

Secure Web Programming (TLEN 5839)

Bank application System

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Application Users

Bank Admin

- They are the ones who can create new accounts.
- Only the admin has the access privilege to login into the database and view all the existing accounts and their details.
- They also have the privilege to delete an account in case of reported fraud theft.

Bank account holders

- Those who have an account in this bank can login and view their account balances,
- make transfers to different accounts within the bank and
- view their bank statements.

Application usage

Admin

- Admin logs into the system.
- After the admin creates an account for a customer, the details of the customer will be included in the database and he will be able to login into his account.
- Once a theft is reported, the admin deletes the account holder's information along with his credit card details by using his SSN number.

Customers/Account Holders

- After a user logs into the system he will be directed to the default tab **Accounts** page which displays his account details with balances.
- The **Transfers** tab provides amount transfer feature. User can transfer cash between different accounts within the bank (Form validation is done for this functionality).
- The **Statements** tab displays the details about each transfer that the customers make.

System

- It keep records of IP addresses that tries to login and blocks an unauthorized user after 5 failed attempts.
- It automatically updates the balances of accounts involved in a transaction.

Admin functionalities – Login page

[Home](#) | [Secure Login](#)



Admin functionalities – Account Creation page

[Home](#) | [Secure Login](#)

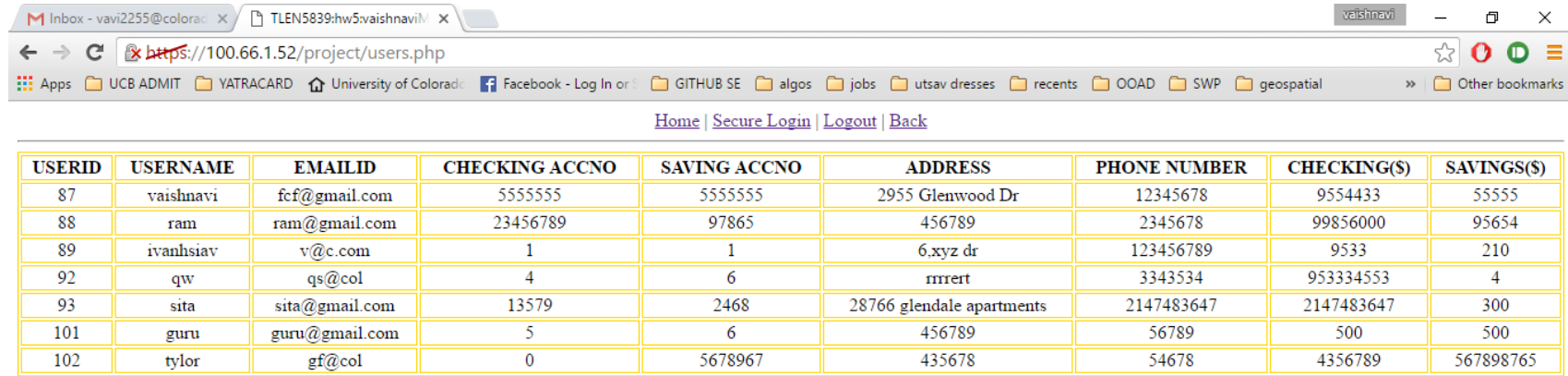
CREATING A NEW ACCOUNT

Username:	<input type="text"/>	
Password:	<input type="password"/>	
Email:	<input type="text"/>	
Home Address:	<input type="text"/>	
Mobile number:	<input type="text"/>	
SSN number	<input type="text"/>	
Checking Account number:	<input type="text"/>	Initial deposit: \$ <input type="text"/>
Savings Account number:	<input type="text"/>	Initial deposit: \$ <input type="text"/>
<input type="button" value="Submit"/>		

[Check Users](#) | [Add New Users](#) | [Check login attempts](#) | [Fraud Handling](#) | [Logout](#)

Admin functionalities

Viewing account holders of the bank



The screenshot shows a web browser window with the address bar displaying `https://100.66.1.52/project/users.php`. The browser's bookmark bar includes links to 'Apps', 'UCB ADMIT', 'YATRACARD', 'University of Colorado', 'Facebook - Log In or S...', 'GITHUB SE', 'algos', 'jobs', 'utsav dresses', 'recents', 'OOAD', 'SWP', 'geospatial', and 'Other bookmarks'. Below the browser window, a navigation bar contains links for 'Home', 'Secure Login', 'Logout', and 'Back'. The main content area displays a table with account holder information.

USERID	USERNAME	EMAILID	CHECKING ACCNO	SAVING ACCNO	ADDRESS	PHONE NUMBER	CHECKING(\$)	SAVINGS(\$)
87	vaishnavi	fcf@gmail.com	5555555	5555555	2955 Glenwood Dr	12345678	9554433	55555
88	ram	ram@gmail.com	23456789	97865	456789	2345678	99856000	95654
89	ivanhsiav	v@c.com	1	1	6.xyz dr	123456789	9533	210
92	qw	qs@col	4	6	rrrrt	3343534	953334553	4
93	sita	sita@gmail.com	13579	2468	28766 glendale apartments	2147483647	2147483647	300
101	guru	guru@gmail.com	5	6	456789	56789	500	500
102	tylor	gf@col	0	5678967	435678	54678	4356789	567898765

Admin functionalities - Deleting an account in case of reported frauds

[Home](#) | [Secure Login](#) | [Logout](#) | [Back](#)

SEARCH FOR AN ACCOUNT HOLDER

Enter account holder's SSN:

Submit

[Home](#) | [Secure Login](#) | [Logout](#)

DETAILS OF ACCOUNT HOLDER WITH SSN NUMBER: 123

USERNAME:	guru		
EMAILID:	guru@gmail.com		
USERID:	101		
CHECKING ACCNO:	5	CHECKING(\$):	\$500
SAVING ACCNO:	6	SAVINGS(\$):	\$500
ADDRESS:	456789		
PHONE NUMBER:	56789		

Delete Record

Customer functionalities – Check Balances

[Accounts](#) | [Transfers](#) | [Statements](#) | [Logout](#)

ACCOUNT SUMMARY

CASH ACCOUNTS		BALANCE
CHECKING	23456789	\$99856000
MAIN SAVINGS	97865	\$95654
TOTAL		\$99951654

PERSONAL INFORMATION

USERNAME	ram
EMAILID	ram@gmail.com
ADDRESS	456789
PHONE NUMBER	2345678

Customer functionalities – Make Transfers (Form is validated before a transfer is made)

[Accounts](#) | [Transfers](#) | [Statements](#) | [Logout](#)

TRANSFER MONEY TO ANOTHER ACCOUNT HOLDER

*FROM ACCOUNT	: 1323	Sry! You can enter only your account number
*RECIPIENT NAME	: sita	
*TO ACCOUNT	: 13579	
*AMOUNT	\$2000000000	Sry! your balance is less!
*SEND DATE	: mm / dd / yyyy	Select date
*DESCRIPTION	:	Enter a description

Customer functionalities – Make Transfers (Form is validated before a transfer is made)

Validations made – The form throws an error if

- From Account: If it does not match the account number of the user who has logged in.
- To Account: If it does not match to an existing account holder of the bank.
- Receiver name: The To account entry and the corresponding receiver name should match.
- Amount : Amount entered should be less than the available balance.
- Date, Description, From account, To Account, Receiver name and the amount - are all required fields and they cannot be empty.

It also throws an error if the From Account, To Account and Amount has alphabets instead of numbers in them.

Also, the receiver name field should not contain numbers.

Customer functionalities – Statements tab

[Accounts](#) | [Transfers](#) | [Statements](#) | [Logout](#)

TO ACCOUNT	1	
AMOUNT	\$200	
SENDDATE	2016-12-31 00:00:00	
DESCRIPTION		Testing transfers

TO ACCOUNT	1	
AMOUNT	\$200	
SENDDATE	2016-12-31 00:00:00	
DESCRIPTION		Transfer

TO ACCOUNT	1	
AMOUNT	\$200	
SENDDATE	2016-04-22 00:00:00	
DESCRIPTION		Transfer

Thankyou! 😊