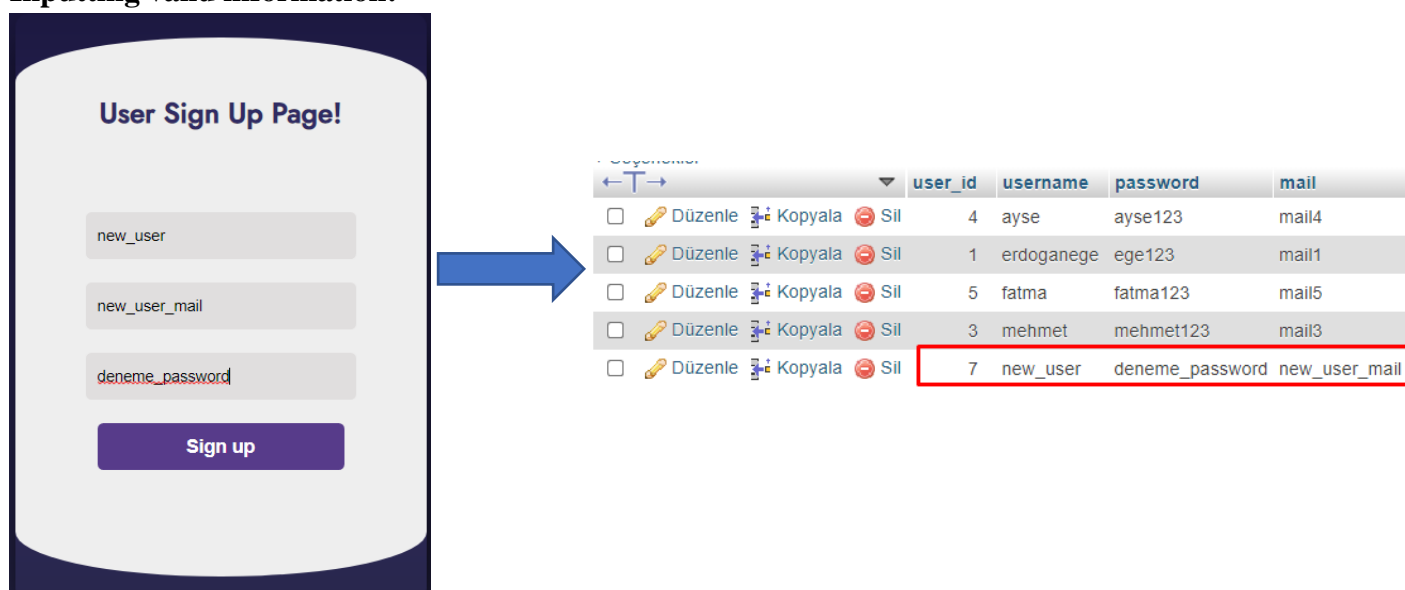
+ Seçenekler

				user_id	username	password	mail
<input type="checkbox"/>	Düzenle	Kopyala	Sil	4	ayse	ayse123	mail4
<input type="checkbox"/>	Düzenle	Kopyala	Sil	1	erdoganeg	ege123	mail1
<input type="checkbox"/>	Düzenle	Kopyala	Sil	5	fatma	fatma123	mail5
<input type="checkbox"/>	Düzenle	Kopyala	Sil	3	mehmet	mehmet123	mail3

Inputting invalid information (e.g., non-unique username, password, or mail):

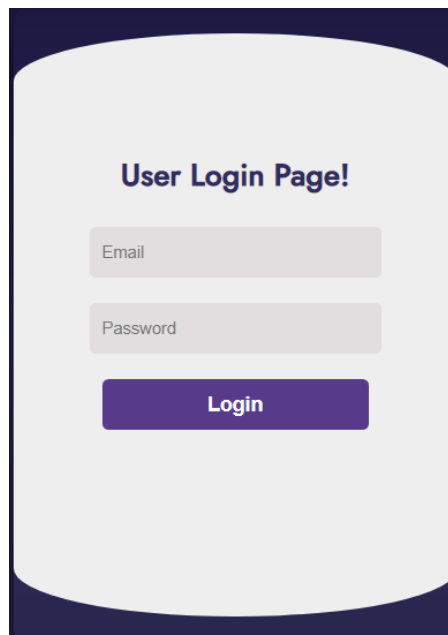


Inputting valid information:



Login as User

If you already signed up, or successfully signed up, you will be navigated to the login page:



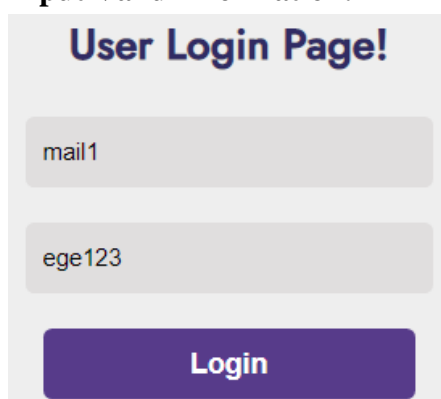
A screenshot of a user login page. It features a light gray rounded rectangle centered on a dark blue background. The title "User Login Page!" is at the top in bold. Below it are two input fields: "Email" and "Password". At the bottom is a purple "Login" button.

Input Invalid Information (non-existing mail and password combination):



A diagram showing the login process with invalid information. On the left, the "User Login Page!" form has "nonexisting" entered in both the "Email" and "Password" fields. A blue arrow points to the right, where a message box appears. The message box contains the text "There is no such user in the database!" and "Please return to Welcome Page!" with a purple "Back to Welcome Page" button at the bottom.

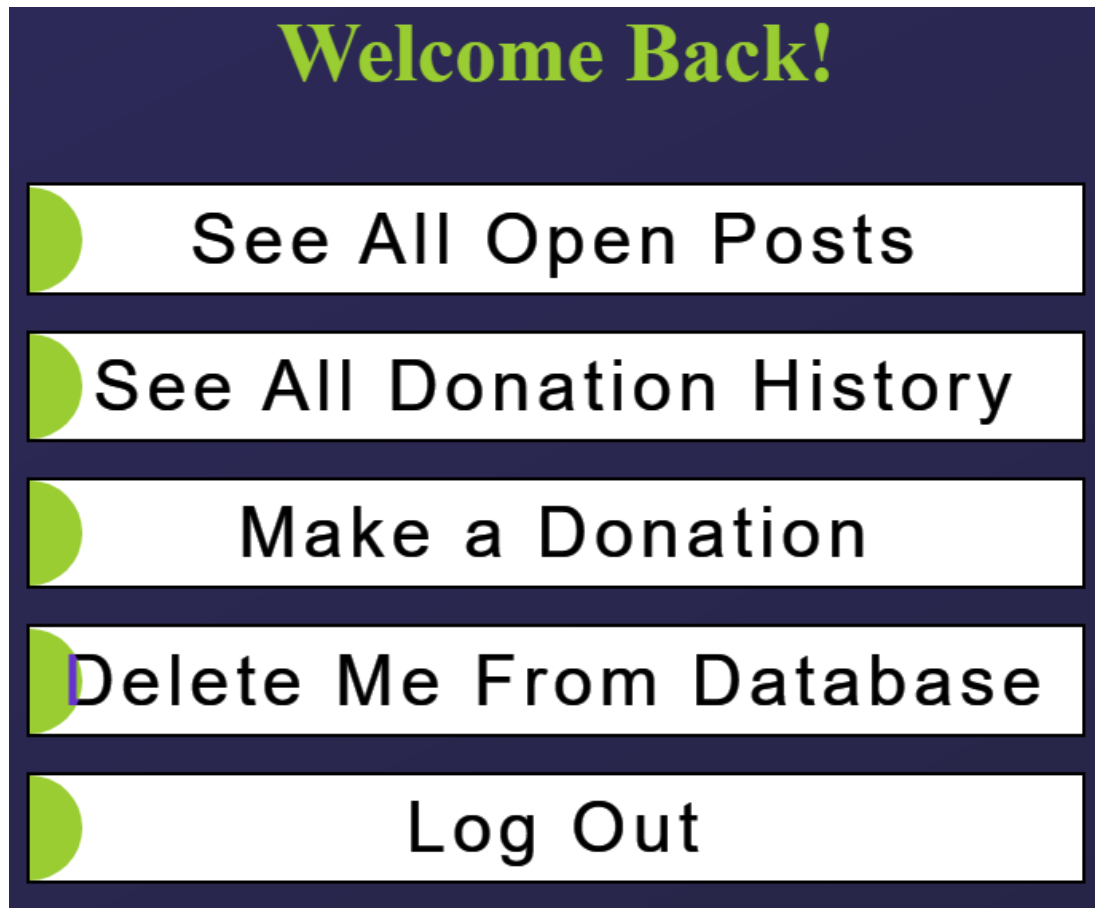
Input Valid Information:



A screenshot of the "User Login Page!" form with valid information entered. The "Email" field contains "mail1" and the "Password" field contains "ege123". The purple "Login" button is at the bottom.

MAIN USER PAGE

If a user successfully login the application, following web page is shown:



There are 5 possible options for user to do. User can see all open posts, donation history, make a new donation to an open post, delete his/her account, or can log out from the account.

SEE ALL OPEN POSTS

When a user clicks the button of ‘See All Open Posts’, all of the available posts shown as following web page:

ALL OPEN POSTS!

POST ID	TITLE	IMPORTANCE	DATE	INSTITUTE NAME	NEEDED MATERIAL	AMOUNT
1	Need Money	3	2021-12-05	KIZILAY	tl money	10000
2	We Need Money	4	2021-11-25	TEMA	tl money	5000
3	Need Blood	5	2021-11-25	KIZILAY	lt blood	20
4	Need Pencil	2	2021-12-10	Doga Elementary School	pen/pencil/rubber	20000

You can Filter Posts according to their importance level (e.g. find posts where importance = input)

[Filter](#)

[User Main Page](#)

User can see all open posts which are available in the database as following:

							post_id	title	importance	date	institute_id	needs_id
<input type="checkbox"/>		Düzenle		Kopyala		Sil	1	Need Money	3	2021-12-05	1	1
<input type="checkbox"/>		Düzenle		Kopyala		Sil	2	We Need Money	4	2021-11-25	2	2
<input type="checkbox"/>		Düzenle		Kopyala		Sil	3	Need Blood	5	2021-11-25	1	5
<input type="checkbox"/>		Düzenle		Kopyala		Sil	4	Need Pencil	2	2021-12-10	4	4

User can use the filter button to see only posts that have specific importance level.

After Filtering with Importance Level = 3:

FILTERED POSTS TABLE!

POST ID	TITLE	IMPORTANCE	DATE	INSTITUTE NAME	NEEDED MATERIAL	AMOUNT
1	Need Money	3	2021-12-05	KIZILAY	tl money	10000

[Back to User Main Page](#)

SEE ALL DONATION HISTORY

When a user clicks the button of ‘See All Donation History’, all of the previous donations shown as following web page:

DONATION HISTORY TABLE!







USERNAME	POST ID	POST'S TITLE	DONATION DATE	AMOUNT	MATERIAL
mehmet	3	Need Blood	2021-11-30	2	It blood
ayse	4	Need Pencil	2021-12-25	100	pen/pencil/rubber

You can Filter Donations according to their amount level (e.g. find donations where donation amount > input)

Filter

Back to User Main Page

User can see all previous donations which are available in the database as following:

					user_id	post_id	donation_date	amount	material
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil		3	3	2021-11-30	2	It blood
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil		4	4	2021-12-25	100	pen/pencil/rubber

User can use the filter button to see only donations that have more amount than input.

After Filtering with Amount = 50:

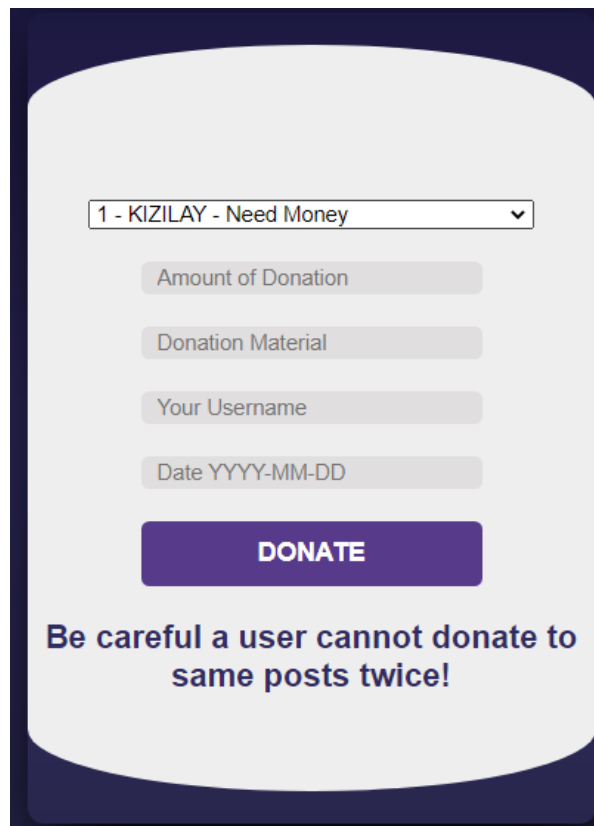
FILTERED DONATION HISTORY TABLE!

USERNAME	POST ID	POST'S TITLE	DONATION DATE	AMOUNT	MATERIAL
ayse	4	Need Pencil	2021-12-25	100	pen/pencil/rubber

Back to User Main Page

MAKE A DONATION

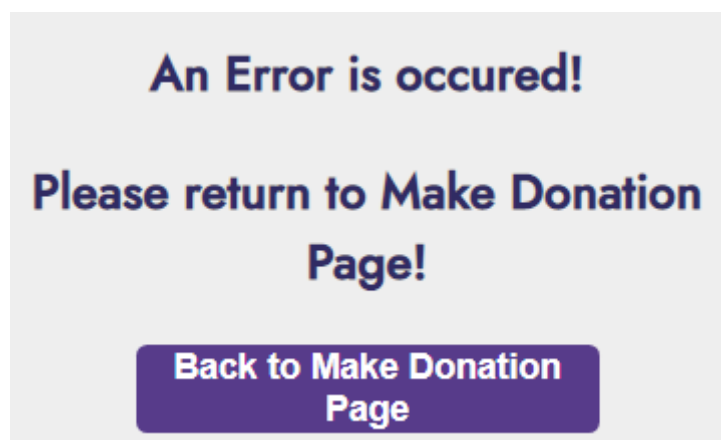
When a user clicks the button of 'Make a Donation', to make a new donation:



The screenshot shows a donation form with a dark blue header and footer. The form itself is a light gray rounded rectangle. At the top is a dropdown menu showing '1 - KIZILAY - Need Money'. Below it are four input fields: 'Amount of Donation', 'Donation Material', 'Your Username', and 'Date YYYY-MM-DD'. A purple 'DONATE' button is centered below the fields. At the bottom of the form, a message reads: 'Be careful a user cannot donate to same posts twice!'.

User chooses the post from select html object, fills the necessary input fields. Then, clicks to donate button.

If the user tries to make donation to same post twice, appropriate error web page is shown.



Inputting Valid Information:

1 - KIZILAY - Need Money

99

MONEY







fatma

2021-12-27

DONATE

Be careful a user cannot donate to same posts twice!

Before clicking the Donate button:

				user_id	post_id	donation_date	amount	material
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	3	3	2021-11-30	2	It blood
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	4	4	2021-12-25	100	pen/pencil/rubber

DONATION HISTORY TABLE!

USERNAME	POST ID	POST'S TITLE	DONATION DATE	AMOUNT	MATERIAL
mehmet	3	Need Blood	2021-11-30	2	It blood
ayse	4	Need Pencil	2021-12-25	100	pen/pencil/rubber










You can Filter Donations according to their amount level (e.g. find donations where donation amount > input)

Amount

Filter

Back to User Main Page

After clicking the Donate Button:

				user_id	post_id	donation_date	amount	material
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	3	3	2021-11-30	2	It blood
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	4	4	2021-12-25	100	pen/pencil/rubber
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	5	1	2021-12-27	99	MONEY

DONATION HISTORY TABLE!

USERNAME	POST ID	POST'S TITLE	DONATION DATE	AMOUNT	MATERIAL
mehmet	3	Need Blood	2021-11-30	2	It blood
ayse	4	Need Pencil	2021-12-25	100	pen/pencil/rubber
fatma	1	Need Money	2021-12-27	99	MONEY

You can Filter Donations according to their amount level (e.g. find donations where donation amount > input)

Filter

Back to User Main Page

DELETE ME FROM DATABASE

When a user clicks the button of 'Delete Me From Database', the following web page is shown:

Currently, user database as following:

				user_id	username	password	mail
<input type="checkbox"/>	Düzenle	Kopyala	Sil	4	ayse	ayse123	mail4
<input type="checkbox"/>	Düzenle	Kopyala	Sil	1	erdoganeg	ege123	mail1
<input type="checkbox"/>	Düzenle	Kopyala	Sil	5	fatma	fatma123	mail5
<input type="checkbox"/>	Düzenle	Kopyala	Sil	3	mehmet	mehmet123	mail3
<input type="checkbox"/>	Düzenle	Kopyala	Sil	7	new_user	deneme_password	new_user_mail

Input Invalid Information (non-existing username and password combination):

Input Valid Information:













If you are sure to delete yourself!

erdoganege

ege123

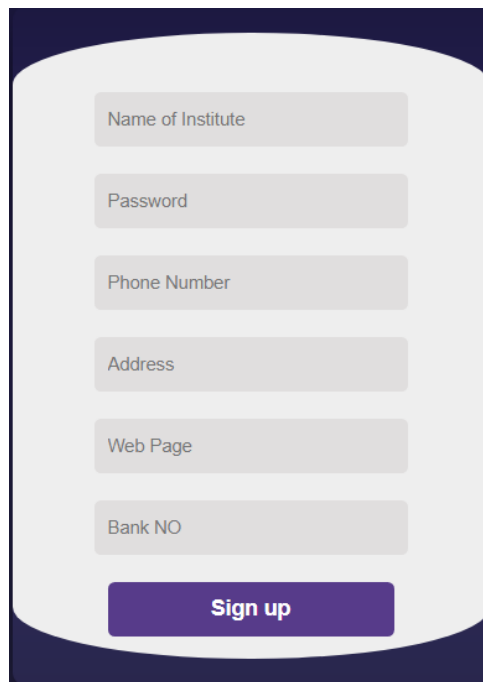
DELETE ME

After Deletion of user erdoganege:

<div>← T →</div>					user_id	username	password	mail
<input type="checkbox"/>		Düzenle	 Kopyala	 Sil	4	ayse	ayse123	mail4
<input type="checkbox"/>		Düzenle	 Kopyala	 Sil	5	fatma	fatma123	mail5
<input type="checkbox"/>		Düzenle	 Kopyala	 Sil	3	mehmet	mehmet123	mail3
<input type="checkbox"/>		Düzenle	 Kopyala	 Sil	7	new_user	deneme_password	new_user_mail

If the user clicks ‘Log Out’ button, user navigated to the Welcome Page.

Sign Up as Institute



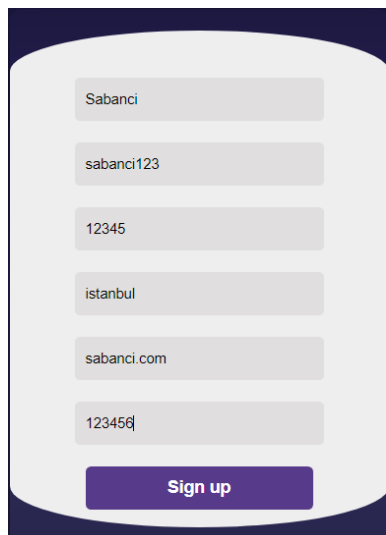
A screenshot of a web form titled "Sign Up as Institute". The form is set against a dark blue background with a light gray rounded rectangle containing the input fields. The fields are: "Name of Institute", "Password", "Phone Number", "Address", "Web Page", and "Bank NO". Each field has a light gray placeholder text. Below the fields is a purple button labeled "Sign up".

It is same as user signing up, all required input fields must be filled and must be unique name in the database. If the inputs are not valid, same error page is shown as above.













Previously institutes relation in database:

				institute_id	name	password	phone_no	address	web_page	bank_no
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	1	KIZILAY	kizilay123	phone1	Istanbul	kizilay.com	bank_no1
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	2	TEMA	tema123	phone2	Ankara	tema.com	bank_no2
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	3	Hospital	hospital123	phone3	Izmir	hospital.com	bank_no3
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	4	Doga Elementary School	doga123	phone4	Istanbul	dogaschool.com	bank_no4

Inputting valid information:



A screenshot of the "Sign Up as Institute" form with the following values entered: "Sabanci" in the Name field, "sabanci123" in the Password field, "12345" in the Phone Number field, "istanbul" in the Address field, "sabanci.com" in the Web Page field, and "123456" in the Bank NO field. The "Sign up" button is at the bottom.

				institute_id	name	password	phone_no	address	web_page	bank_no			
<input type="checkbox"/>		Düzenle		Kopyala		Sil	1	KIZILAY	kizilay123	phone1	Istanbul	kizilay.com	bank_no1
<input type="checkbox"/>		Düzenle		Kopyala		Sil	2	TEMA	tema123	phone2	Ankara	tema.com	bank_no2
<input type="checkbox"/>		Düzenle		Kopyala		Sil	3	Hospital	hospital123	phone3	Izmir	hospital.com	bank_no3
<input type="checkbox"/>		Düzenle		Kopyala		Sil	4	Doga Elementary School	doga123	phone4	Istanbul	dogaschool.com	bank_no4
<input type="checkbox"/>		Düzenle		Kopyala		Sil	5	Sabanci	sabanci123	12345	istanbul	sabanci.com	123456

Login as Institute

If the institute is already signed up, or successfully signed up, it will be navigated to the login page:

A login form titled "Institute Login Page!". It features two input fields: "Name of the Institute" and "Password". Below these fields is a purple "Login" button. The form is centered on a dark blue background with a light gray rounded rectangle.

Input Invalid Information (non-existing name and password combination):

A flow diagram showing an invalid login attempt. On the left, the "Institute Login Page!" form has "nonexisting" entered in both the "Name of the Institute" and "Password" fields. A blue arrow points to the right, where a message box states: "There is no such institute in the database! Please return to Welcome Page!". Below this message is a purple "Back to Welcome Page" button.

Input Valid Information:

The "Institute Login Page!" form with "KIZILAY" entered in the "Name of the Institute" field and "kizilay123" entered in the "Password" field. The "Login" button is visible at the bottom.

MAIN INSTITUTE PAGE

If an institute successfully login the application, following web page is shown:



There are 5 possible options for institute to do. Institute can see all open posts, donation history, create a new post, delete its account, or can log out from the account.

First two options results with the same web pages as in the user case. Therefore, they are now shown in the report.

CREATE A NEW POST

When an institute clicks the button of 'Create a New Post', the following web page is shown:

Welcome to Post Creation!

Fill following informations!

Title

Importance Level

Date YYYY-MM-DD

KIZILAY

1 - tl money - 10000

CREATE POST

Institute fills the first three input fields with hands. Then, it chooses its name from the list as the institute must be registered in the database to create a post. Then, it chooses specific need of the post from needs relation in the database.

Inputting valid information:

Welcome to Post Creation!

Fill following informations!

NEW POST FOR REPORT

9

2021-12-27

TEMA

2 - tl money - 5000
















CREATE POST

Posts relation in database before clicking create post button:

+ Seçenekler

<div><div><div>←</div><div>T</div><div>→</div></div></div>			post_id	title	importance	date	institute_id	needs_id
<div><div><div><div><div></div></div></div><div><div><div>Düzenle</div><div><div><div></div><div></div></div></div><div><div><div>Kopyala</div><div><div><div></div><div></div></div></div><div><div><div>Sil</div><div><div><div></div><div></div></div></div></div></div></div></div></div></div></div></div>	1	Need Money	3	2021-12-05	1	1		
<div><div><div><div><div></div></div></div><div><div><div>Düzenle</div><div><div><div></div><div></div></div></div><div><div><div>Kopyala</div><div><div><div></div><div></div></div></div><div><div><div>Sil</div><div><div><div></div><div></div></div></div></div></div></div></div></div></div></div></div>	2	We Need Money	4	2021-11-25	2	2		
<div><div><div><div><div></div></div></div><div><div><div>Düzenle</div><div><div><div></div><div></div></div></div><div><div><div>Kopyala</div><div><div><div></div><div></div></div></div><div><div><div>Sil</div><div><div><div></div><div></div></div></div></div></div></div></div></div></div></div></div>	3	Need Blood	5	2021-11-25	1	5		
<div><div><div><div><div></div></div></div><div><div><div>Düzenle</div><div><div><div></div><div></div></div></div><div><div><div>Kopyala</div><div><div><div></div><div></div></div></div><div><div><div>Sil</div><div><div><div></div><div></div></div></div></div></div></div></div></div></div></div></div>	4	Need Pencil	2	2021-12-10	4	4		

After clicking create post button:

			post_id	title	importance	date	institute_id	needs_id	
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	1	Need Money	3	2021-12-05	1	1
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	2	We Need Money	4	2021-11-25	2	2
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	3	Need Blood	5	2021-11-25	1	5
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	4	Need Pencil	2	2021-12-10	4	4
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	6	NEW POST FOR REPORT	9	2021-12-27	2	2

DELETE MY INSTITUTE

When an institute clicks the button of 'Delete My Institute', the following web page is shown:

Currently, institutes database as following:

Kizilay													
			institute_id	name	password	phone_no	address	web_page	bank_no				
<input type="checkbox"/>		Düzenle		Kopyala		Sil	1	KIZILAY	kizilay123	phone1	Istanbul	kizilay.com	bank_no1
<input type="checkbox"/>		Düzenle		Kopyala		Sil	2	TEMA	tema123	phone2	Ankara	tema.com	bank_no2
<input type="checkbox"/>		Düzenle		Kopyala		Sil	3	Hospital	hospital123	phone3	Izmir	hospital.com	bank_no3
<input type="checkbox"/>		Düzenle		Kopyala		Sil	4	Doga Elementary School	doga123	phone4	Istanbul	dogaschool.com	bank_no4
<input type="checkbox"/>		Düzenle		Kopyala		Sil	5	Sabancı	sabancı123	12345	istanbul	sabancı.com	123456

Input Invalid Information (non-existing name and password combination):

Input Valid Information:




If you are sure to delete your institute!

Sabancı

sabancı123

DELETE MY INSTITUTE

After Deletion of institute Sabancı:

+ Seçenekler				institute_id	name	password	phone_no	address	web_page	bank_no
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	1	KIZILAY	kizilay123	phone1	Istanbul	kizilay.com	bank_no1
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	2	TEMA	tema123	phone2	Ankara	tema.com	bank_no2
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	3	Hospital	hospital123	phone3	Izmir	hospital.com	bank_no3
<input type="checkbox"/>	 Düzenle	 Kopyala	 Sil	4	Doga Elementary School	doga123	phone4	Istanbul	dogaschool.com	bank_no4

If the institute clicks 'Log Out' button, institute navigated to the Welcome Page.

Consequently, web application is used by two different user type as a normal person or an institute. User and/or institute can login or sign up to web application. They may see all open posts, donation histories and log out from the web application. They both can filter posts or donations with their inputs. User can make a donation to a post. Institute can create a new post for possible donations. They can both delete their own account from the application.

All updates are reflected to the database as proper way without violating table restrictions.

Used Relations:

5 Different Relations are actively used in the web application:

- 1. Users Table**
- 2. Institutes Table**
- 3. Posts Table**
- 4. Needs Table**
- 5. Donation Table**

Following 3 actions are implemented:

- 1. Inserting a new element to tables**
- 2. Deleting an existing entry from table**
- 3. Selecting / Filtering existing tables according to user input**

Used Technologies:

- 1. HTML**
- 2. CSS**
- 3. PHP**