

# STAGE THREE

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Portfolio Webpage:

<https://bryanhuynh.github.io/CPSC-481-Project/>

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<https://github.com/BryanHuynh/CPSC-481-Project>

## PhotoCator



### Project Description:

Our project idea is a photography landmark locator. This application is going to look like a navigation app like google maps, but instead the focus of this app is for people to share unique and interesting locations for beautiful photography. To do this, when a photo is uploaded, they will be asked to give a description of the longitude and latitude of the photo, along with the date and time of day, so that one can go out and recreate the photo if the wish. We also plan to link it towards social media, so you can see the pictures that your peers take.

### Tasks prototyped:

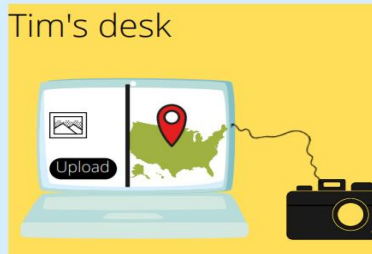
- **Vertically:**
  - Uploading and sharing photos
  - Social Media Linkage
  - Finding Photos and landmarks
- **Horizontally:**
  - Logging in to the website with a Photocator account
  - Adding friends (All social media platforms)
  - Leaving a review on a location or commenting on a photo
  - Read reviews or comments on a location
  - Users can edit and customize their own profile
  - An accessibility tab is there to accommodate Users with unique needs
  - Add a new location
  - Users can go to other user's or friend's social media or profile to see more photos by that user
  - Filtering pins based off different tags

### Storyboard

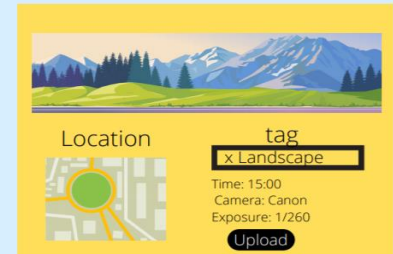
## Uploading a photo



Tim takes a nice photo



Tim uploads photo to computer and uploads them to photo selection screen on photocator



Time goes to the page to upload his photo. He previews the photo when uploads, then selects the exact position he stood when taking the photo. He then adds the tag 'Landscape'. Done, he uploads the photo



Returning to the home page he notices that a new pin appears where he took his photo. He also sees his photo along with others in the photo feed



Clicking on his pin he sees a preview of his photo along with details and a link to his Instagram

## Discussion of Cognitive walk through

- How did we generate the cognitive walkthrough?
  - We first outlined all the tasks that a user would take from our stage 2. With this we developed our low-fidelity prototype to test how we wanted the user to interact with this website and what problems they might have met. With those problems in mind, we adjusted our prototype and found simple solutions to help better the experience of the user.
  - Some problems that we ran into were ambiguity of some steps that a user would have to take to perform certain tasks. An example of this was when a user would want to upload a photo, they would have to press the plus button to do so. The problem that we saw this that was that a user might not know what that button is or what it does. The solution we produced was that when the user hovers over the button it will say "upload photo".
  - In addition, we wanted to look for ways to automate some of the user's task so that they would have taken out the experience, like how when a photo was going to be uploaded, we wanted the system to investigate the photos meta-data and look for key information about the photo.

### What went well and what we would do differently

Through the process of sketching and ideating we were able to generate similar yet vastly different ideas about how the service will be accomplished. One example is the home page we all knew what features we wanted available, but the layout and how the information was conveyed was vastly different. We came together and individually discussed all our sketches and evaluated what it brought to the project and its effectiveness. Following this we were able to create a storyboard in which we gave a detailed explanation of the process a user would go through to upload a photo. This process helped us understand and visualize how a user would go about uploading a photo and the steps they would have to take, and especially helped when we were making our prototype.

Had we done this again, we would have made sure to designate one unique page for each member of our group so that we didn't end up with similar sketches of the same pages. This caused us to have to re design some of our sketches to implement something different in each version of the page so that they do not end up looking the same. An example of this was when we were designing our log in page, since it was a simple log-in and password, everyone had a similar sketch.

## **\*APPENDIX\***

### **Affinity Diagram**

|              | <i>GROUPS</i>  |  |  |
|--------------|--|--|--|
|              | Quality Of Life/Usability  | FINDING LANDMARKS  | SHARING PICTURES   |
| <i>IDEAS</i> | <ul style="list-style-type: none"> <li>• accessibility choice</li> <li>• Changing temperature format</li> <li>• Saving Favorites</li> <li>• Increasing site text size</li> <li>• Customizable profiles</li> <li>• Credential based log in using various platforms (ex. Twitter, Facebook)</li> <li>• Changing your user profile</li> <li>• Add Notifications to the user</li> <li>• Toggling for comic sans</li> <li>• Changing language</li> <li>• Having dark mode</li> <li>• Menu visibility toggling</li> <li>• Changing user profile</li> </ul> | <ul style="list-style-type: none"> <li>• Scrollable Map area</li> <li>• Exploring popular images of a Landmark</li> <li>• Filtering</li> <li>• All pins appear in photo feed</li> <li>• A preview image with description when you click on an image</li> <li>• Search bar for finding pictures</li> <li>• Providing date and weather data for pictures</li> <li>• Busy alert for covid-19 reasons</li> <li>• Slider picture menu</li> <li>• A preview image with description when you click on an image</li> </ul> | <ul style="list-style-type: none"> <li>• For finding area, using pin and radar</li> <li>• Manual location entry</li> <li>• Comments and reviews</li> <li>• Messaging client</li> <li>• Reviewing and commenting photos</li> <li>• Messaging people</li> <li>• Profile page</li> <li>• Viewing Contact list</li> <li>• Choosing a pin or radar to display location of the picture</li> <li>• Social Media linkage</li> <li>• Being able to click on the map when you upload an image</li> <li>• Reviewing pictures, and adding the location with pins and radars</li> <li>• Having in site friends and social media</li> <li>• Uploading a picture</li> </ul> |

#### **Top 3 Ideas:**

1. CONNECTING WITH FRIENDS THROUGH THE USE OF SOCIAL MEDIA LINKAGE

- We want users to be able to connect with more friends than just through Photocator, thus we want to be able for users to include their friends from their favorite social media app.
  - The user can link this app through 3 platforms (Twitter, Facebook, Instagram)
  - The user can link their account through the sign-up page, log in page and through the home screen.
2. FINDING NEW PHOTOS USING FILTERING AND NAVIGATION ICONS (Pins and photo previews)
- As this the focus of our app, the user should be able to find photos and directions to those places effortlessly
  - The user has a choice of filtering which type of pictures they want to find, changing these filters changes the pins that you would see on the map
  - Once the user finds their pin, they just need to click on it, and it will give them all the information about that picture (time, location, camera, tags, rating, comments, weather conditions, the busyness of the area).
  - The user then can click the direction button for the directions to get to that area
3. UPLOADING PICTURES USING A MULTIPAGE DESIGN
- Once the user has a picture they want to upload, they need to click the “add photo” button on the interface this will bring them to the first page.
  - The first page will contain the image, the second page will contain the location, the third and final page will contain the image, the location (in map form), a tag section, and a text section for other information including time, location (City, Address), tags, a caption, weather condition and the busyness of the area.
  - Once the user is satisfied with their photo and all its information, they just need to click the confirm button and it will be posted.

#### **Discussion of Groups of Affinity Diagram:**

- Quality of Life/ Usability
  - This grouping tangentially relates to the design requirement of logging in to the application, as well as interacting with uploaded assets. A weakness of this group is that it does not encompass any concise functionality. On the other hand, the generality it provides can be considered a strength as it allows for implementations that are

universal to the web app. For example. By considering the accessibility idea, all UI components become more user-friendly to a more diverse range of people. The idea is feasible as it is simply taking existing functionality and making it easier to use. The grouping is also original, since ideas such as accessibility in a social media app, are rarely intricately implemented.

- Finding Landmarks

- This grouping relates to the design requirements developed from the user-task descriptions of stage 2. Specifically, the tasks of viewing a map of the globe to be able to view landmarks on it, filtering available landmarks based on the user's preferences, and viewing more information about landmarks that the user is focusing on. A weakness of this grouping is that it does not take into consideration the social integration aspect of the web app, which is a major component of the app. A strength of this grouping is that it gives a good idea of how users will primarily interact with the app, which is through the use of a traversable map, in order to focus in on what the user is looking for. Furthermore, the grouping introduces the idea of filtering based on a user's needs, which is also a main functionality that succinctly provides users with the information they desire. As for feasibility, as finding landmarks is one of the most significant features of the web app, time can certainly be provided in developing this grouping. The idea of traversing a map to find locations isn't original, however making it a main feature of a social media application certainly is.

- Sharing Pictures

- This ties into the design requirements developed from the user-tasks of stage 2. Logging-in to an account creates the idea of a user within the web app ecosystem. By tying a user to an account, a user ends up with an identity on the web application. Viewing a photo feed is another user task related to this group, as is viewing a friend's profile of pictures and uploading a user's own assets to the website. A strength of this grouping is that it describes the social integration aspect of the web application. It considers the interactions that users will have with the system (web app) as well as the interactions that users will have with each other, in the form of uploading, sharing, and commenting on pictures that have been taken. A weakness of this grouping is that it does not consider the User Interface of the application. Ideas such as uploading pictures, credential-based log-in, and viewing profiles of friends, are all feasible ideas, and also major parts of the web app. A less feasible idea (time-permitting) would be the commenting on pictures idea. This grouping of sharing pictures is original when it is considered in relation to what is being shared, which in this case are pictures taken with extensive meta-data that includes items such as weather data, time of day, and latitude and longitude location data, among other things.

## Cognitive Walkthrough

### Uploading and sharing photos / Adding new location

| Description of task step  | Does user have training or knowledge to do this step? | Is it believable that they would do it? | Are they motivated?   | Comments (including possible solutions)   |
|---|---|---|---|---|
| User presses the '+' sign at the top left corner of the interface       | No  | Yes                                     | Yes, they want to share a picture.  | When the user mouses over the icon it says "upload photo"<br>Or we could give the menu a small label  |
| User picks a photo to be uploaded                                       | No  | Yes                                     | Yes, they have a photo that they want to upload   | Have a button that says "select Photo" below the image thumbnail.   |
| User puts a pin on the map or enters the coordinates in the text fields | No  | Yes                                     | Location is required for the photo to be uploaded   | Have a message on the top of the window telling the user to click anywhere to apply a pin. The text fields also have a placeholder that says 'latitude' and 'longitude', so the user knows to put that information there.   |
| User selects tags about the photo type                                  | Yes   | Yes                                     | Depends on the user, if the user does not want to add tags to the photo because maybe their tag isn't there, the user may give up or give wrong information just to the user can be able to post the picture. | There is a list of predefined tags that that the user can pick from<br><br>We said that it is required to have these fields filled in to have the ability to post the picture<br><br>Solution:<br>Remove the constriction of tags being required to share photos. If the user does not put any tag, section the tag under a new category called 'any' |
| User defines camera   | Yes   | Yes                                     | Yes, fields required by the user like the type of camera,   | Some fields can be filled out automatically based on the photos meta-data   |



|   |     |     |   |  |
|---|-----|-----|---|--|
|   |     |     | to be filled out  |  |
| User defines when the photo was taken, the weather conditions, the busyness of the area, and the caption. | Yes | Yes | It depends on the user, if the user took the photo recently or have good memory, they will have remembered all that information. However, for a user who does not remember this information, may give up or give wrong information about the photo to be able to post it. | <p>This can be filled out automatically with the meta data if it exists</p> <p>We said that this information needs to be given or else the user cannot upload the photo</p> <p>Solution:<br/>Remove the constriction about having the time, weather, busyness, and caption text fields filled out in order to post it.</p> |
| Upload photo  | Yes | Yes | Yes, it is required to successfully share a photo   | There is a button that says "upload"   |

#### Uploading and sharing photos (Existing location)

| Description of task step  | Does user have training or knowledge to do this step? | Is it believable that they would do it? | Are they motivated?                               | Comments (including possible solutions)  |
|---|---|---|---|--|
| User presses the '+' sign at the top left corner of the interface | No  | Yes                                     | Yes, they want to share a picture.                | When the user mouses over the icon it says "upload photo"<br>Or we could give the menu a small label |
| User picks a photo to be uploaded                                 | No  | Yes                                     | Yes, they have a photo that they want to upload   | Have a button that says "select Photo" below the image thumbnail.                                    |
| User searches for the location in the database of locations       | No  | Yes                                     | Location is required for the photo to be uploaded | Add prompts telling the user they can search for the location in the search window provided.         |

|   |     |     |  |   |
|---|-----|-----|--|---|
| photos have already been taken at   |     |     |  |   |
| User selects tags about the photo type  | Yes | Yes | Depends on the user, if the user does not want to add tags to the photo because maybe their tag isn't there, the user may give up or give wrong information just to the user can be able to post the picture.                                      | <p>There is a list of predefined tags that that the user can pick from</p> <p>We said that it is required to have these fields filled in to have the ability to post the picture</p> <p>Solution:<br/>Remove the constriction of tags being required to share photos. If the user does not put any tag, section the tag under a new category called 'any'</p> |
| User defines camera   | Yes | Yes | Yes, fields required by the user like the type of camera, to be filled out   | Some fields can be filled out automatically based on the photos meta-data   |
| User defines when the photo was taken, the weather conditions, the busyness of the area, and the caption. | Yes | Yes | It depends on the user, if the user took the photo recently or have good memory, they will have remembered all that information. However, for a user who does not remember this information, may give up or give wrong information about the photo | <p>This can be filled out automatically with the meta data if it exists</p> <p>We said that this information needs to be given or else the user cannot upload the photo</p> <p>Solution:<br/>Remove the constriction about having the time, weather, busyness, and caption text fields filled out in order to post it.</p>                                    |

|              |     |     |   |                                      |
|--------------|-----|-----|---|--------------------------------------|
|              |     |     | to be able to post it.                            |                                      |
| Upload photo | Yes | Yes | Yes, it is required to successfully share a photo | There is a button that says "upload" |

#### Finding Landmarks

| Description of task step   | Does user have training or knowledge to do this step? | Is it believable that they would do it? | Are they motivated?  | Comments (including possible solutions)  |
|--|---|---|--|--|
| Adding filters   | Yes   | Yes                                     | Yes  | This is optional the user can either choose to filter to find specific pictures or they can choose to browse freely<br><br>There will be a list of tags that they the user can select  |
| Click on a pin on the map to preview a photo or they click on the photo preview in the home screen feed or they use the search bar | No  | Yes                                     | Yes, that is one of the ways to view other photos from that location | When the click on a pin, they can easily close the preview menu so that they can find another pin.<br>They can zoom into a map so that they can more accurately select a certain pin. The menu is on the home page for ease of access, and allowing them to quickly find a large set of photos quickly |
| Clicks on the direction button   | Yes   | Yes                                     | Yes  | When the button is clicked it gives them the direction to get to the landmark.   |

#### Linking Social Media

| Description of task step | Does user have training or | Is it believable | Are they motivated? | Comments (including |
|--------------------------|----------------------------|------------------|---------------------|---------------------|
|--------------------------|----------------------------|------------------|---------------------|---------------------|

|   | knowledge to do this step? | that they would do it? |  | possible solutions)  |
|---|----------------------------|------------------------|--|--|
| Click on friend's tab in the top right corner                 | Yes                        | Yes                    | Yes, if they want to see their friends and link social media they will go look for where those connections are   | Yes, if they want to see their friends and link social media they will go look for where those connections are |
| Click on Link social media button                             | Yes                        | Yes                    | Yes, to link their social media they will need to provide the information to link the account  | This can be changed/removed or added later in their profile settings page                                      |
| Click on the social media icon they want to link              | Yes                        | Yes                    | Yes, they have in mind the social media account they want to link so they will go looking for it   | This will open a new tab in the browser, that follows to the user's social media page                          |
| Fill in their information for that social media they selected | yes                        | Yes                    | Yes, Photocator needs that information to make the connection, so if they want to attach a social media account to it, they will need to provide this information. | They will only need to do this once and will not be required to do this for ever post they make                |
| Click login button  | Yes                        | Yes                    | Yes, they will want to complete the process  | The login button will be at the bottom of the form so that their eye naturally follows to the next step        |

## Filtering

| Description of task step                          | Does user have training or knowledge to do this step? | Is it believable that they would do it?                              | Are they motivated?  | Comments (including possible solutions)   |
|---|---|--|--|---|
| Click's the hamburger menu at the top left corner | No  | Depends if they want to search for specific pictures or just browse. | Depends if the user is searching for specific pictures.  | Solution:<br>Hovering over the hamburger menu will display a message saying 'filter'<br>Or we could give the menu a small label |
| The user selects the filter(s) of his choice      | Yes   | Yes  | With the long list of filters, the user may find it hard to find his specific filter, the user may give up if he cannot find it. | Solution:<br>Adding a search bar to the filter window to search for different filters to make them easier to find.              |
| The user clicks "update filter"                   | Yes   | Yes  | Yes  |   |

## Adding Friends

| Description of task step                        | Does user have training or knowledge to do this step? | Is it believable that they would do it? | Are they motivated? | Comments (including possible solutions)   |
|---|---|---|---------------------|---|
| Click's the friend icon in the top right corner | No  | Yes                                     | Yes                 | The user may not know what the icon means.<br>Solution:<br>We could give the menu a small label |

|   |     |     |  |   |
|---|-----|-----|--|---|
| The user clicks the “add friend” button   | Yes | Yes | Yes  |   |
| The user searches for friends using the search bar, using keywords like name, tag and location. | Yes | Yes | If the user is someone who isn’t very technologically advanced and dislikes typing or cannot type quickly, then searching for friends based off multiple categories may exhaust the user and may make them give up | <p>The use can filter finding different people by using different keywords to find specific targets.</p> <p>Solution:<br/>Make the some of the categories drop down menus. Make tag, category and location drop down menus instead of manually searching for them</p> |
| The user clicks the add friend button in the bottom left corner of each profile preview         | No  | Yes | If the user has poor eyesight, the icon maybe hard to spot, it is quite small.   | <p>Solution:<br/>Reposition the button into a spot where it is bigger and will catch the users’ eye more easily and maybe add a label</p>   |

#### Writing reviews on landmarks

| Description of task step | Does user have training or knowledge to do this step? | Is it believable that they would do it? | Are they motivated? | Comments (including possible solutions) |
|--------------------------|---|---|---------------------|---|
| The user clicks “add     | Yes   | Yes                                     | Yes                 |   |

|   |     |     |  |  |
|---|-----|-----|--|--|
| review” on the photo preview popup  |     |     |  |  |
| The user gives rating by clicking on the number of stars.   | No  | Yes | Yes  | Giving ratings this way is very effective way to give ratings effortlessly.  |
| The user clicks on the empty review text box to give a written review or comments to emphasize key points about that landmark | Yes | Yes | It depends if the user is looking to give a quick rating or a full-on review to let others know specifically what is good about that place | This part is optional the user can either choose to leave a written review or not, however the rating is required. |
| The user clicks the "post review" button  | Yes | Yes | Yes  | The review is uploaded for others to see.  |

#### Editing and customizing the users’ own profile

| Description of task step                                       | Does user have training or knowledge to do this step? | Is it believable that they would do it? | Are they motivated? | Comments (including possible solutions)  |
|--|---|---|---------------------|--|
| The user clicks on the ‘profile’ icon in the top right corner. | No  | Yes                                     | Yes                 | The icon is quite like the friend's icon, we can fix this by giving the icon a small label |
| The user clicks the ‘edit’ button on her own                   | Yes   | Yes                                     | Yes                 | The button is placed right in the middle of the header, it is very hard to miss            |

|  |     |     |   |  |
|--|-----|-----|---|--|
| profile page   |     |     |   |  |
| The user clicks on the empty text field and adds a biography about themselves. | Yes | Yes | Depends if they want people to know what kind of person, they are | This part is optional the user can either choose to write a biography about themselves or not. |
| The user clicks on the social media icons and links their social media.        | Yes | Yes | Depends if the user wants to share their social media with others | This part is also optional, the user can choose whether to leave them unlinked or linked       |
| The user clicks on "add pictures" button to upload a new photo to his profile. | Yes | Yes | Yes   |  |

#### Accessibility Tab Usage

| Description of task step                                      | Does user have training or knowledge to do this step? | Is it believable that they would do it? | Are they motivated?  | Comments (including possible solutions)                                   |
|---|---|---|--|---|
| User clicks on the accessibility icon in the top right corner | No  | Yes                                     | Yes, if the user has certain issues with interacting with a webpage for example has dyslexia, they will be looking for tools to make their | The icon could use a label to help more clearly define what its there for |



|   |     |     |  |   |
|---|-----|-----|--|---|
|   |     |     | experience easier  |   |
| The user selects the options that they would like enabled | Yes | Yes | Yes  | They would know which options to turn on since they would be very familiar with their challenges. |
| User clicks Enable button                                 | Yes | Yes | Yes, as this will enact rules they have selected to affect the site. |   |

### Logging in

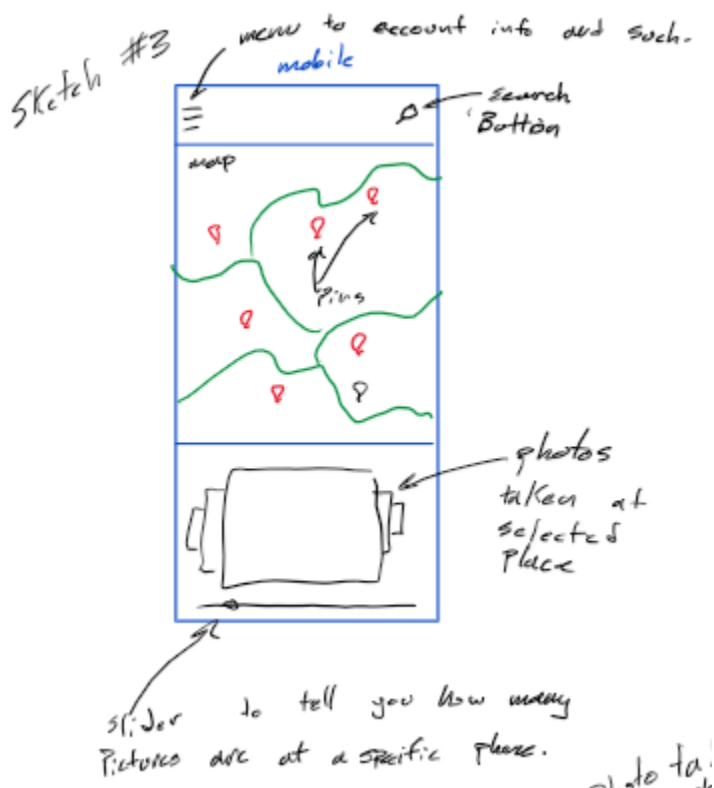
| Description of task step   | Does user have training or knowledge to do this step? | Is it believable that they would do it? | Are they motivated? | Comments (including possible solutions)  |
|--|---|---|---------------------|--|
| The user enters their username and password in to specified fields | Yes   | Yes                                     | Yes                 | The user can also login by clicking one of the social media icons and logging in with that |
| The user clicks the login button                                   | Yes   | Yes                                     | Yes                 |  |

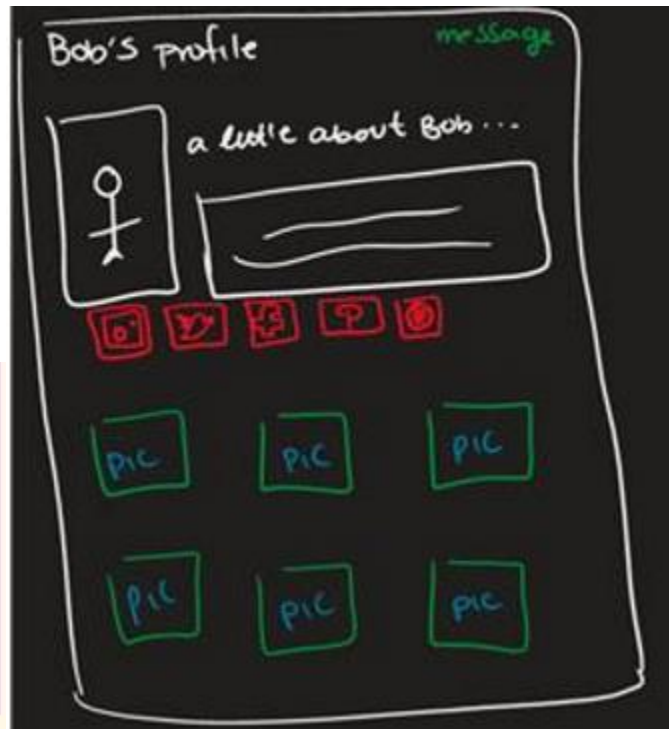
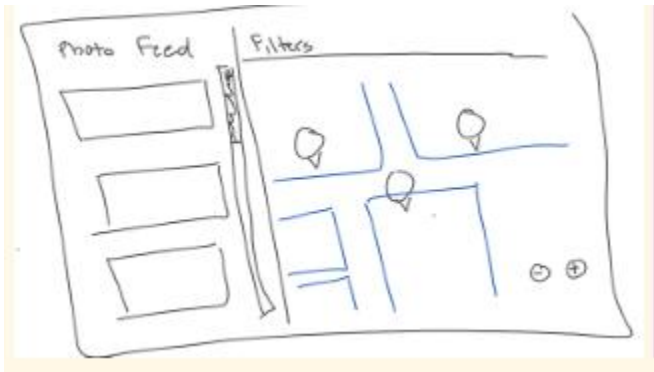
### Signing up

| Description of task step     | Does user have training or knowledge to do this step? | Is it believable that they would do it? | Are they motivated? | Comments (including possible solutions) |
|------------------------------|---|---|---------------------|---|
| The user enters their email, | Yes   | Yes                                     | Yes                 |   |

|   |     |     |     |   |
|---|-----|-----|-----|---|
| username, password, and confirm password into the specified fields        |     |     |     |   |
| The user clicks on each social media icon and links his account with them | Yes | Yes | Yes | The social media icons are Facebook, Instagram and Twitter. |
| The user clicks the "sign up" button                                      | Yes | Yes | Yes |   |

### Sample of Sketches





Upload Image:

Image Preview

Location:

Longitude    Latitude

Date:

Time:

Social Media to Upload to:

☐ Instagram  
☐ Twitter  
☐ Facebook

Post

