SOCIALMAP

Software Engineering Project 2016

Aaron O'Brien, Cody Dyer, Diego Gimenez, Tyler Jackimowicz, William Duffie

Project Summary:

Our web application SocialMap is a web app that allows the user the possibility of implementing the user's pictures and videos into Google maps using the locations to visualize the trips and placed visited.
The benefits of using SocialMap is it allows the user to order and locate pictures on Google Maps, as well as get a quick overview of different places the user has visited in the world, inside a country, or state.
The user is allowed to login with Instagram and the last 5 pictures that he or she has taken will be displayed on the top of the page.
Here the user can drag and drop the images into their map giving our web app more diversity into uploading photos.

Key Requirements:

1 Online Access
User: A user went on a trip and they took pictures in different countries, the problem is no one knows where the pictures are geographically.
Response: Create a website in which a map displays where the pictures are taken through Google maps.
    1.1 find a free website domain in order to host our website. This priority is high because
    1.2 We changed over from the free web hosting server to a paid service called iPage. It was a pretty cheap web hosting and it allowed for us to be recognized as a non-malicious site by Instagram.

2 Security
User: A user is afraid that the pictures he/she uploaded could be stolen or viewed by someone that is unauthorized.
Response: Make the user accounts privates and enabling an option for sharing the selected albums to other users.
    2.1 use free tools such as Netsparker and OpenVAS in order to test SQL injection and XSS. Instead we found a way to encrypt the passwords and emails that is inserted into our server.

3 Login
User: A user wants to have a profile in which they can upload and edit their own Social Map.
Response: Create a login and password domain in order for each user to have their own secure page to edit.
    3.1 Create a login screen in order for the user to login to his/her account
    3.2 Find a free website hosting server such as MySQL in order to store the user's login information securely.

4 Social Media
User: A user wants to import pictures from certain social media outlets.
Response: Enable an import option to SocialMap through different social medias such as Facebook and Instagram
    4.1 Utilize Social media plug-ins/APIs. We are trying to utilize the Instagram API in order to be able to look at their map features as well as our own.
        By using their API we will be able to direct you straight to their map and be able to see some of the pictures you took using Instagram.

5 Form to submit pictures
User: A user wants to upload some pictures that he / she got from a friend and do not have a location because they were not taken from his / her phone
Response: Create a form with all the information needed for implementing the picture into Google Maps and enable the option to click in the location where the picture was taken
    5.1 Design a form that enables the user to select a photo from their computer files and submit it on the map at a certain location.
        The way the user inputs the photos is by inserting a url from which the photo is uploaded form

6 FAQ
User: I want to contact the administration about certain questions on the website or how to operate the website
Response: Create a forum that allows the user to ask question or comment on certain aspects of the website.
    6.1 Create a forum that allows the user to ask questions or make comments to the administration.

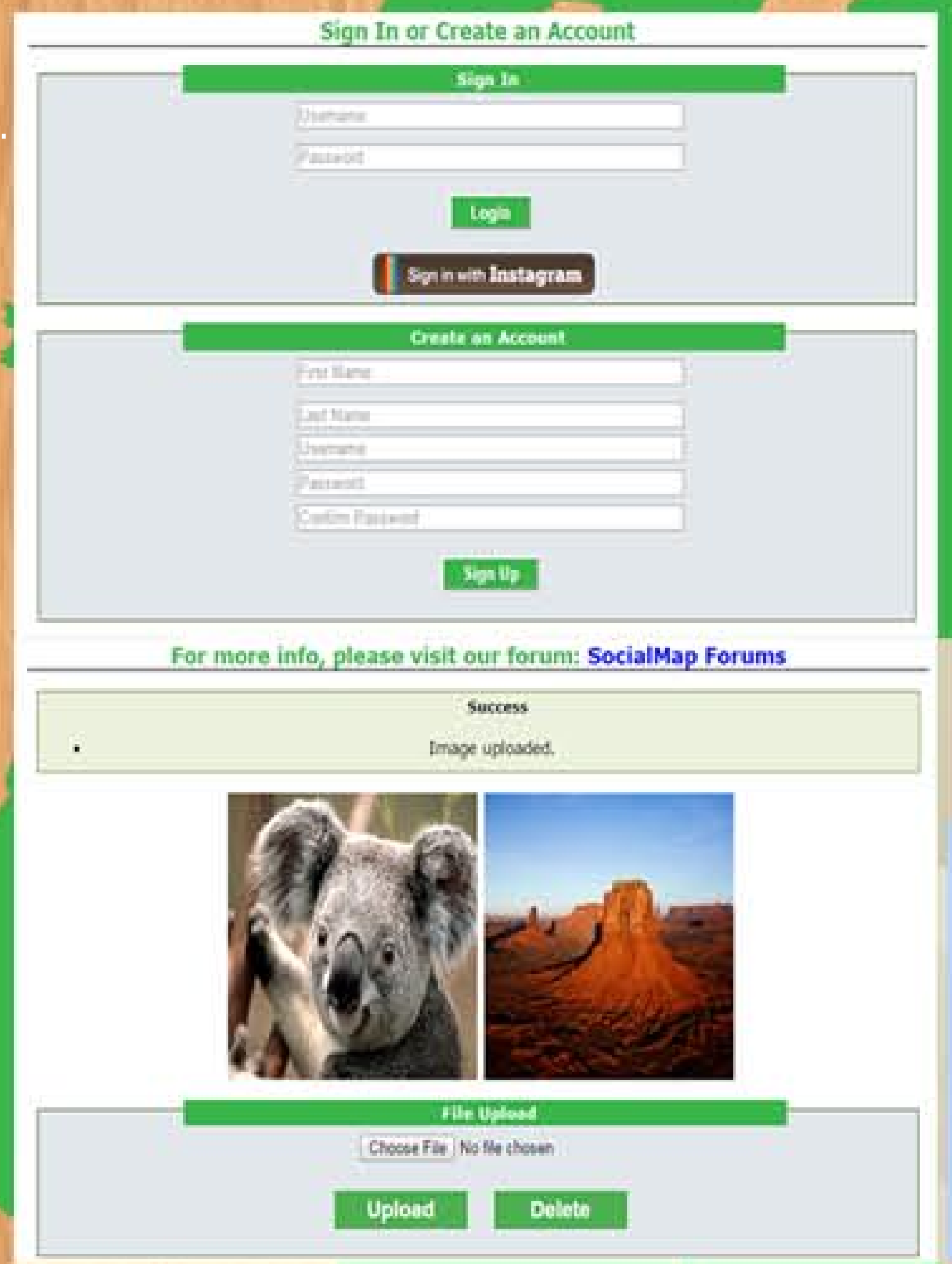
Software Engineering Concepts:

- Security- We were able put an encryption on our passwords for the users that were logging in.
  We also worked with a system that used Sandbox for their security, and we successfully integrated their system with ours.
  - Hashing- We used hashing for the encryption of our passwords
- Inheritance- We used this with anything that used PHP and Javascript. Specifically, we inherited the classes for the Instagram API and the Google Map API.
  At first we struggled with this concept, but we worked diligently enough to get the API's to cooperate with our code.
- Interfaces- At first we worked with a free webhosting server in which we created and held our website. We eventually had to transfer our website over to iPage for API cooperation.
  Working with these different interfaces broadened our horizon when developing our website.
- Validation- We had to use full server side and client side validation that way faulty information could not pass through our system.

Future Aspirations:

- Design an auto-post function that retrieves the user's new photos, and inserts it into the map at the precise location
- Creating an easier and more accessible interface when using the website.
- Being able to challenge or compare with friends within the website.
- More social media plugins (Facebook, Google+, and Twitter).
- Add in video.
- A monthly or yearly collage done automatically and sent to the user via email.
- Access to friends collages.
- An app with the same capabilities as the website.
- Provide a counter of the different numbers of countries or states you visited.
- Wish list of places the user wants to visit

User Interface:


Sign In or Create an Account

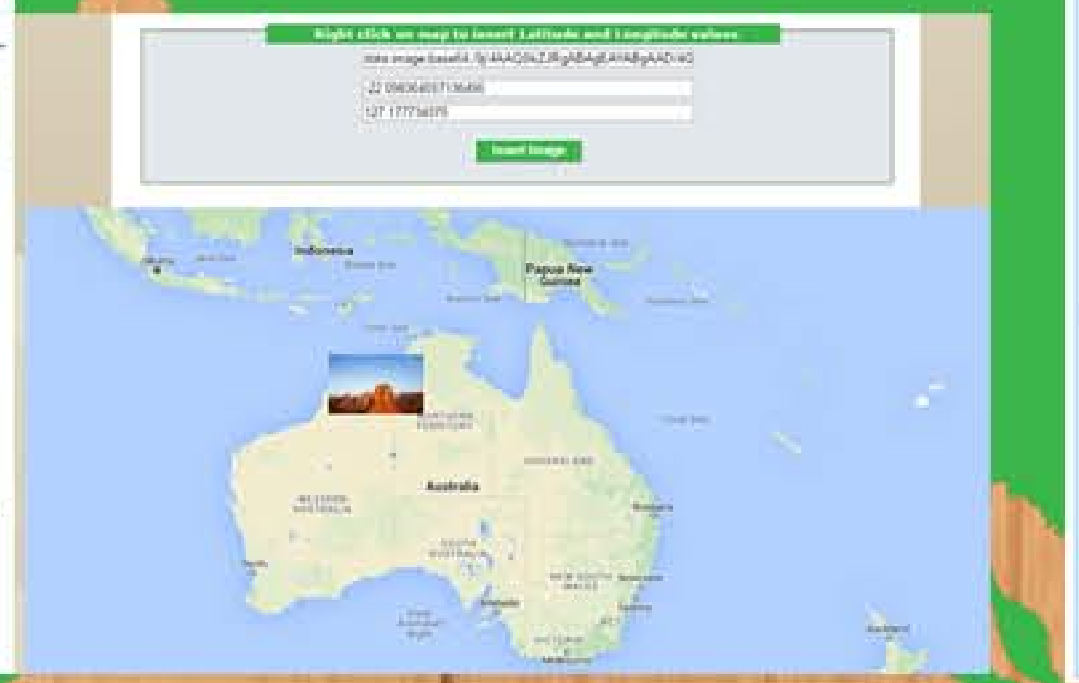
Sign In

Create an Account

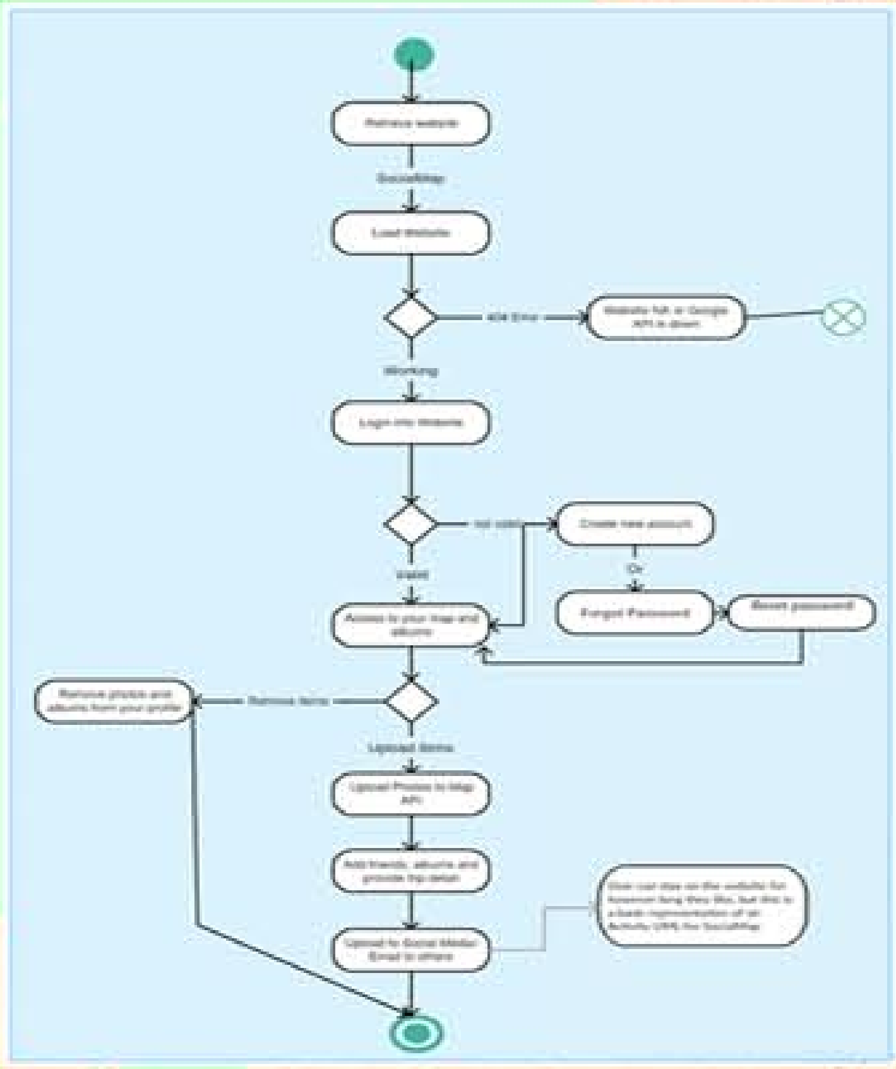
For more info, please visit our forum: SocialMap Forums

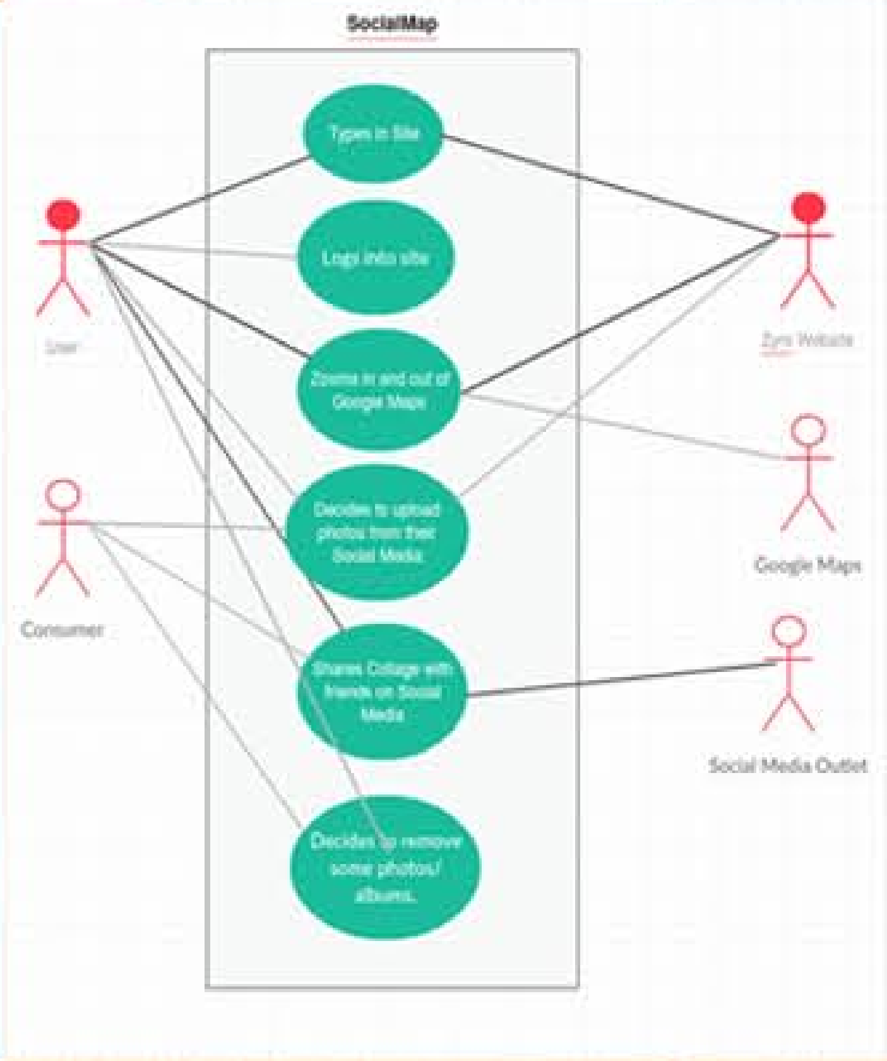
Success
- Image uploaded.

File Upload


Right click on map to insert Latitude and Longitude values

Architecture/Design Artifacts:

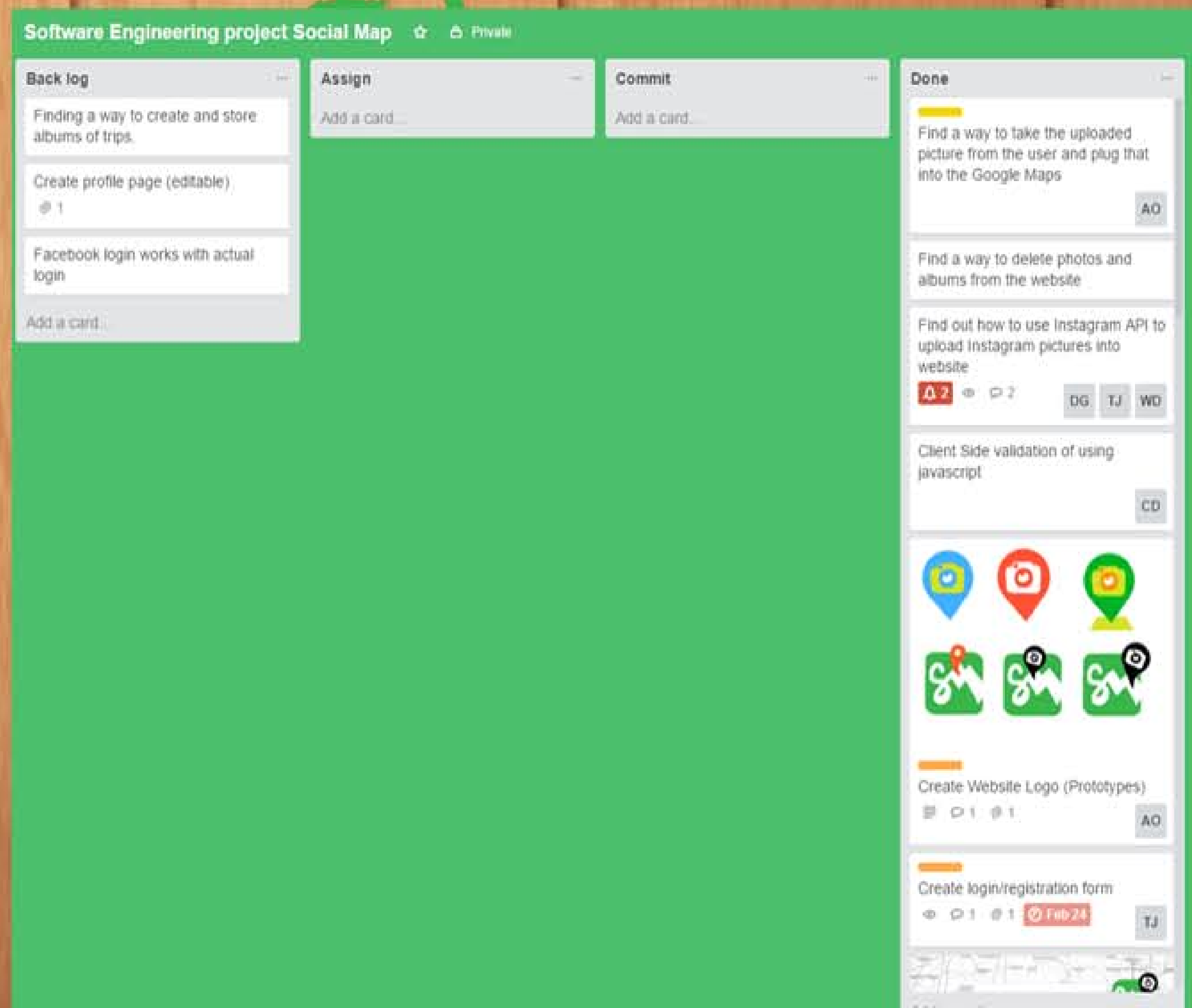




Tools/Technologies used:

Page
GitHub
ProBoards
Trello
Notepad++
Ps
Google
canvas
Insta
php
JS
HTML 5
MySQL

Project Management:


Software Engineering project Social Map

Back log
- Finding a way to create and store albums of trips.
- Create profile page (editable)
- Facebook login works with actual login

Assign

Commit

Done
- Find a way to take the uploaded picture from the user and plug that into the Google Maps — AO
- Find a way to delete photos and albums from the website
- Find out how to use Instagram API to upload Instagram pictures into website — DG TJ WD
- Client Side validation of using javascript — CD
- Create Website Logo (Prototypes) — AO
- Create login/registration form — Feb 24 — TJ