

IMPRESSIONS

Project Part 2

Samiksha Goyal N18819733

Kunal Relia N14724679

Introduction : Impressions

Impressions is a free web application that requires registration to use. Users can upload, save and manage images—known as pins through collections known as pinboards. Impressions acts as a personalized media platform. Users can browse the content of others on the main page. Users can then save individual pins to one of their own boards using the "Pin It" button, with Pinboards typically organized by a central topic or theme. Users can personalize their experience with Pinterest by pinning items, creating boards, and interacting with other members.

Content can also be found outside of Pinterest and similarly uploaded to a board via the "Pin It" button. An account can be created and accessed by providing username and email.

Quick links to Pinterest include the "pin it" button that can be added to the bookmark bar of a web browser, "Follow me" and "Pin it" buttons added to personal .Users should be aware of certain terms and functions when using Pinterest.

A "**pinboard**" is where the user's pins are located. Users can have several boards for various items such as quotes, travel or, most popularly, weddings.

A "**pin**" is an image that has either been uploaded or linked from a website. Once users create boards and add pins, other users can now *repin*, meaning they can *pin* one user's image to their board as well. Once the user has set up their account and boards, they can browse, comment, and like otherpins. If a user wants to turn an image online into a "pin," there are a few simple steps to do so.

First, the user must select the image to pin. Then, the user enters an image URL into the link box. Next, the user selects the exact image they want to pin, and place it on the designated board.

Other users can now click on the pin to see which board the image is pinned in, who pinned the image previously, where the original pin is from, and who has liked, commented, or repinned the image.

Users should also keep in mind that Pinterest stores actual copies (not just thumbnails and links) of the images being pinned.

The images users pin, define their identities and boards they view. Pinterest then modifies a user's homepage to reflect toward his or her interest.

A basic summary of key features are :

Sign up: User can sign up by providing username and email, and set a password. He can then can login using the same.

Profile: User can create his profile and edit and update it.

Friends: user can send and receive friend requests which facilitates another level of privacy.

PinBoards: A board is where you collect your pins. For example, you can have a board named Food where you can pin all your food related pictures. By default a board is public.

Tags: user can add tags or keywords to facilitate key word searching for his pins.

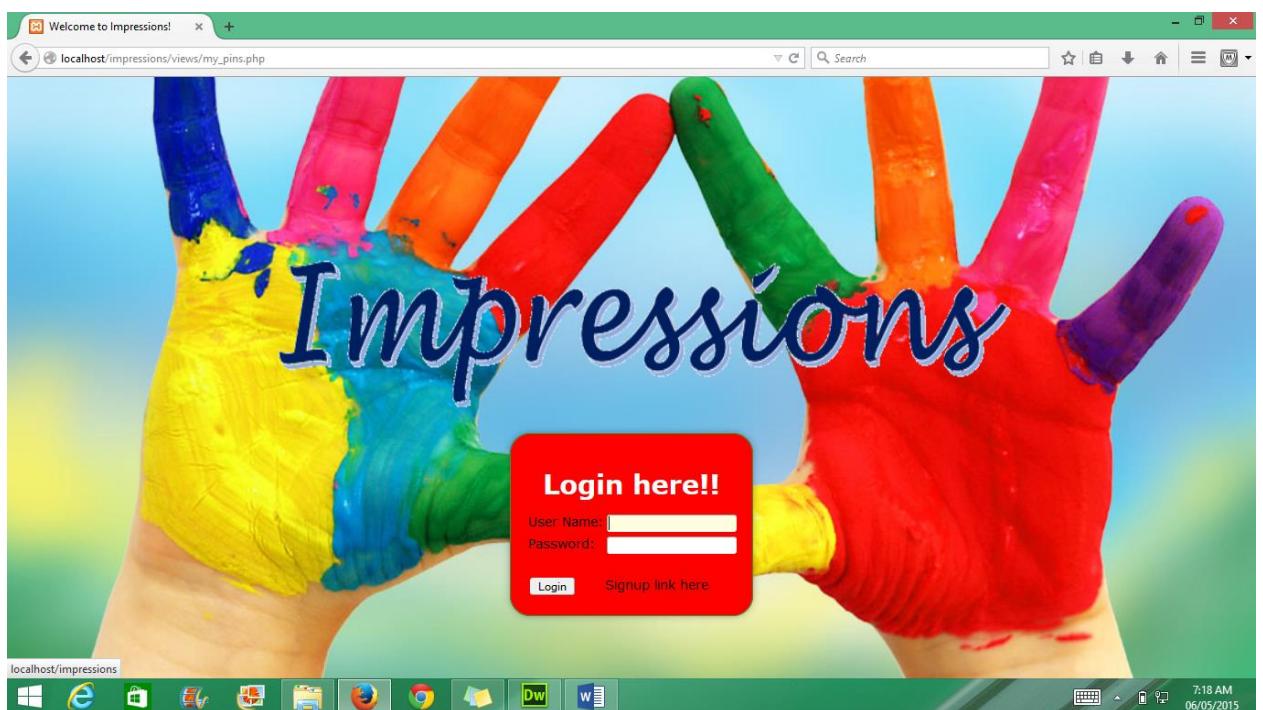
Follow: A user can follow another user or one or more of his boards.

Follow Stream: User can define one or more streams of his interest which will consolidate All the pictures that he chooses from the boards that he follows or pictures that the system will find him for his selected keywords.

Search: User can search for pins or boards or users by providing a keyword.

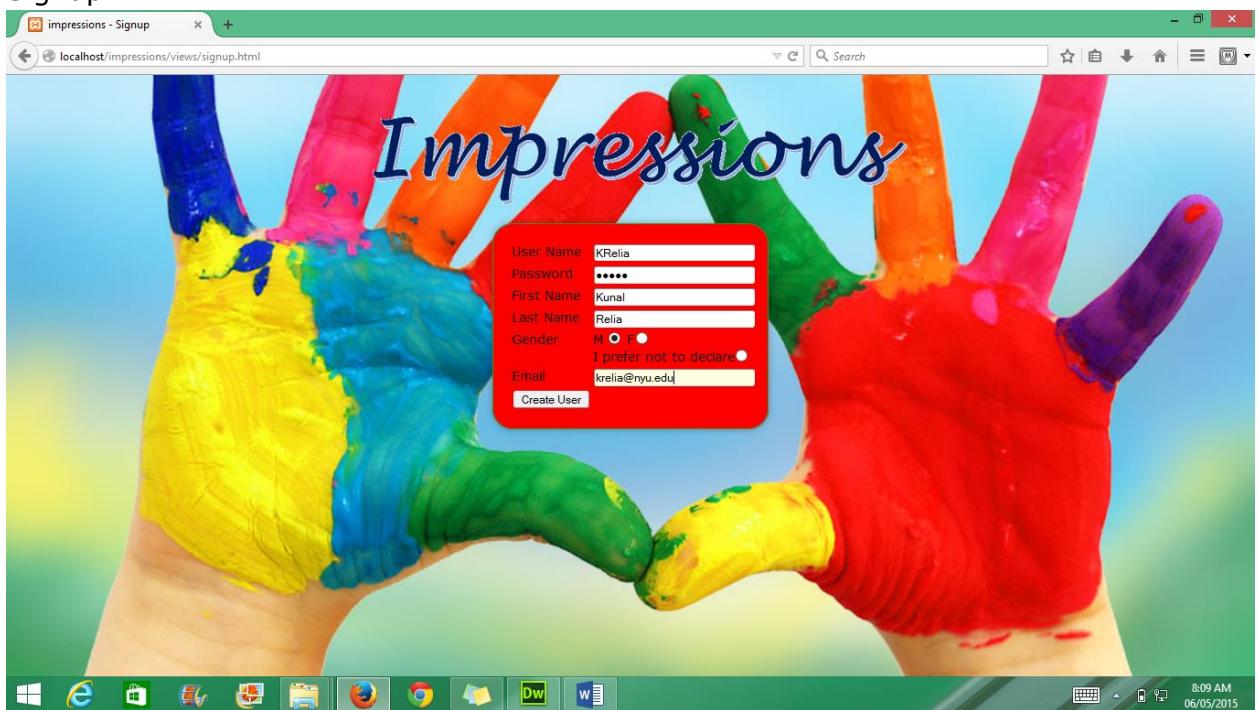
Implementation of above functionalities :

a) Login :



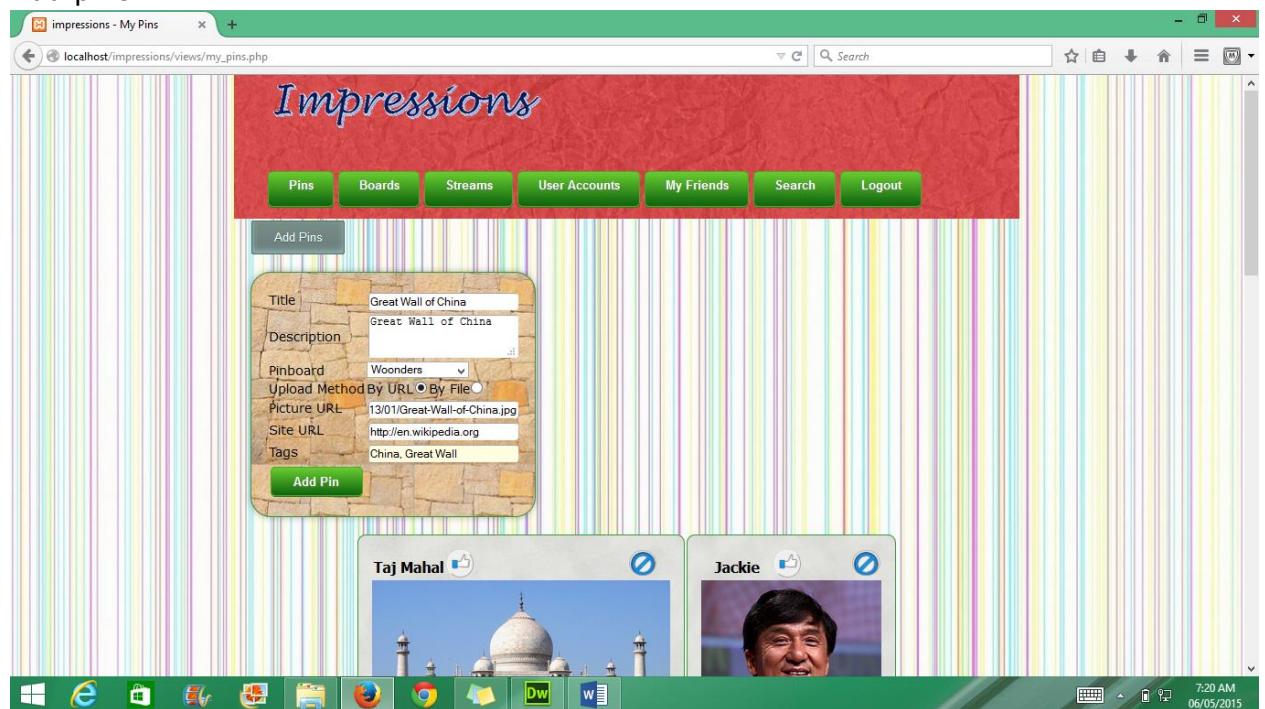
The home page of the website is a dynamic one working on the ideology of Google. Just like Google has a new doodle every day, our website's homepage will have a new page background everyday welcoming each and every user with the most liked pic of the previous day. The login form also changes the colour so as to match with the background image. Our database has the functionality which helps us find the most liked pic on any given day.

b) Signup :



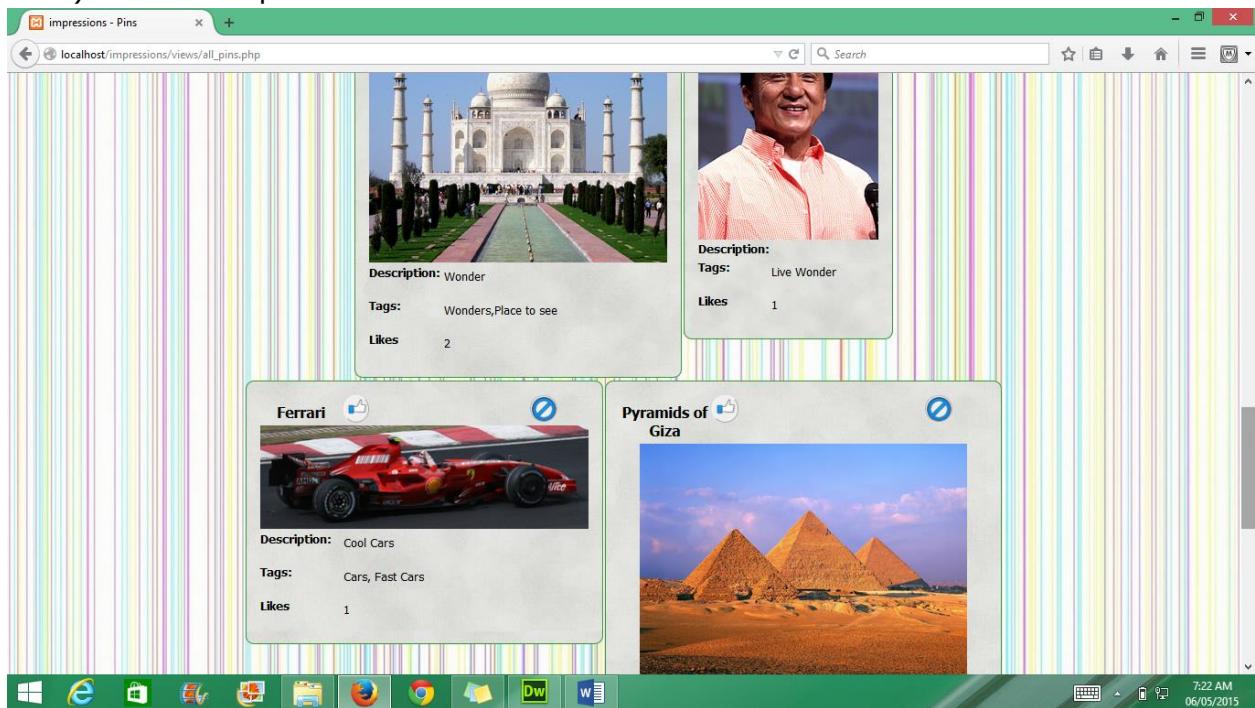
The sign up page for new users is designed in the simplest way possible so as to make the process of signing up very easy.

c) Add pins:



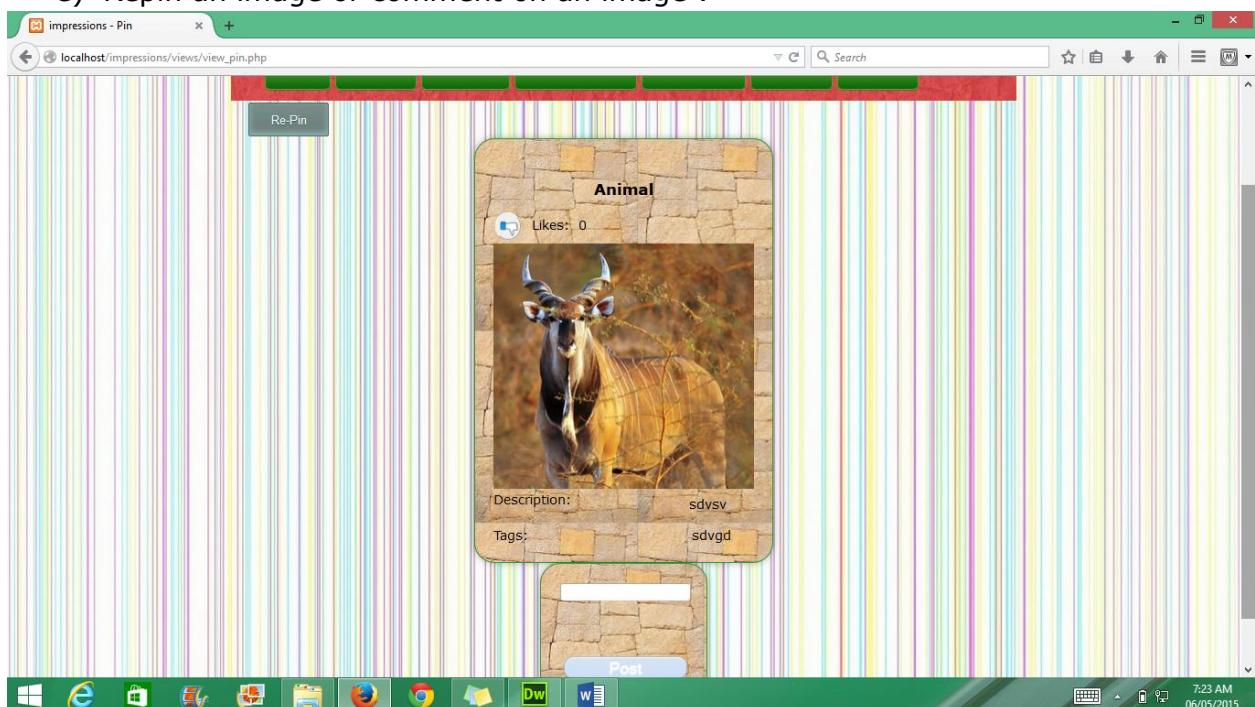
The user's home page will display all the pins in a sorted order. The pins displayed will also be from boards that are followed by the user. Here, a click of button will help user upload a new picture and pin. The user can either upload a file or copy paste the image's URL to pin the picture.

d) Search for pins:



The user can search for all the pins that are part of the website.

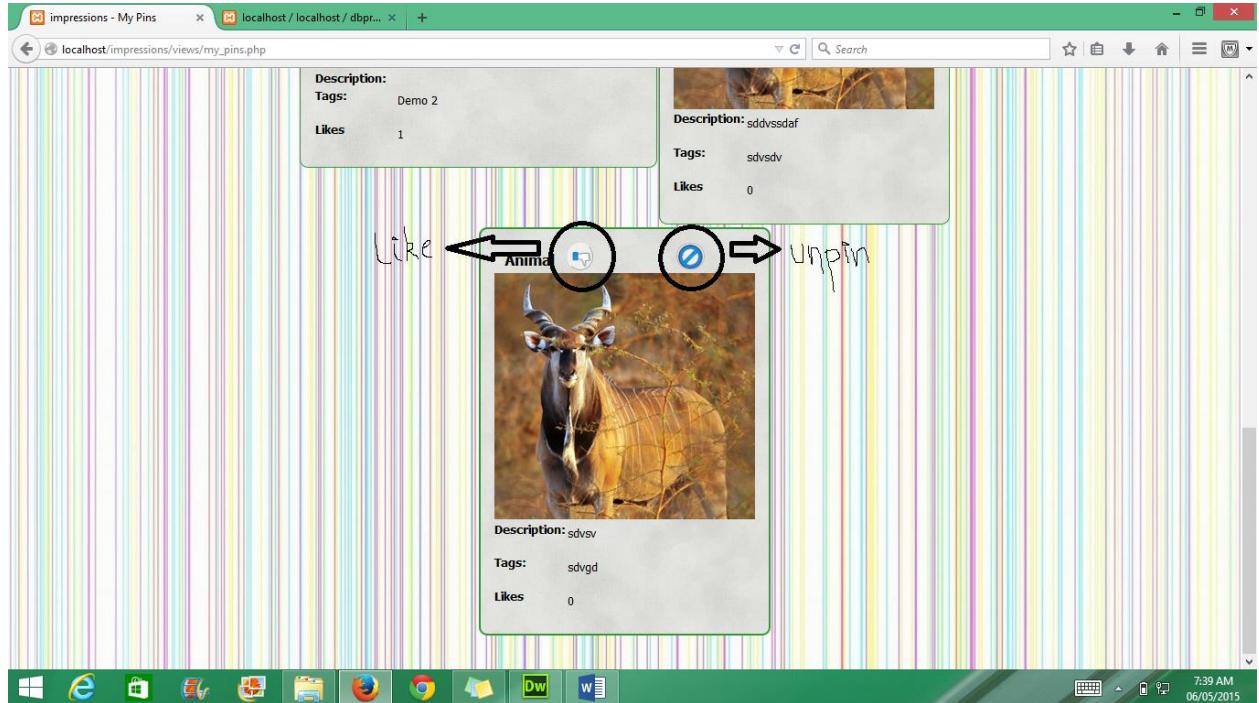
e) Repin an image or comment on an image :



On clicking any pin, the user will be able to look at the details of the pin and he can re-pin it on his own board.

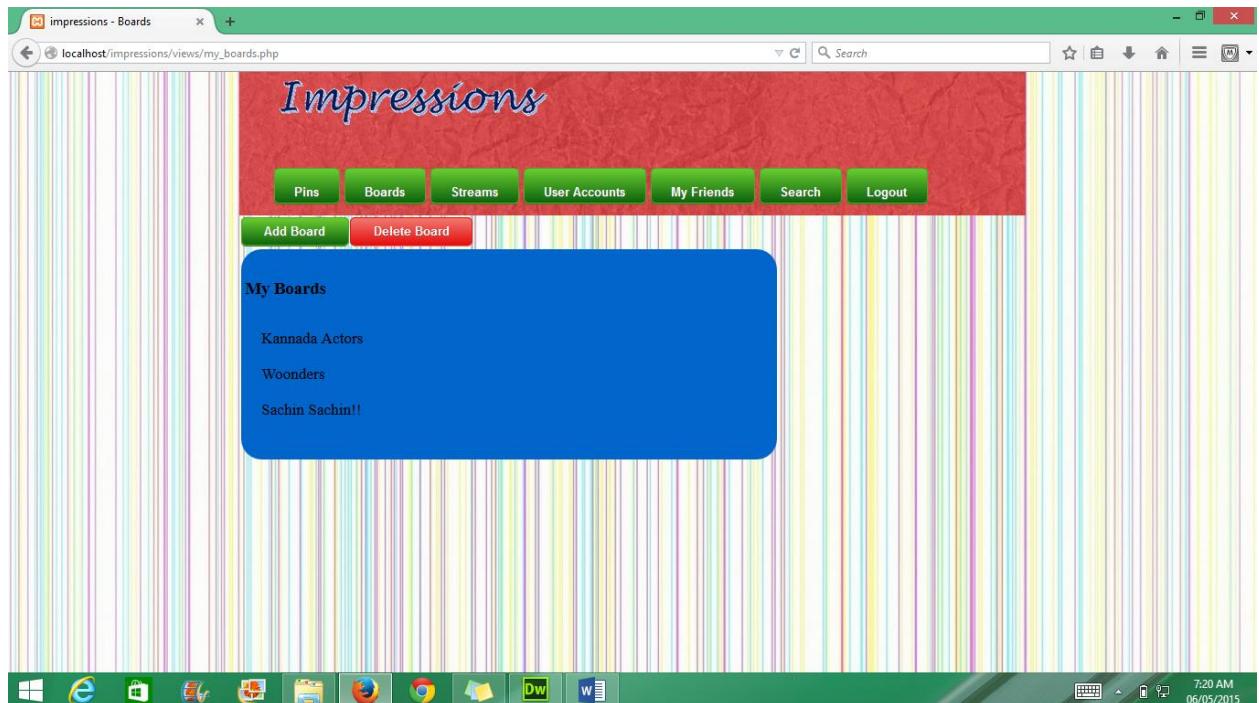
Further, the user can also comment on a pin if the original pinner has given the authority.

f) Liking and unpinning:



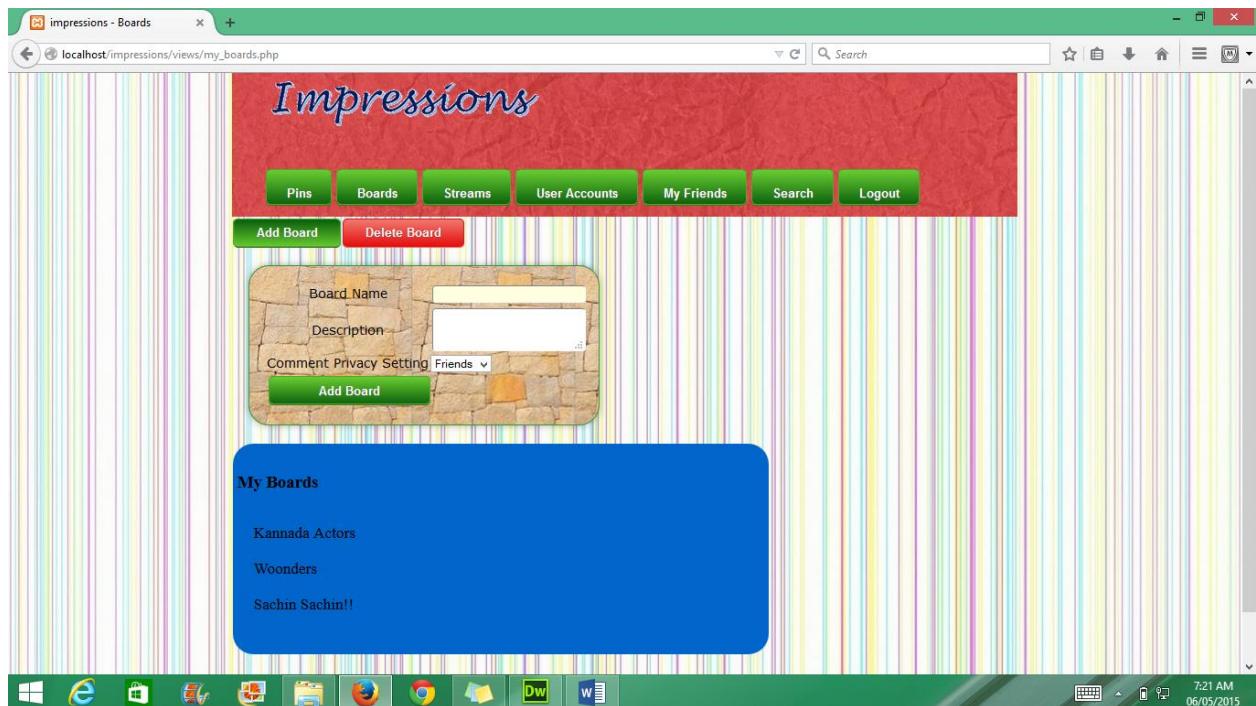
The user can also like a pin, be it pinned by user or some other user. Further, a pinned image can be unpinned by the user.

g) User's boards :



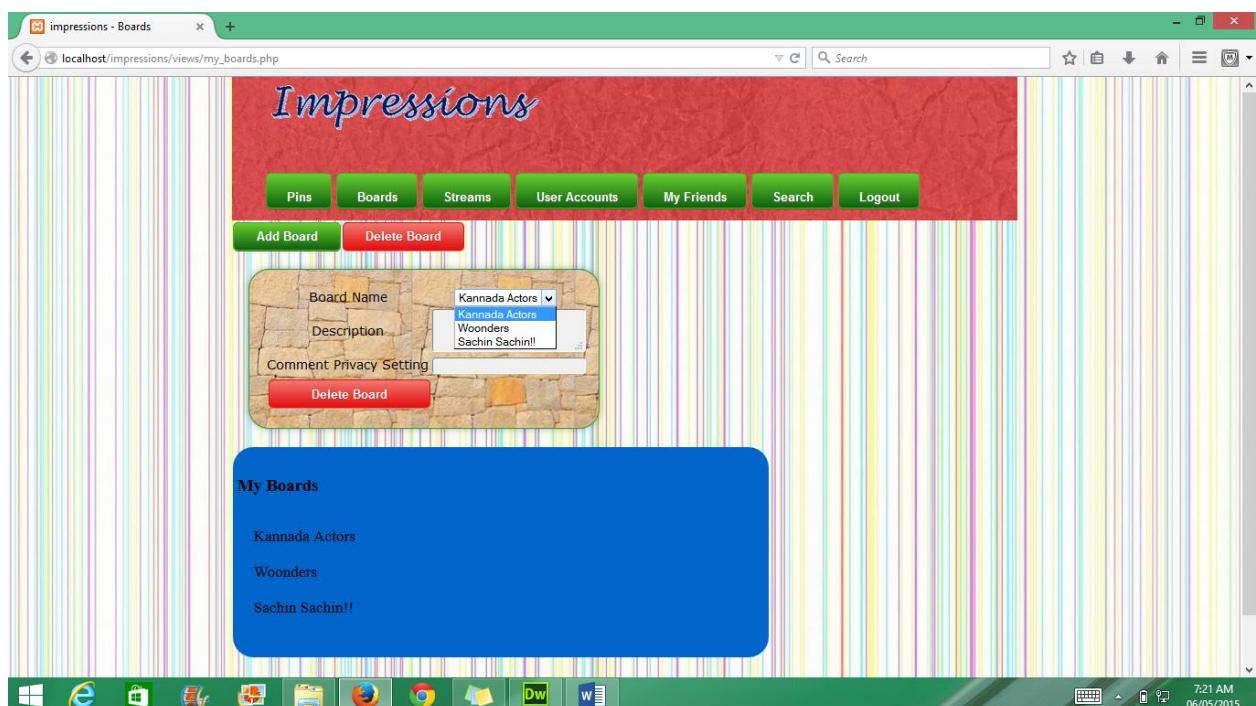
The "My Boards" button will enlist all the boards that are created by the user. Clicking on it will redirect the user to all the pins pinned to that particular board.

h) Add a new board



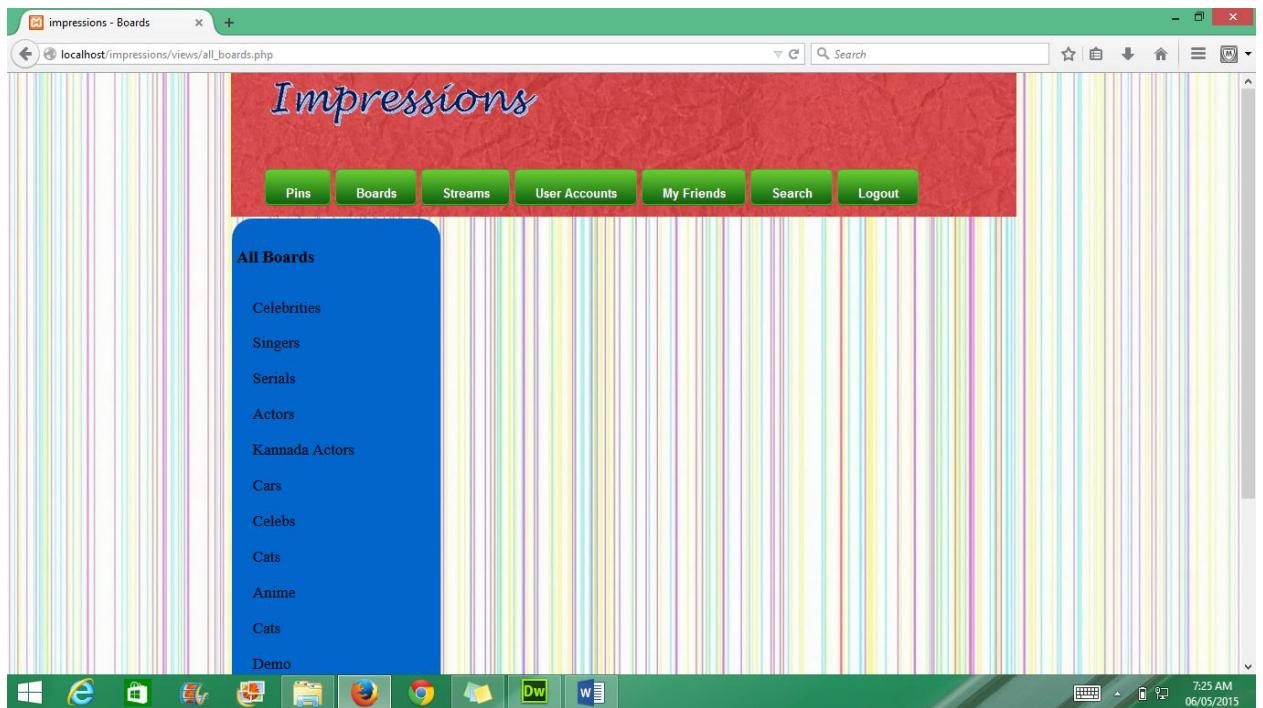
The user can add any number of new boards for his reference.

i) Delete a selected board:



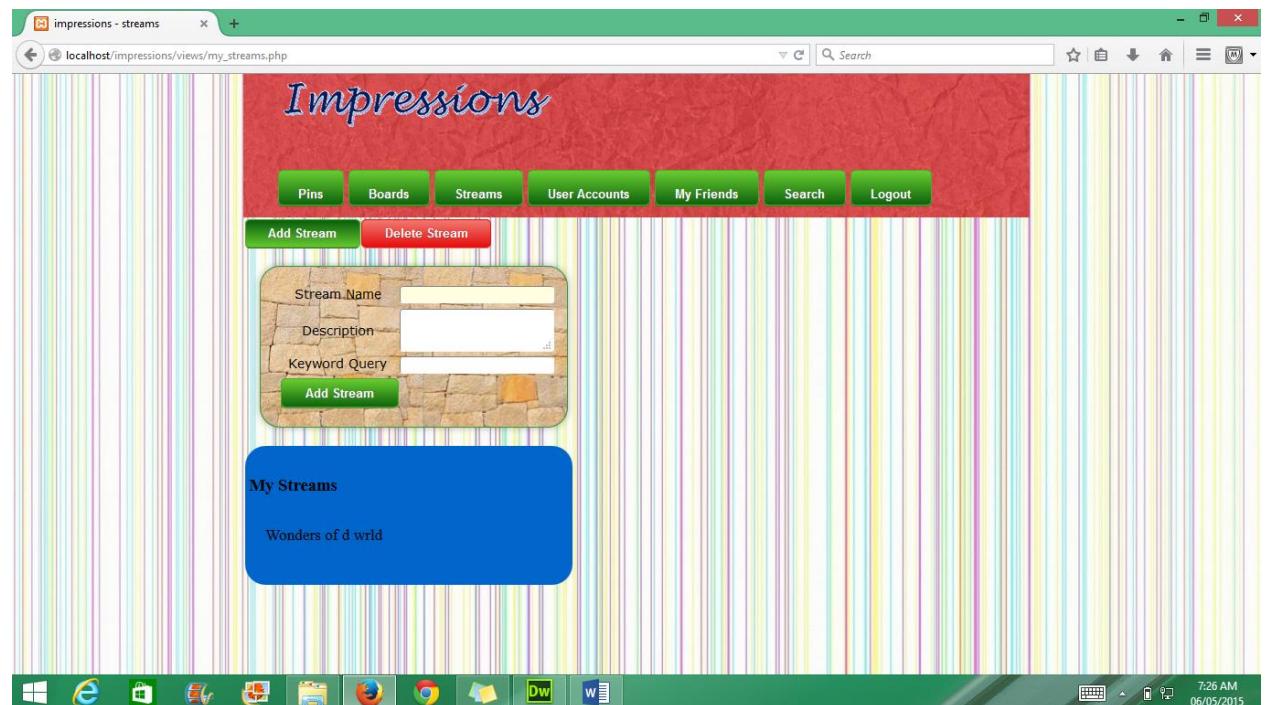
The user can delete a board from his account.

j) Search for a board :



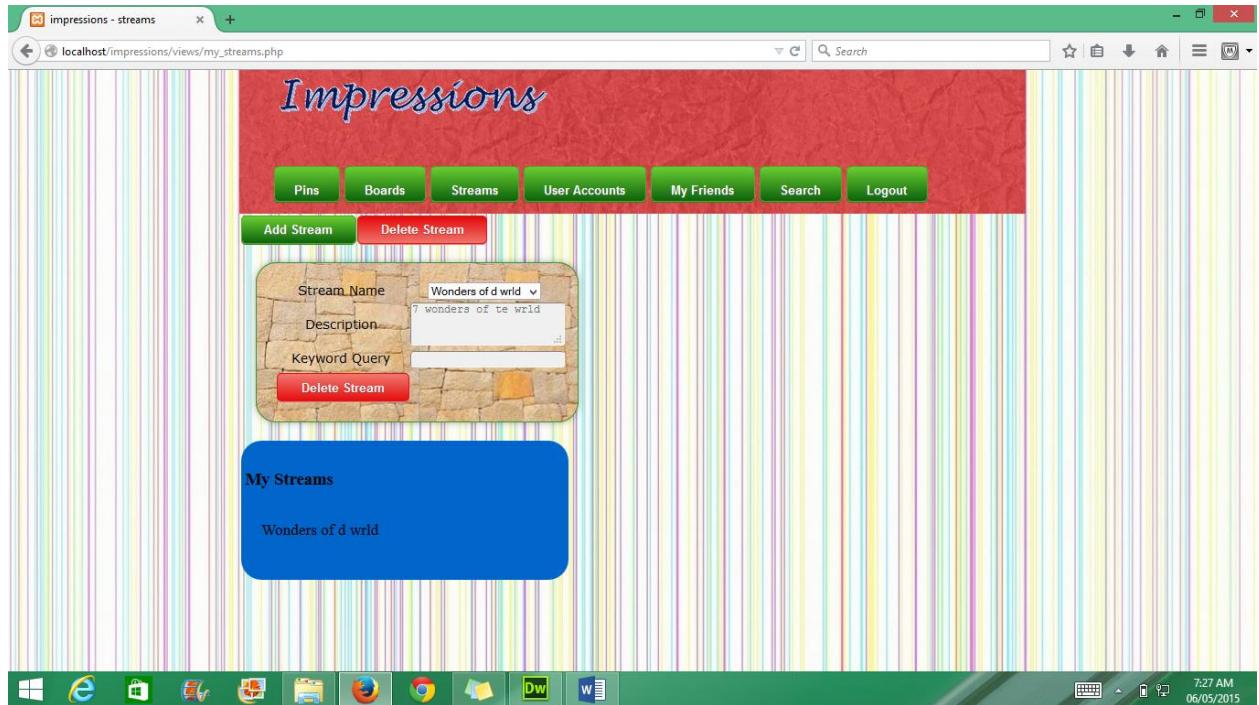
The user can search for a board from all the boards that are part of the website.

k) Add a new stream and list of User's Stream :



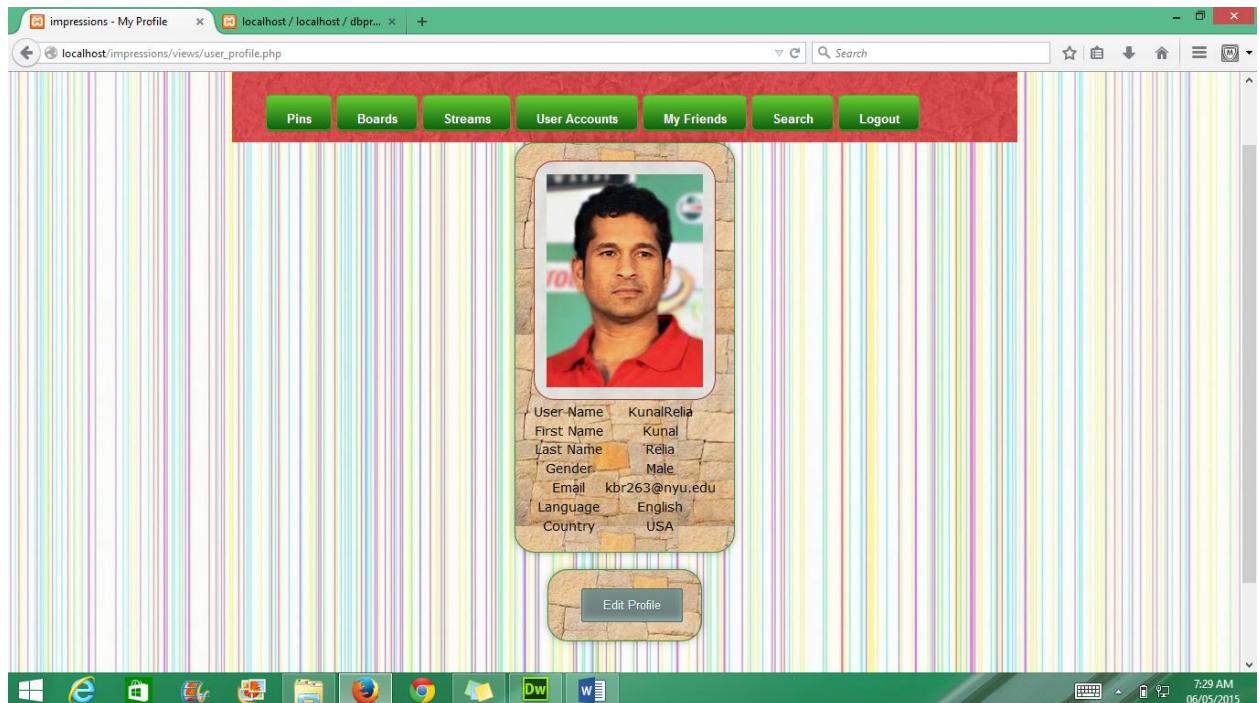
The user can create a stream and add boards to it. This functionality also allows the user to follow boards.

I) Delete a Stream :



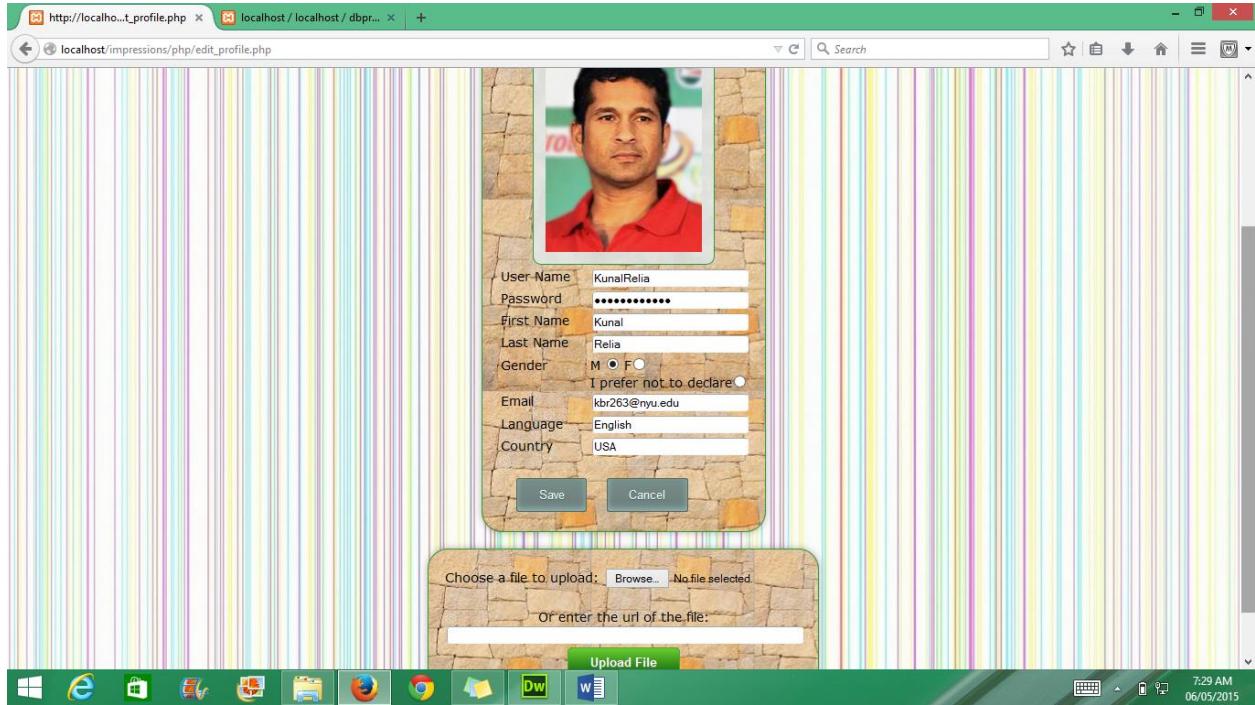
The user can delete a created stream.

m) User account information :



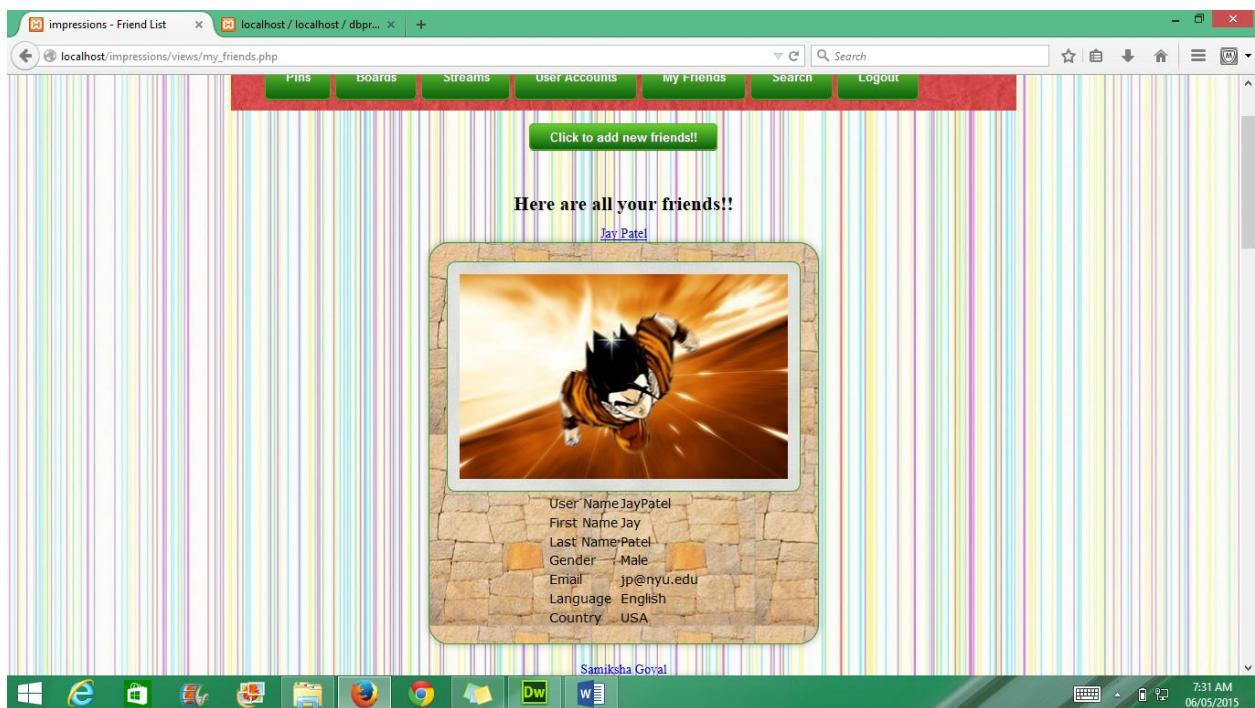
On clicking User Accounts tab, the user can view his own profile information.

n) Change user details and profile picture :



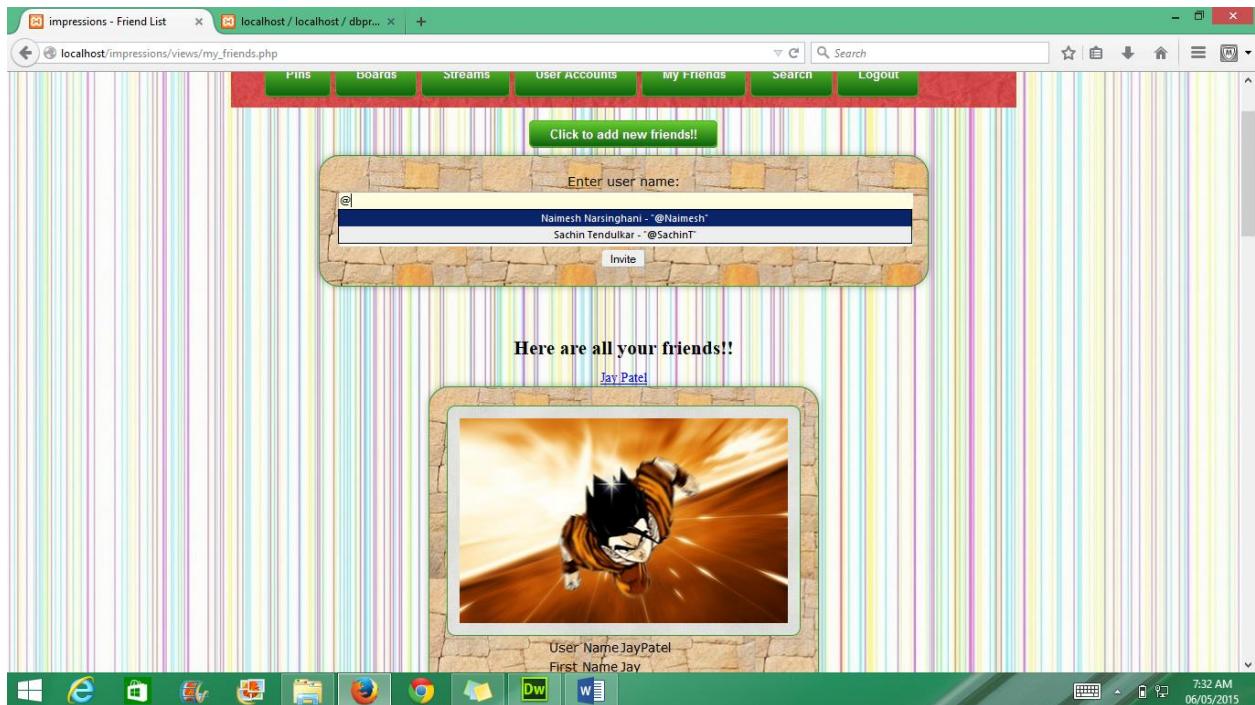
On clicking the “edit profile” button, the user can make several changes to his account information. A profile pic can also be uploaded here and changed.

o) Friend List :



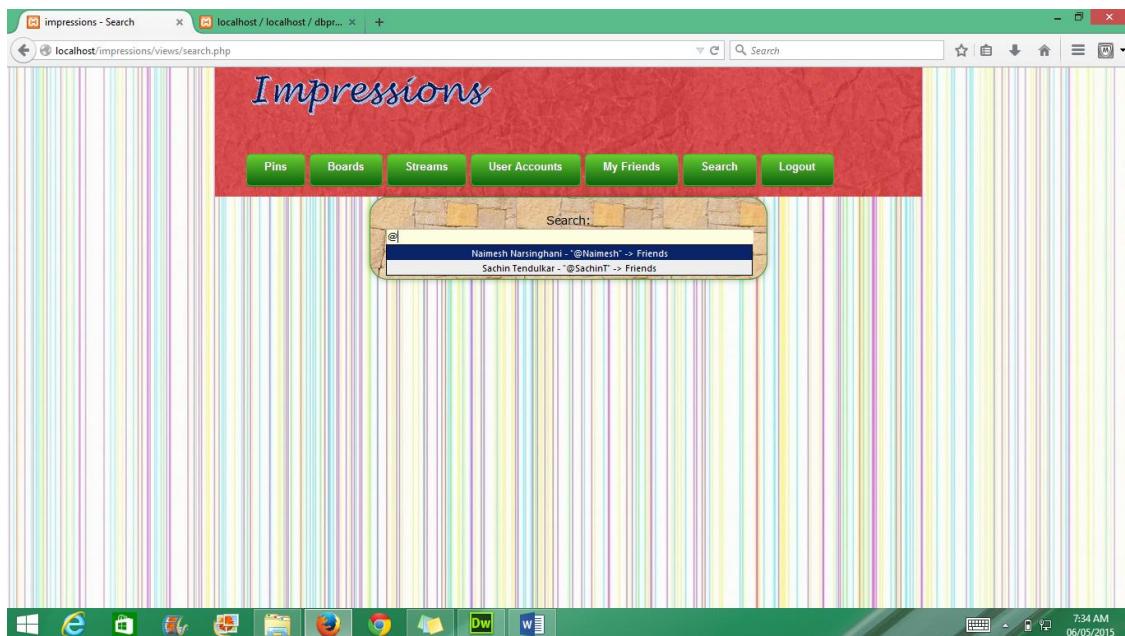
Clicking “My Friends” will enlist all the people who are friends of the logged in user. Clicking on the name will redirect the user to the account information of the selected friend.

p) Add a new Friend using "@" tag :



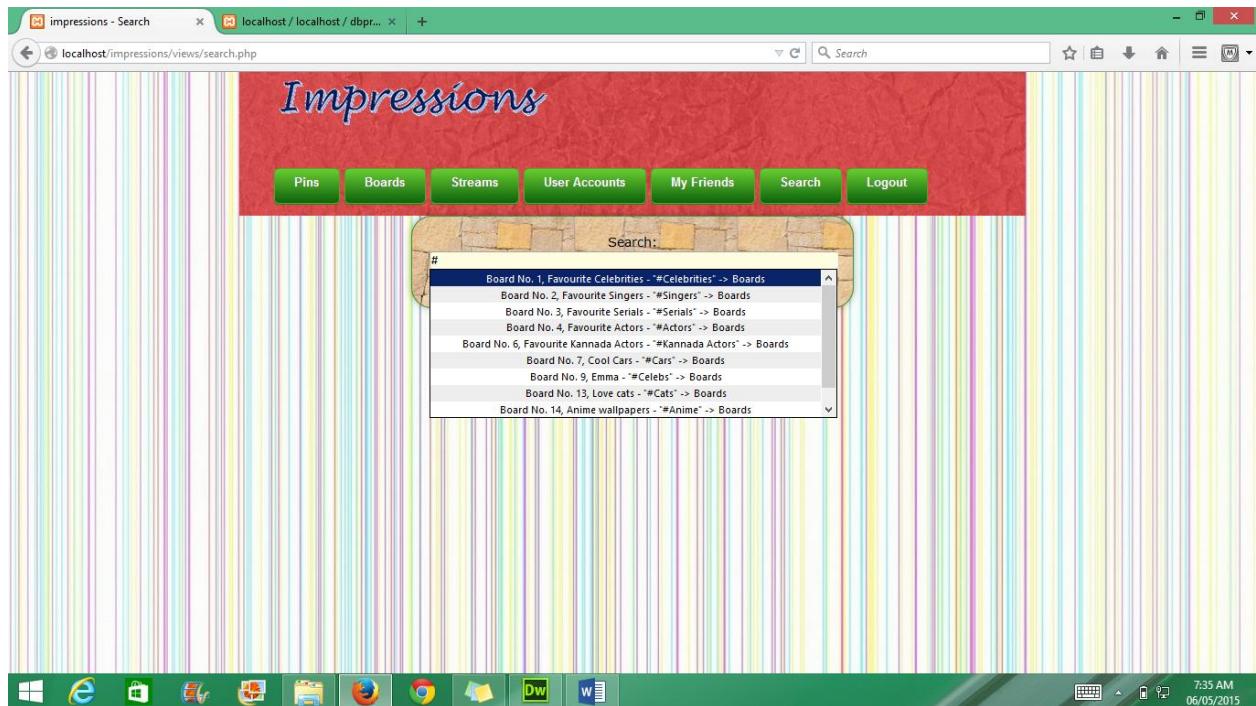
A friend request can be sent to an user who is yet not a friend of the logged in user. A "@" attribute is used to directly search for a friend whose ID is known. For regular users, a Facebook like dropdown feature is used (exclusively designed by us) where in typing a name will display all the friend suggestions related to the string entered. The list will display those names only who are yet not friend of the logged in user.

q) A customized search bar – "@" tag for directly searching friends



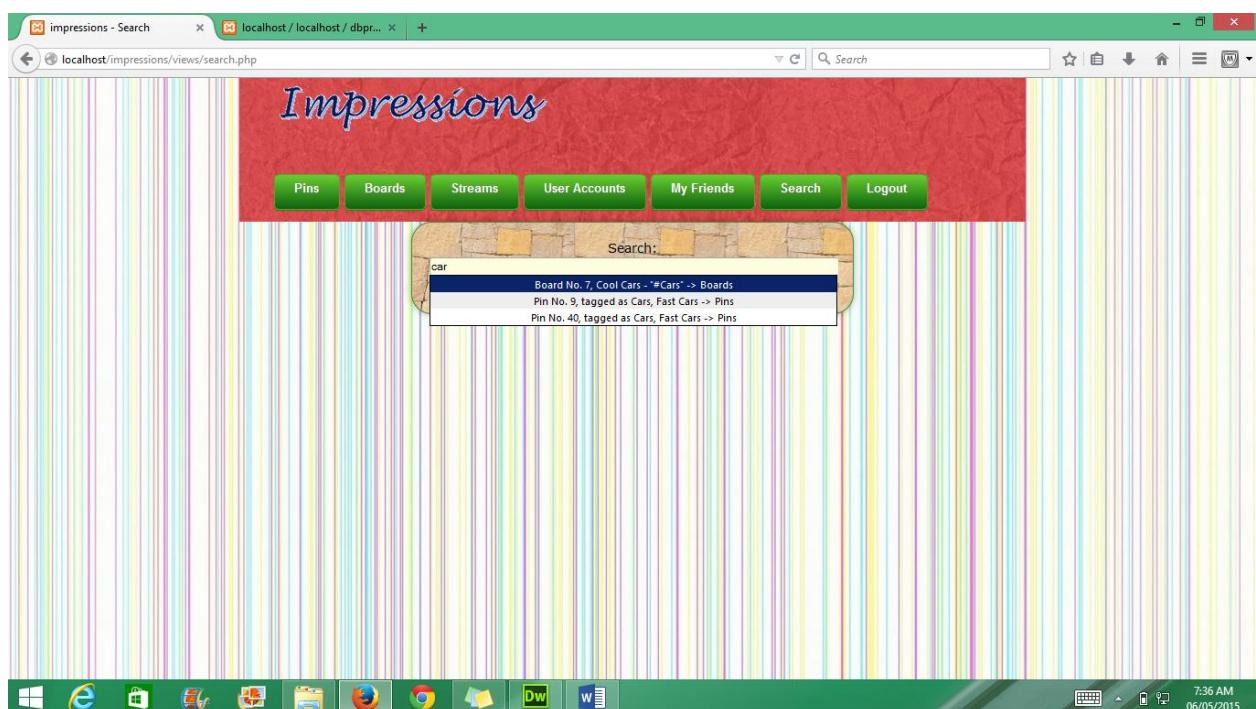
A common search bar has been given to the user where he can search for any content from one single place, be it a friend, be it a board or be it a pin. Added functionality of "@" will help user to directly search for a friend bypassing all other fields.

- r) A customized search bar – "#" tag for directly searching boards



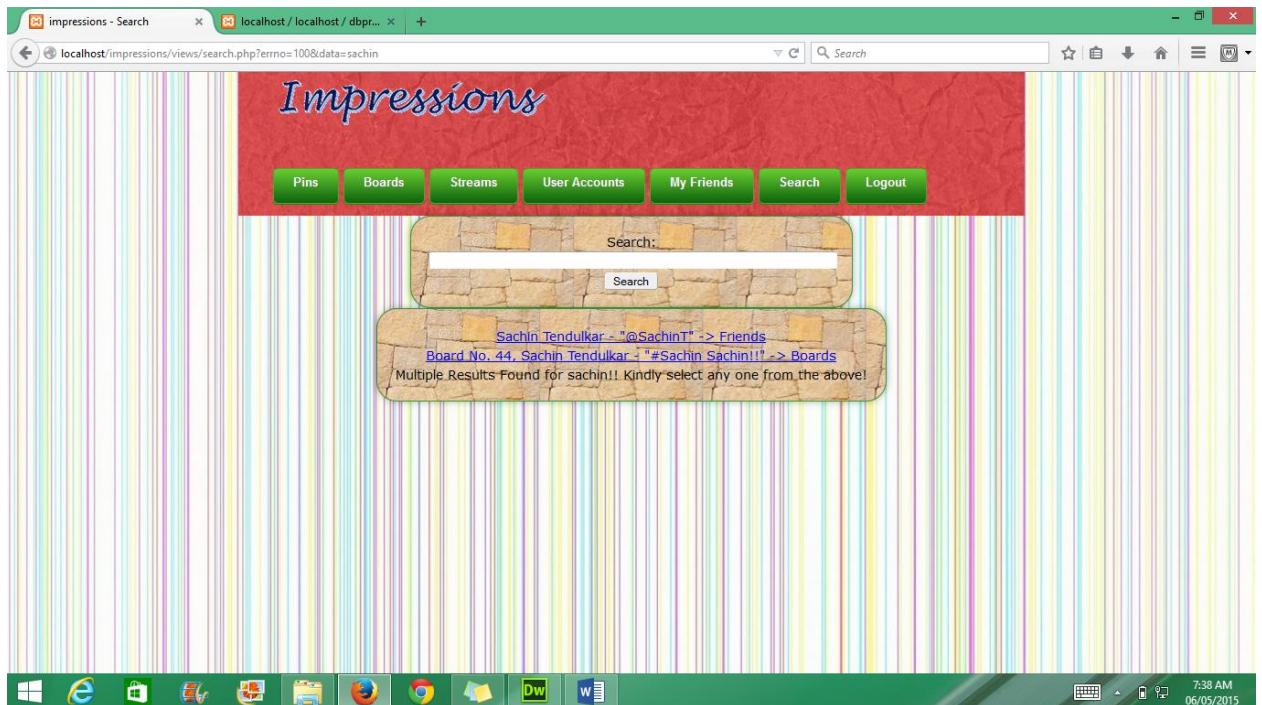
Twitter like "#" (hashtag) is used to directly search for boards from the database. The user can implicitly search for a board by using a "#" followed by a board's name.

- s) A customized search bar – one field for searching all attributes



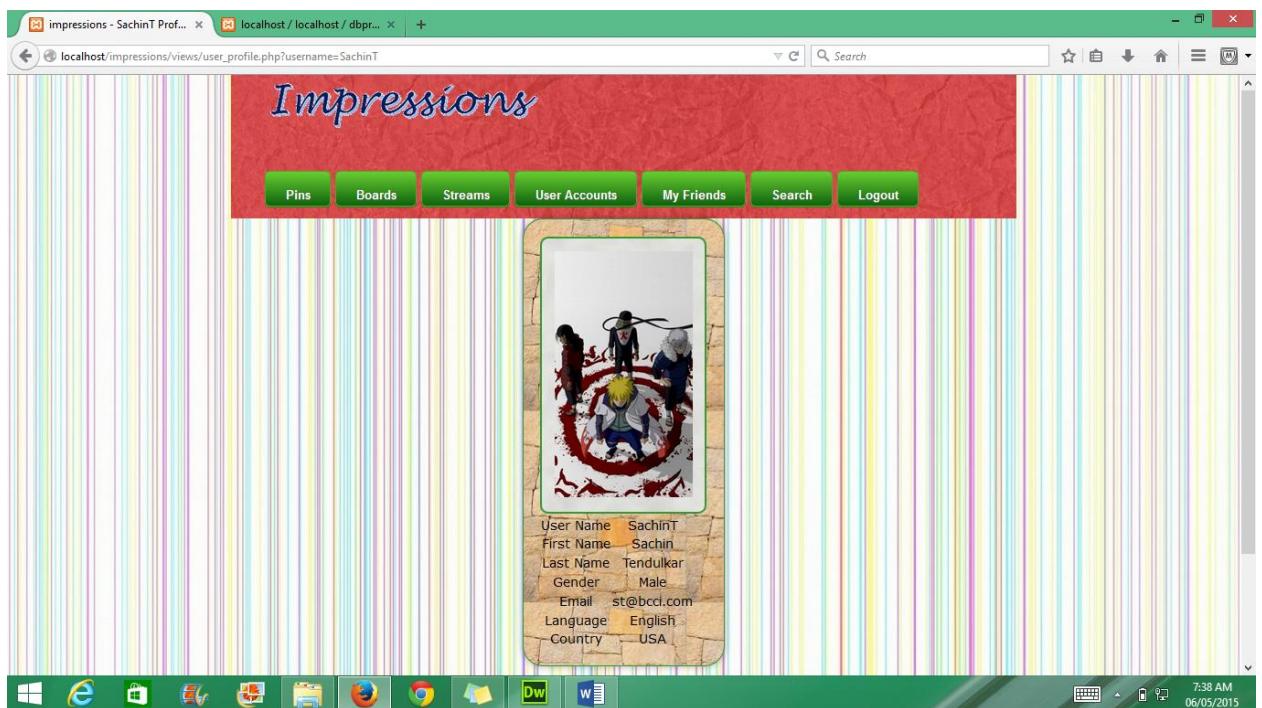
The user also has a universal search option wherein he can search everything related to a keyword, be it pin boards, users or pins.

t) Multiple results found for the search Keyword :



If we get multiple search results for a keyword , a list of all corresponding results will be displayed to enable the user to select and redirect to the desired page.

u) On clicking friends option of search, user is redirected to profile



On selecting a friend from a search, the user will be redirected to the profile information of the selected user. Similarly, user is redirected to a pin or a board.

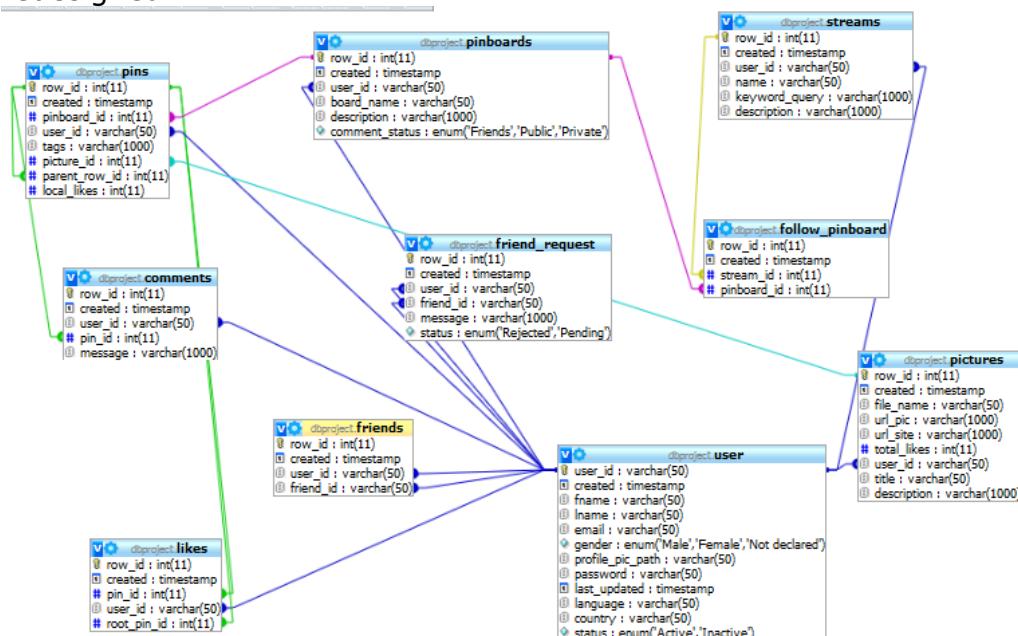
v) Screen Shot of the final database

The screenshot shows the phpMyAdmin interface for a MySQL database named 'dbproject'. The left sidebar lists tables: comments, follow_pinboard, friends, friend_request, likes, pictures, pinboards, pins, streams, and user. The 'user' table is selected. The main area displays the 'user' table with the following data:

	user_id	created	fname	lname	email	gender	profile_pic_path	password	last_updated	language	country	status
<input type="checkbox"/>	AbhiPillai	2015-04-15 00:33:26	Abhishek	Pillai	ab@nyu.edu	Male	NULL	abhpillai	2013-11-24 19:05:54	English	USA	A
<input type="checkbox"/>	Dhishan	2015-04-15 00:35:04	Dhishan	Amaranthika	da@nyu.edu	Male	NULL	987654	2013-11-24 19:07:01	English	USA	A
<input type="checkbox"/>	JayPatel	2015-04-15 00:21:52	Jay	Patel	jp@nyu.edu	Male	NULL	12345	2013-11-25 02:56:12	English	USA	A
<input type="checkbox"/>	Delete KK	2015-04-15 00:20:50	KratiKa	Kasliwal	kk@nyu.edu	Female	NULL	Kk	2013-11-24 19:08:52	English	USA	A
<input type="checkbox"/>	KunalRelia	2015-04-15 00:19:36	Kunal	Relia	ktr263@nyu.edu	Male	NULL	kunarelia91	2013-11-24 18:58:40	English	USA	A
<input type="checkbox"/>	Naimesh	2015-04-15 00:21:21	Naimesh	Narsinghani	nin212@nyu.edu	Male	NULL	nin212	2013-11-24 19:04:37	English	USA	A
<input type="checkbox"/>	SachinT	2015-05-01 04:59:05	Sachin	Tendulkar	st@hcci.com	Male	NULL	st	2015-05-01 04:59:05	English	USA	A
<input type="checkbox"/>	Sgoyal	2015-04-15 00:35:27	Samiksha	Goyal	sg@nyu.edu	Female	NULL	sg1111	2013-12-13 05:39:20	NULL	NULL	A

Below the table, there are buttons for 'Check All / Uncheck All With selected', 'Change', 'Delete', and 'Export'. The bottom navigation bar includes 'Query results operations'.

w) Revised Relational Schema according to which the database has been redesigned



Implementation of additional functionalities :

- 1) The most interesting feature of this web application is its daily changing background , similar to google doodle . The background of today's image is the most liked picture of yesterday's pins . This makes our users more excited about the likes and keeps the pictures in trend even after posting them for a long time (like rating of the picture) .
- 2) The pins on the homepage of the user are sorted.
- 3) Our web application introduces the users to a new concept of making friends , just like the most popular website Facebook , wherein one user can send a friend request to the other user and can have extended privileges of viewing and commenting all the pins and the boards of the accepted friend .
- 4) The user is given an additional facility of advanced search option where he can search for a friend using "@" or search for a board using "#" (hashtag).
- 5) Another interesting feature enables a common search bar which allows the user to search for multiple items (like a person, pin or a board) just like the search bar function of Facebook.

Conclusion:

This project has enabled us to understand the concepts of the database in a better way and implementing it on a realtime working application has made it even better for us to understand the basic difference between theoretical knowledge and practical implementation. It allowed us to solve some of the most trivial implementation issues , that are certainly going to help in other future endeavors as well . The most challenging part of designing the entire database and normalizing it helped us understand the cost specific metrics of implementations and hence broadened our spectrum of thinking . It was a challenging but a very interesting experience to work on this project.