

CS4116 Design Document

UL Singles

Group 4

Members

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Introduction

UL Singles is the first dating platform designed exclusively for UL students. Students can match with each other based on their profiles which include pictures, hobbies and a bio. Students can also browse other users and perform filtered searches to find the perfect match (e.g. list all men under 23 who are enrolled in computer science).

High Level Functionality

UL Singles is comprised of two account types, an Administrator and a User.

Our website will allow Users to:



- Register an account through the sign-up page.
- Log in to their account following a successful registration.
- Add personal information to their profile such as:
 - Photo
 - Name
 - Age
 - Gender
 - Hobbies
 - Bio
 - Course & Year of Study
 - Pursuing status
 - Looking for type of relationship
- Access the Home page:
 - Contains various website information such as suggestions on where to meet up, date ideas and also different deals happening on campus and events.

- Access the Explore Page:
 - Users can view other user's profiles to find potential matches that are suggested based on what the user has selected in their own profile. (e.g. a user who is male, pursuing females will be suggested to a user who is female, pursuing males.)
 - Users can then choose whether to adore or to ignore other users' profiles based on the information they have provided. Once two users 'adore' each other's profiles, they have 'matched' and can now send messages to each other through the messages page.
 - Users can perform filtered searches for other users through the explore page. (as mentioned in the introduction.)
- Access the Messages Page:
 - Users can message all of their matches.
- Access the Matches Page:
 - Users can view their matches.
- Jump between pages with ease through the use of a dropdown menu.

Our website will allow Admins (that have extended functionality that is not available on user accounts) to:


- View all user profiles.
- Add / Update information on the Home page.
- Remove profile pictures and edit information on any profile.
- Temporarily suspend or permanently ban any user account with reason.
- Delete user accounts.

Web Page Mockups



UL SINGLES
COLLEGE MADE SIMPLE

Sign UpLog In



Log in

Email or name



Password

[Forgot Password?](#)

Log in


Don't have an account? [Sign up](#)

Figure 1 Login Page. The user can login if they have an existing account.



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Sign UpLog In



UL SINGLES
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Create an account

Name

Email

Password

Confirm password

Sign up

Already have an account? [Log in](#)

Figure 2 Sign Up Page. The user can sign up if they do not already have an account.

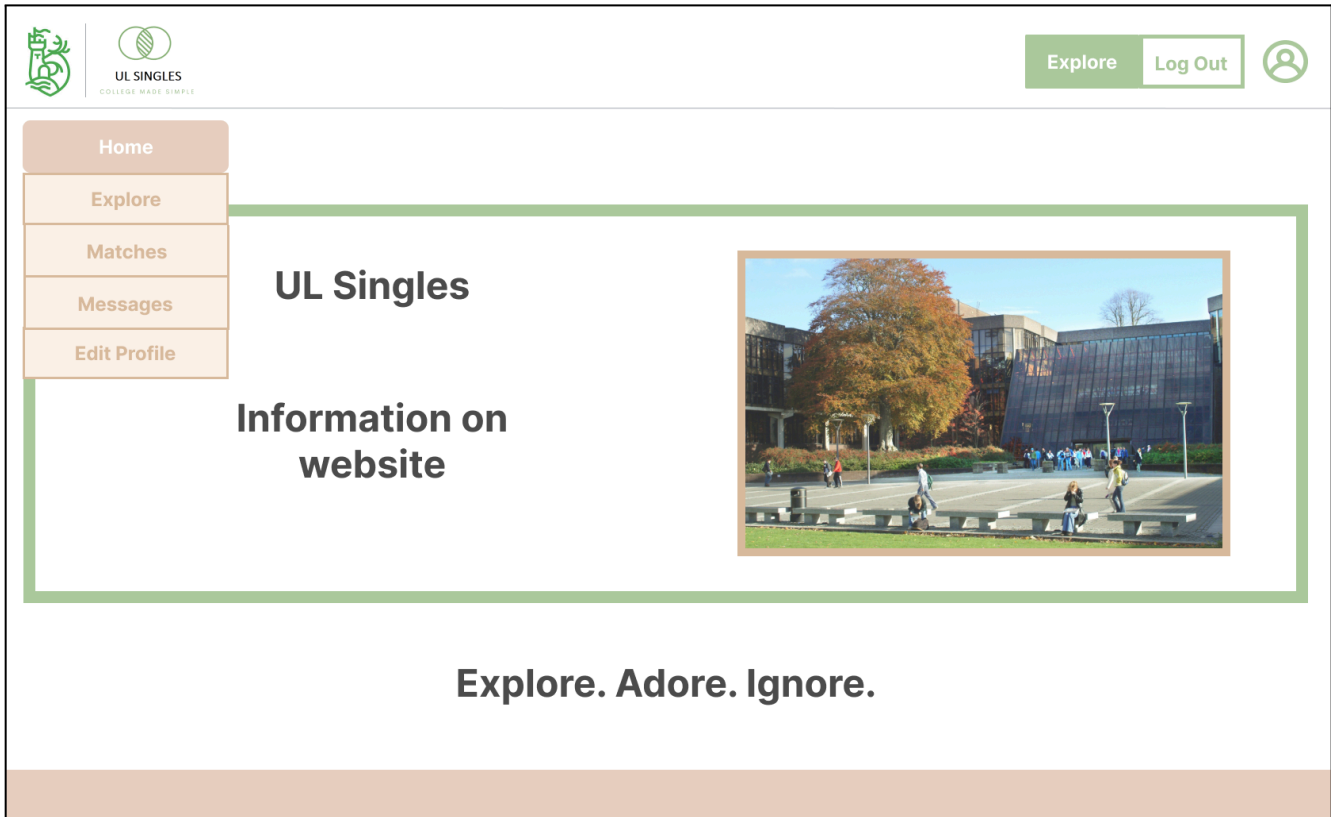


Figure 3 Home Page. Information about the site will be displayed here along with various options to different pages.

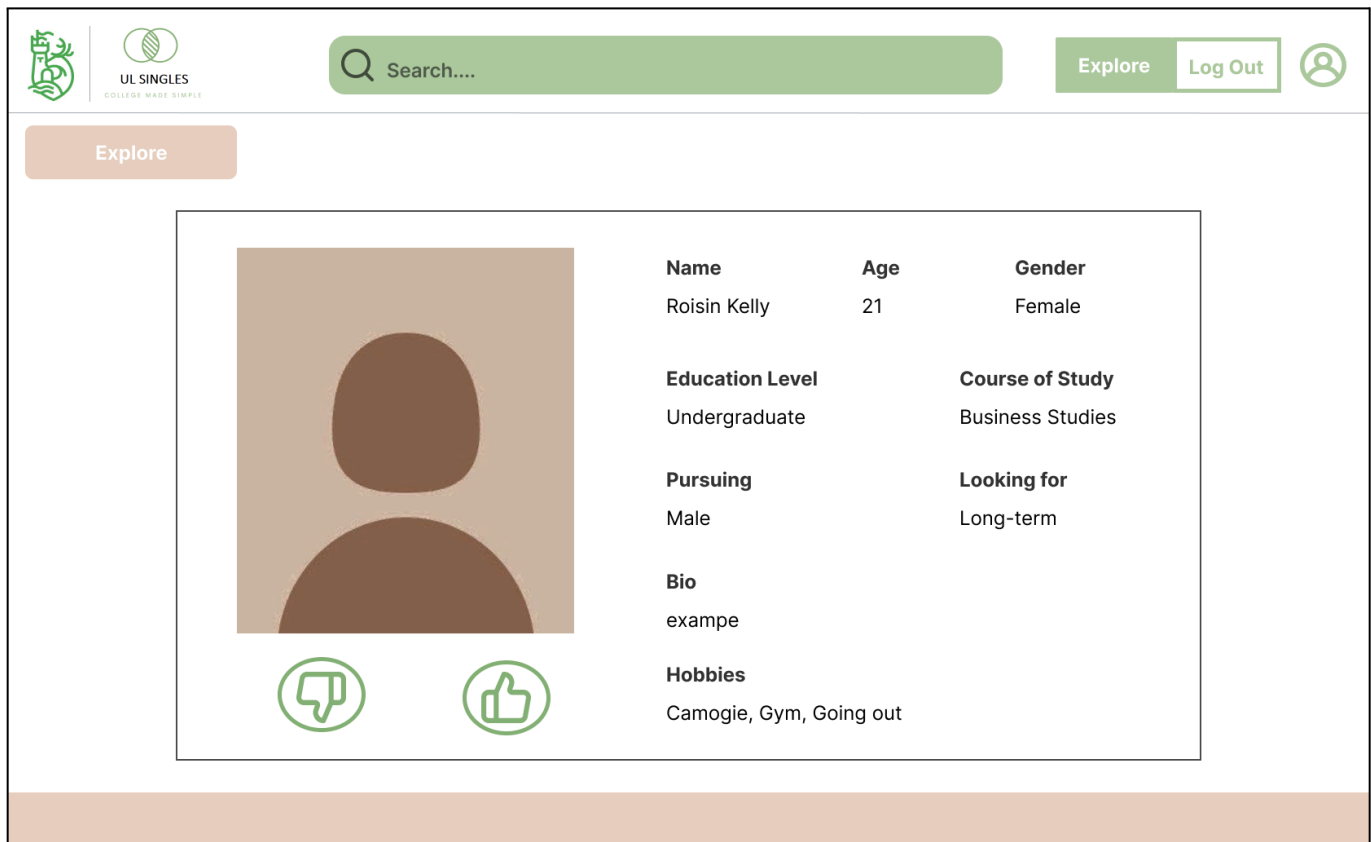


Figure 4 Explore Page. Once logged in, the user can navigate to the Explore page where they will be shown other users and information about them. The user can then “Adore”, or “Ignore” them.

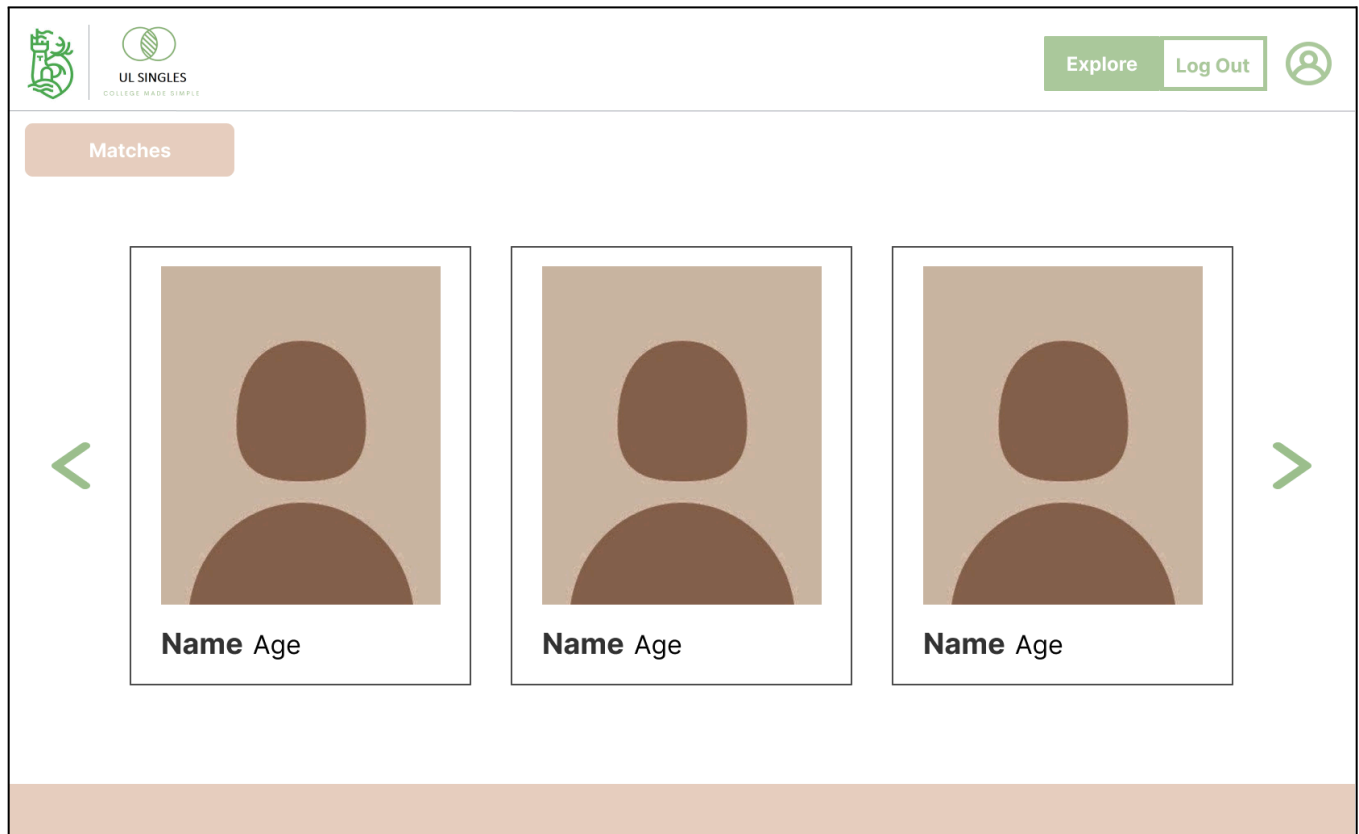


Figure 5 Matches Page. Here, the user can view all the other users that they have matched with.

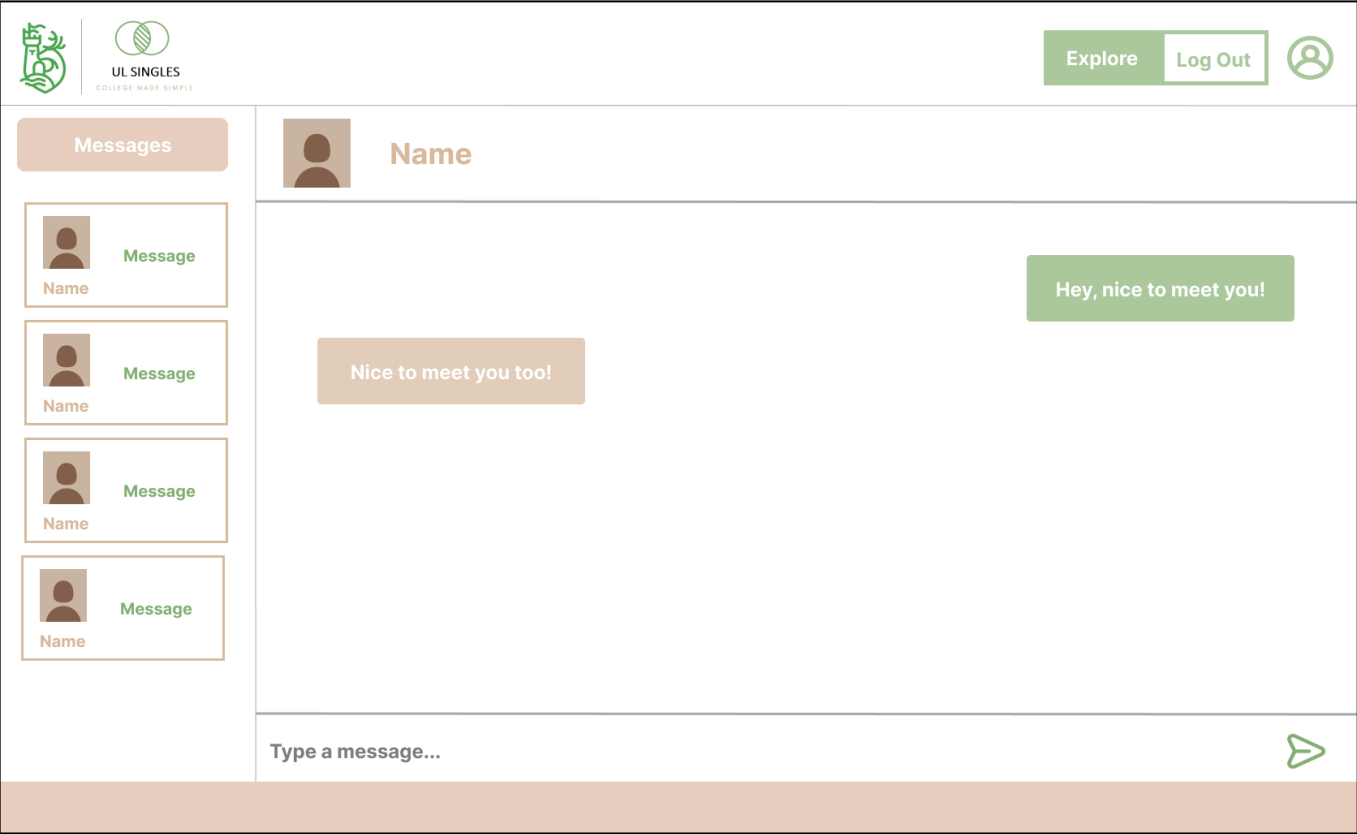





Figure 6 Messaging Page. Here, users can message other users they have matched with.

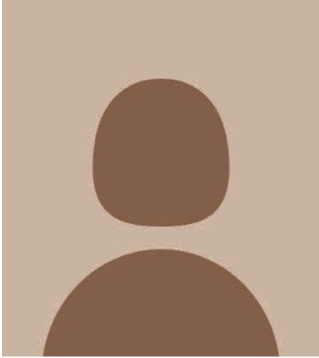




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ExploreLog Out

Edit profile



Change/Upload profile picture

Save

Name
Type here..

Age
Type here...

Gender
Choose..

College Year
Choose..

Pursuing
Choose..

Bio
Type here...

Hobbies
Type here...

Course of Study
Type here...

Looking for
Choose..

Figure 7 Profile Page. The user will be able to update profile information.

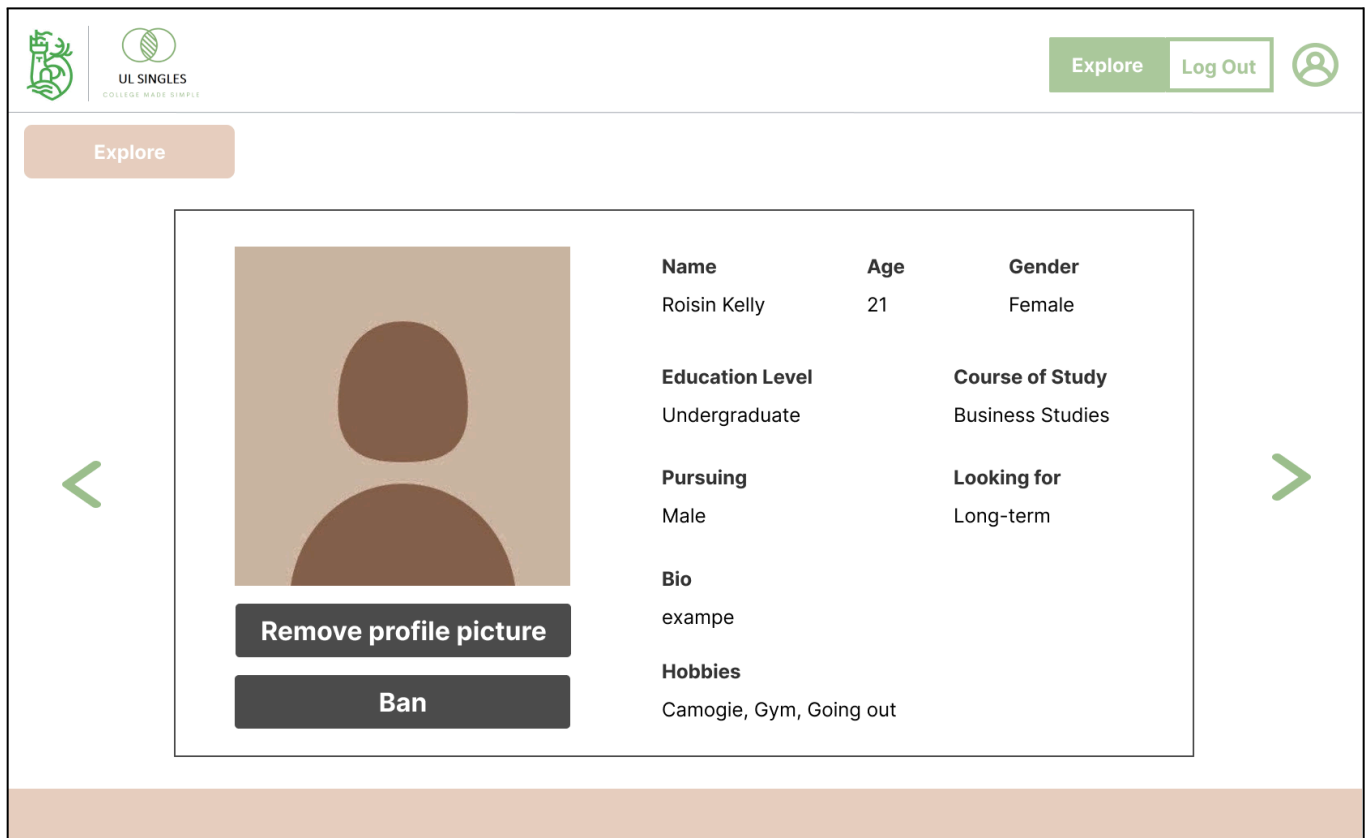



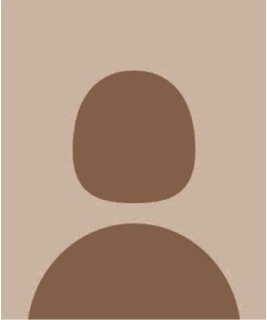


Figure 8 Admin Explore Page. If logged in as an Admin, this will be the explore page view. They will have the option to go through different user profiles. They can also remove profile pictures or ban users if their profile contains inappropriate content.



UL SINGLES
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ExploreLog Out



Name Age

Ban User

Reason

Duration

TemporaryPermanent

Ban

Figure 9 Admin's Ban Page. If an Admin chooses to ban a user, they will be directed to this page. They will provide a reason and will be able to either permanently or temporarily ban the user. Such functionality is not available to normal users.

Some Mobile Mockups of Website (Responsive)

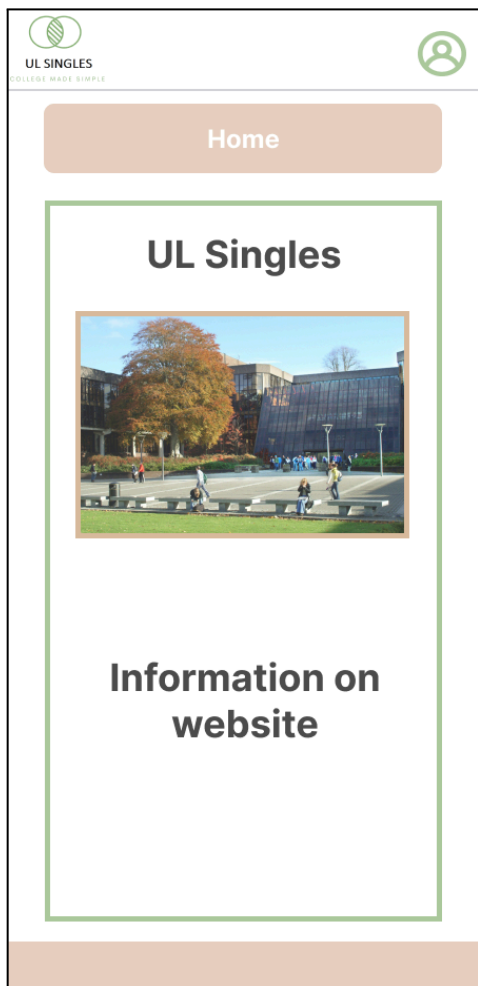


Figure 1 Home Page

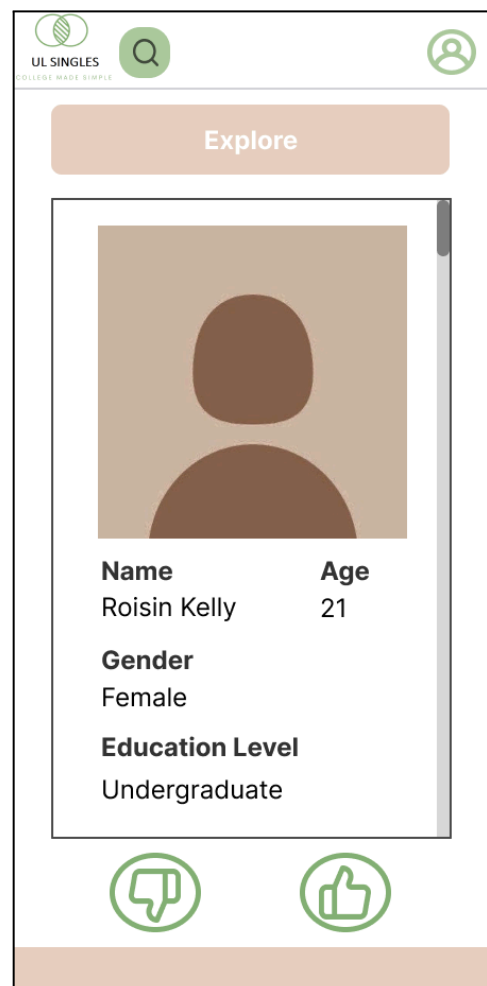


Figure 2 Explore Page

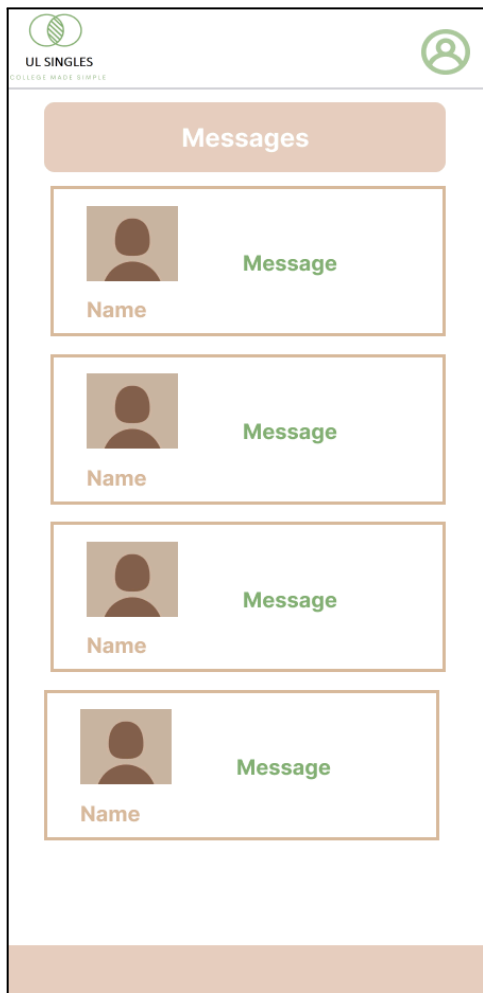


Figure 3 Messaging Page 1

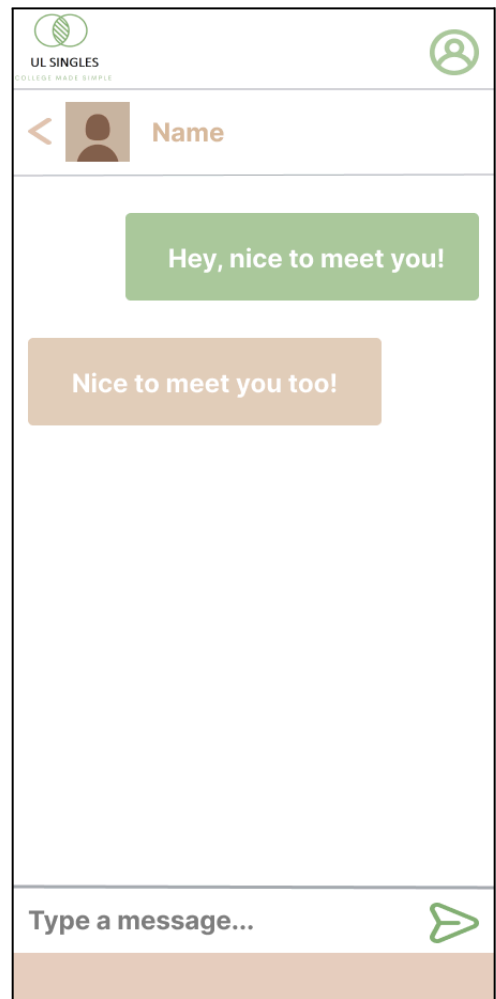


Figure 4 Messaging Page 2

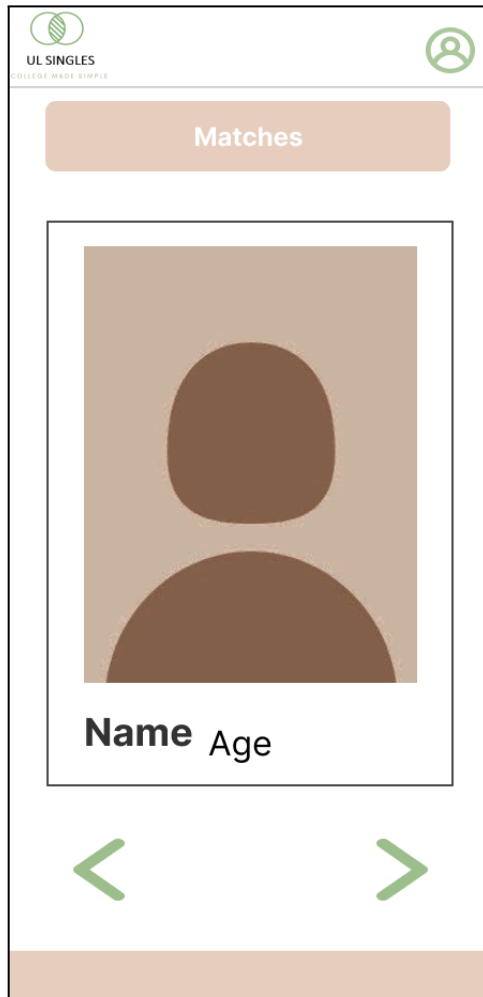


Figure 5 Matches Page

Database Tables

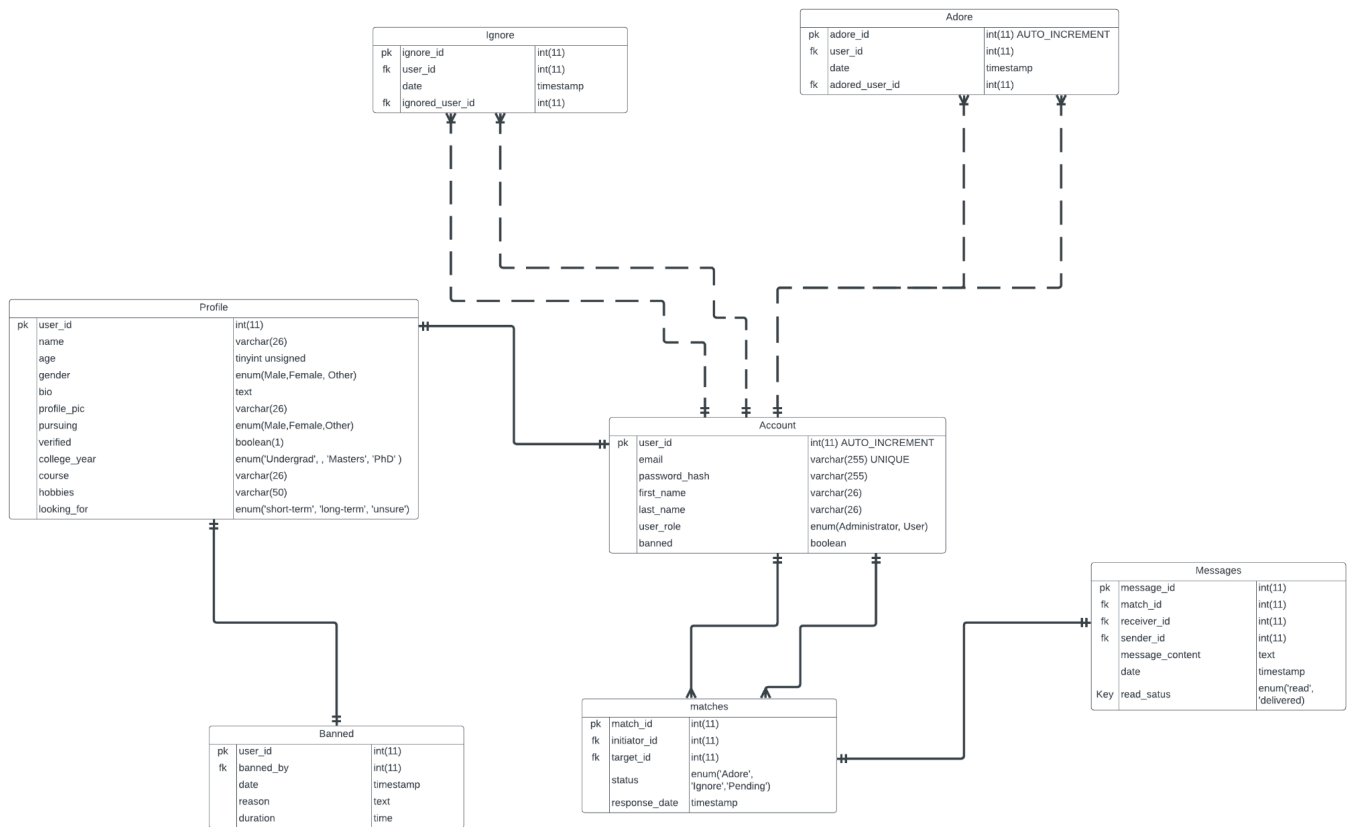


Table 1 Account Table.

Field	Type	Key Type
user_id	int(11) AUTO_INCREMENT	Primary
email	varchar(255) UNIQUE	
password_hash	varchar(255)	
first_name	varchar(26)	
last_name	varchar(26)	
user_role	enum(Administrator, User)	
banned	boolean(1)	

Table 2 Profile Table.

Field	Type	Key Type
user_id	int(11)	Primary
name	varchar(26)	
age	tinyint unsigned	
gender	enum(Male, Female, Other)	
bio	text	
profile_pic	varchar(26)	
pursuing	enum(Male, Female, Other)	
verified	boolean(1)	
college_year	enum('Undergrad', 'Masters', 'PhD')	
course	varchar(26)	
hobbies	varchar(50)	
looking_for	enum('short-term', 'long-term', 'unsure')	

Table 3 Banned Table.

Field	Type	Key Type
user_id	int(11)	Primary
banned_by	int(11)	Foreign
date	timestamp	
reason	text	
duration	time	

Table 4 Adore Table.

Field	Type	Key Type
adore_id	int(11) AUTO_INCREMENT	Primary
user_id	int(11)	Foreign
date	timestamp	
adored_user_id	int(11)	Foreign

Table 5 Ignore Table.

Field	Type	Key Type
ignore_id	int(11)	Primary
user_id	int(11)	Foreign
date	timestamp	
ignored_user_id	int(11)	Foreign

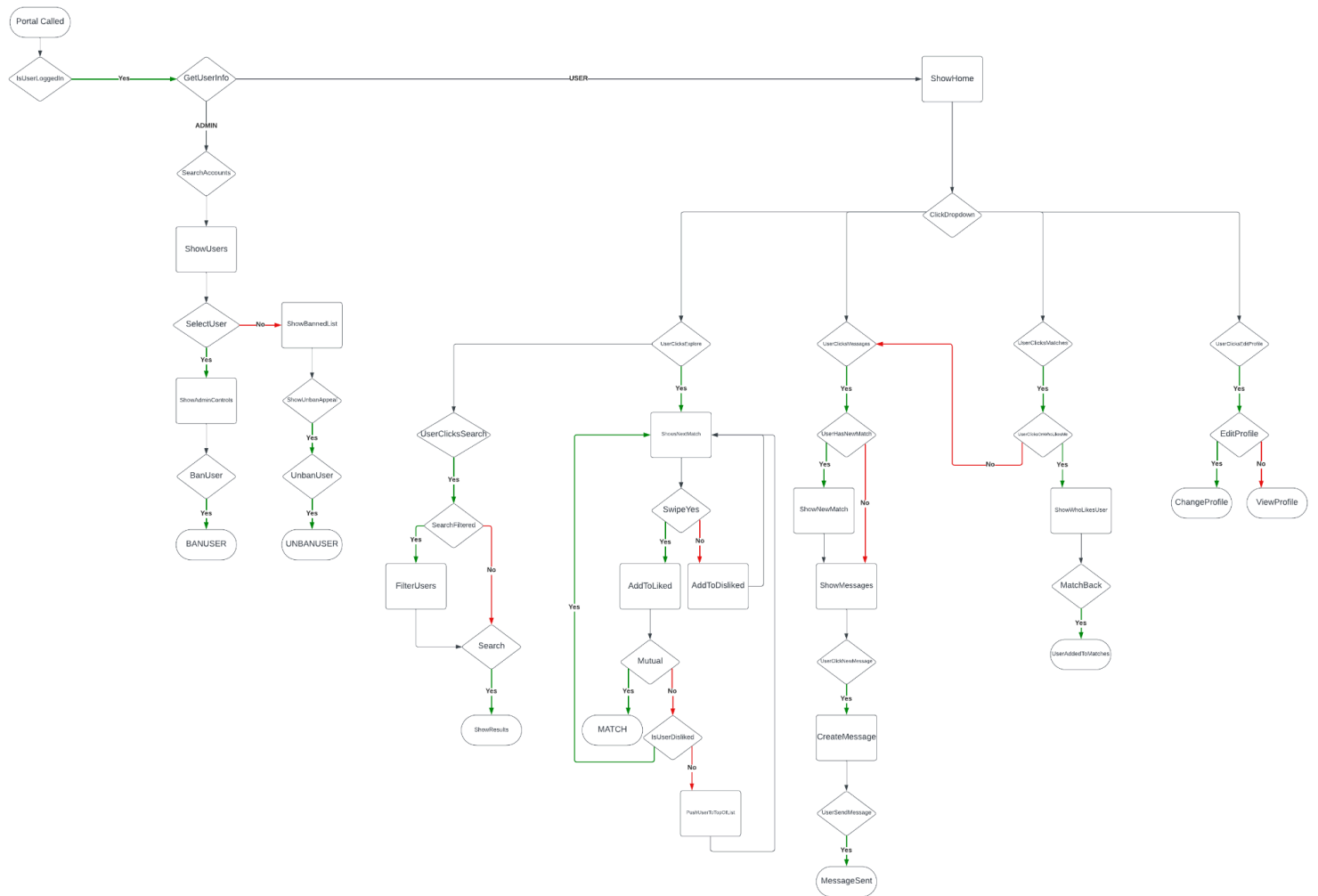
Table 6 Matches Table.

Field	Type	Key Type
match_id	int(11)	Primary
initiator_id	int(11)	Foreign
target_id	int(11)	Foreign
status	enum('Adore', 'Ignore', 'Pending')	
response_date	timestamp	

Table 7 Message Table.

Field	Type	Key Type
message_id	int(11)	Primary
match_id	int(11)	Foreign
receiver_id	int(11)	Foreign
sender_id	int(11)	Foreign
message_content	text	
date	timestamp	
read_status	enum('read', 'delivered')	

Process Chart



Process List

Process #	1
Title	getSignInStatus
Brief Descr.	Get's user's current login status by checking for the existing cookie.
Inputs	\$_SESSION
Detailed Descr.	When a user visits the website, check for a specific cookie set indicating the user has signed in before. Read its value to determine users login status or retrieve any necessary information (user_id).
Output	HTTP 200 Ok Status code OR HTTP 401 unauthorised status code

Process #	2
Title	getAccountInfo
Brief Descr.	Get's users information.
Inputs	email; user_id;
Detailed Descr.	Returns user_id, email, first_name, from the account table.
Output	Array of user info

Process #	3
Title	login
Brief Descr.	Logs user in.
Inputs	email; password;
Detailed Descr.	Logs users in using their email and password. Checks isAccountFound and isAccountBanned before login.
Output	none

Process #	4
Title	isAccountFound
Brief Descr.	Checks if an account is in the db.
Inputs	email; password;
Detailed Descr.	Checks if the email and password entered matches the corresponding values in the db.
Output	boolean;

Process #	5
Title	isAccountBanned
Brief Descr.	Checks if an account in the db is banned.
Inputs	email;
Detailed Descr.	Checks if the email is listed as a banned account in the db under Account table.
Output	boolean;

Process #	6
Title	signUp
Brief Descr.	Creates a new account.
Inputs	email; password; first_name; last_name;
Detailed Descr.	Creates a new account based on the data inputted by the user. It assigns the account a unique user_id. It calls the verifyStudentEmail method and has various set methods. It also updates the Accounts table in the db.
Output	none

Process #	7
Title	confirmTsAndCs
Brief Descr.	Get the user to confirm terms and conditions.
Inputs	none
Detailed Descr.	This method makes sure the user has agreed to our webpage's terms and conditions.
Output	boolean;

Process #	8
Title	verifyStudentEmail
Brief Descr.	Verifies email is a UL student email.
Inputs	email;
Detailed Descr.	Verifies the email used to sign-up ends with "@studentmail.ul.ie".
Output	boolean;

Process #	9
Title	setPassword
Brief Descr.	Set the password for the account.
Inputs	password; user_id;
Detailed Descr.	Sets the user's password and updates the Accounts table in the db.
Output	none

Process #	10
Title	getPassword
Brief Descr.	Gets the user password.
Inputs	user_id;
Detailed Descr.	Gets the user password from the Accounts table in the db.
Output	password;

Process #	11
Title	setName
Brief Descr.	Sets the name.
Inputs	string;
Detailed Descr.	Sets the name associated with the user_id. It will update the first_name and last_name in the Account table of db.
Output	none

Process #	12
Title	getName
Brief Descr.	Gets user's the name.
Inputs	user_id;
Detailed Descr.	Gets the name associated with the user_id.
Output	string;

Process #	13
Title	setBio
Brief Descr.	Sets user bio.
Inputs	user_id; string;
Detailed Descr.	Set the bio matching to the user_id in the Database.
Output	none

Process #	14
Title	getBio
Brief Descr.	Gets user bio.
Inputs	user_id;
Detailed Descr.	Gets the bio information matching to the user_id from the db.
Output	string;

Process #	15
Title	setUserId
Brief Descr.	Sets user id.
Inputs	email;
Detailed Descr.	Sets the user_id matching the email in the Account table of the db.
Output	none

Process #	16
Title	getUserId
Brief Descr.	Gets the user's id.
Inputs	email;
Detailed Descr.	Gets the user_id matching the email in the db.
Output	int;

Process #	17
Title	setGender
Brief Descr.	Set users' gender.
Inputs	user_id; gender;
Detailed Descr.	Sets user gender based off of the selection from the dropdown menu. Updates gender section of Profile table in db.
Output	none

Process #	18
Title	getGender
Brief Descr.	Gets user gender.
Inputs	user_id;
Detailed Descr.	Gets user gender from querying the Profile table of db .
Output	ENUM of users gender

Process #	19
Title	setAge
Brief Descr.	Sets the users age.
Inputs	user_id, int;
Detailed Descr.	Sets the users age and assigns it to the user_id in the database.
Output	none

Process #	20
Title	getAge
Brief Descr.	Gets the age of the user.
Inputs	user_id;
Detailed Descr.	Gets the age of the user from the database.
Output	int;

Process #	21
Title	setCollegeYear
Brief Descr.	Sets the college year the user is in.
Inputs	user_id; college_year;
Detailed Descr.	Sets the college year of the user following the set options available. Updates the college_year section in the Profile table of the db.
Output	none

Process #	22
Title	getCollegeYear
Brief Descr.	Gets the college year of the user.
Inputs	user_id;
Detailed Descr.	Gets the college_year of the user by querying the Profile table of db.
Output	ENUM of the year of study

Process #	23
Title	setPursuing
Brief Descr.	Set users pursuing status.
Inputs	user_id; pursuing;
Detailed Descr.	Sets user pursuing status based off the selection from the dropdown menu. Updates pursuing section of Profile table in db.
Output	none

Process #	24
Title	getPursuing
Brief Descr.	Gets user pursuing status.
Inputs	user_id;
Detailed Descr.	Gets users pursuing status from querying the Profile table of db.
Output	ENUM of users pursuing status

Process #	25
Title	setProfilePicture
Brief Descr.	Sets users profile picture.
Inputs	user_id; profile_pic;
Detailed Descr.	Sets the user's profile picture from a photo they upload. Updates the profile_pic section in the Profile table of the db.
Output	none

Process #	26
Title	getProfilePicture
Brief Descr.	Gets users profile picture.
Inputs	user_id;
Detailed Descr.	Gets the users profile picture by querying the Profile table of the db.
Output	string;

Process #	27
Title	setAdminTrue
Brief Descr.	Sets the user to be an admin.
Inputs	user_id;
Detailed Descr.	Checks if user_id is on the list of admin_ids and if so it sets the user_role to admin.
Output	none

Process #	28
Title	getUserRole
Brief Descr.	Gets the role of the user.
Inputs	user_id;
Detailed Descr.	Queries the user_role from the Account table matching the user_id.
Output	Enum of role

Process #	29
Title	setCourse
Brief Descr.	Sets the course of the user.
Inputs	user_id; course;
Detailed Descr.	Sets the users course from what they input. Updates the course section in the Profile table of the db.
Output	none

Process #	30
Title	getCourse
Brief Descr.	Gets the course of the user.
Inputs	user_id;
Detailed Descr.	Gets the course of the user by querying the Profile table of the db.
Output	string;

Process #	31
Title	setHobbies
Brief Descr.	Set users' hobbies.
Inputs	user_id; hobbies;
Detailed Descr.	Sets user hobbies based on their input. Updates hobbies section of Profile table in db.
Output	none

Process #	32
Title	getHobbies
Brief Descr.	Get user hobbies.
Inputs	user_id;
Detailed Descr.	Gets users hobbies from querying the Profile table of db.
Output	string;

Process #	33
Title	setLookingFor
Brief Descr.	Set users looking for status.
Inputs	user_id; looking_for;
Detailed Descr.	Sets user looking_for status based off the selection from the dropdown menu. Updates looking_for section of Profile table in db.
Output	none

Process #	34
Title	getLookingFor
Brief Descr.	Gets users looking for status.
Inputs	user_id;
Detailed Descr.	Gets users looking_for status from querying the Profile table of db.
Output	ENUM of users looking for status

Process #	35
Title	setBanned
Brief Descr.	Sets a user as banned.
Inputs	user_id; target_id; boolean;
Detailed Descr.	Passes user_id to function isUserAdmin expecting return value true. Then sets the target_id's (user_id) banned value in the profile table of the db to the boolean argument.
Output	none

Process #	36
Title	getBanned
Brief Descr.	Gets users banned status.
Inputs	user_id, target_id;
Detailed Descr.	Queries users banned status from the Account table in the db.
Output	boolean

Process #	37
Title	deleteAccount
Brief Descr.	Admin can delete an account from the db.
Inputs	user_id;
Detailed Descr.	Admin can choose a specific account and they can delete this account.
Output	none

Process #	38
Title	updateUserDetails
Brief Descr.	Admin can edit a specific user's details.
Inputs	user_id;
Detailed Descr.	Admin can choose a specific account and they can edit any of their details if they feel the information inputted is inappropriate.
Output	none

Process #	39
Title	showAdminControls
Brief Descr.	Displays admin controls.
Inputs	user_id;
Detailed Descr.	If the user is logged in as an admin, it should show extra admin controls.
Output	none

Process #	40
Title	isUserAdmin
Brief Descr.	Checks if user_role is an admin
Inputs	user_id;
Detailed Descr.	Checks if the account logged in has their role set to admin.
Output	boolean;

Process #	41
Title	showAccounts
Brief Descr.	Admin can show all accounts from the accounts table in the db.
Inputs	user_id;
Detailed Descr.	Passes user_id to function isUserAdmin expecting return value true. Shows all accounts from the accounts table in the db.
Output	Array of accounts.

Process #	42
Title	selectUser
Brief Descr.	Shows users profile information.
Inputs	user_id; target_id;
Detailed Descr.	Passes user_id to function isUserAdmin expecting return value true. Show profile table for the target_id(user_id) from the db.
Output	Array of user info

Process #	43
Title	adoreUser
Brief Descr.	User can adore (like) another user.
Inputs	user_id; adored_user_id;
Detailed Descr.	Updates entry into Adore table in db. Enters user_id and adored_user_id in the table along with the date and a unique adore_id;
Output	none

Process #	44
Title	ignoreUser
Brief Descr.	User can ignore (dislike) another user.
Inputs	user_id; ignored_user_id;
Detailed Descr.	Updates entry into Ignore table in db. Enter's user_id and ignored_user_id in the table along with date and a unique ignore_id.
Output	none

Process #	45
Title	getAllAdores
Brief Descr.	Gets all the users who have adored (liked) the current user.
Inputs	user_id;
Detailed Descr.	Gets the user_id's of the users that have adored the current user. Does this by checking if the initiator_id in the Matches table has set the current user status to "adored".
Output	Array of adore_id

Process #	46
Title	getMessages
Brief Descr.	Gets messages from the target user.
Inputs	user_id; target_id;
Detailed Descr.	User queries messages table in db for messages between user and target which is returned in an array of messages.
Output	Array of messages

Process #	47
Title	sendMessage
Brief Descr.	User sends a message.
Inputs	user_id; target_id;
Detailed Descr.	User sends a message to the target user. Message added to messages table.
Output	None

Process #	48
Title	deleteMessage
Brief Descr.	User can unsend a message.
Inputs	user_id; message_id;
Detailed Descr.	User can unsend a message that they sent to a specific user. Should be then deleted from the Messages table.
Output	None

Process #	49
Title	addMatch
Brief Descr.	Add match to the Matches table in db.
Inputs	initiator_id; target_id;
Detailed Descr.	Updates entry into Match table in db. If both users adore each other, a match_id will be generated and can later be queried from.
Output	none

Process #	50
Title	removeMatch
Brief Descr.	Remove a match in the Matches table in db.
Inputs	user_id; match_id;
Detailed Descr.	If a user removes a match (unmatches) with a matched user, the match_id will be removed from the db.
Output	none

Process #	51
Title	getAllMatches
Brief Descr.	Gets all users matches.
Inputs	user_id;
Detailed Descr.	Queries the database to get the match id's of the current user.
Output	none

Process #	52
Title	logOut
Brief Descr.	Logs user out.
Inputs	user_id;
Detailed Descr.	Takes the user back to homepage.
Output	none

Process #	53
Title	showEvents
Brief Descr.	Shows events on campus.
Inputs	none
Detailed Descr.	Displays events of the week happening on campus.
Output	none

Process #	54
Title	showDeals
Brief Descr.	Shows deals on campus.
Inputs	none
Detailed Descr.	Displays deals that are happening on campus i.e 2 coffees for €5, pints for €4.
Output	none

Process #	55
Title	showSearchFilters
Brief Descr.	Shows the different search filters that can be applied to the search.
Inputs	none
Detailed Descr.	When the search button is clicked, a dropdown appears with different selections you can tag that allows you to search for users based on your selection.
Output	Array of filter options

Process #	56
Title	searchUser
Brief Descr.	Query db to return a list of accounts using search filters.
Inputs	filter;
Detailed Descr.	Query the db to return user accounts who who match list of the inputted filters by the user i.e age, hobbies, college year, college course etc.
Output	Array of accounts that match the defined search criteria

Process #	57
Title	displayMenuDropdown
Brief Descr.	Displays the menu dropdown for different pages.
Inputs	user_id;
Detailed Descr.	When a user clicks the dropdown selection, all of the pages that are accessible to their role are displayed.
Output	none

Process #	58
Title	openPage
Brief Descr.	Displays the webpage selected.
Inputs	none
Detailed Descr.	When a user clicks a page based on displayMenuDropdown, they will then be loaded into their selected page.
Output	none