

WORKSHOP No. 1 – OBJECT-ORIENTED DESIGN AND REQUIREMENTS

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PROJECT DEFINITION

PinBerry is a simplified and personalized version of Pinterest, where users can view, upload, delete and save photos. The platform aims to be simple and easy to use, allowing anyone to organize their visual content in an intuitive way.

PROJECT OBJECTIVES

- *General objectives*
 - To create a web application that allows users to view, upload, delete and save images in an organized and accessible manner.

- *Specific objectives*
 - Develop a user-friendly interface that facilitates navigation and image management.
 - Implement a class and object-based structure to manage images and folders.
 - Allow users to upload and delete images according to their preferences.
 - Provide the option to save images to folders within the platform or download them.

1. REQUIREMENTS DOCUMENTATION

Functional requirements:

- User Account Management
 - The user will be able to register an account;
By providing a username, a password, and uploading a profile picture.

- The user will be able to edit their account information;
By updating their password and changing their profile picture.
- The user will be able to log in;
By entering their registered username and password to access their account.
- Photo Upload and Download
 - The user will be able to upload photos;
By selecting images from their device's gallery or taking new photos with the device's camera.
 - The user will be able to remove photos that they have upload before
 - The user will be able to download photos;
By saving images from their fyp or folders to their device.
- Photo Organization
 - The user will be able to create folders;
To organize their photos into different categories.
 - The user will be able to delete photos;
Removing selected images from their folders.
- Photo Browsing
 - The user will be able to scroll through their photo collection;
With the system dynamically loading more photos as the user scrolls, enabling smooth navigation through large image libraries.

Non-functional requirements:

- Usability and Design
 - The system should have a clean and attractive interface;
It must be visually appealing and user-friendly.
 - The system should be easy to use;
Users should understand and navigate it without difficulty.
- Reusability

- The system should use reusable components;

Common functions (like upload or validation) must be modular and shared.

- Flexibility and Maintainability

- The system should be flexible;

It must allow new features to be added with minimal changes.

- The system should be maintainable;

Code should be clean, organized, and follow good practices.

2. USER STORIES

Title: View Photos	Priority: High	Estimate: 16-20 hours
User Story: As a User, I want to view the available images on the platform, So that in can explore interesting visual content.		
Acceptance criteria: Given that I am on the homepage When I navigate through the gallery, Then I should be able to see all the available images.		

Title: Upload Photos	Priority: High	Estimate: 20-24 hours
User Story: As a User, I want to upload images to the platform, So that I can organize and store them.		

Acceptance criteria:
Given that I am on the upload page,
When I select an image and confirm the upload,
Then the image should be stored on the platform and appear in my gallery.

Title: Delete Photos	Priority: Medium	Estimate: 16-20 hours
User Story: As a User, I want to delete images that I have uploaded, So that I can remove content I no longer need to.		
Acceptance criteria: Given that I am on my gallery page, When I select an image and press the delete button, Then the image should be permanently removed from my gallery.		

Title: Save Photos	Priority: Medium	Estimate: 16-20 hours
User Story: As a User, I want to save images by downloading them or adding them to folders, So that I can organize my content better.		
Acceptance criteria:		

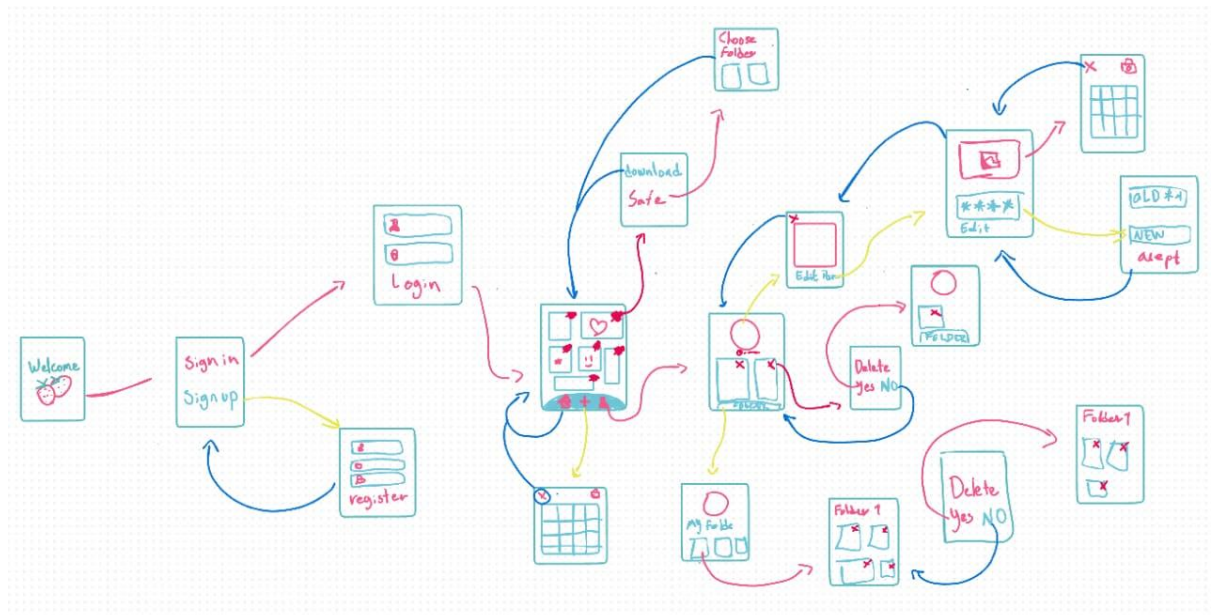
Given that I am viewing an image,

When I choose to download or add it to a folder,

Then the image should be saved according to my selection.

3. MOCKUPS

Mockups drawn diagram



https://www.canva.com/design/DAGkTfEUicw/4lp_0_doZkH3n4L4n3Y25A/edit?utm_content=DAGkTfEUicw&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

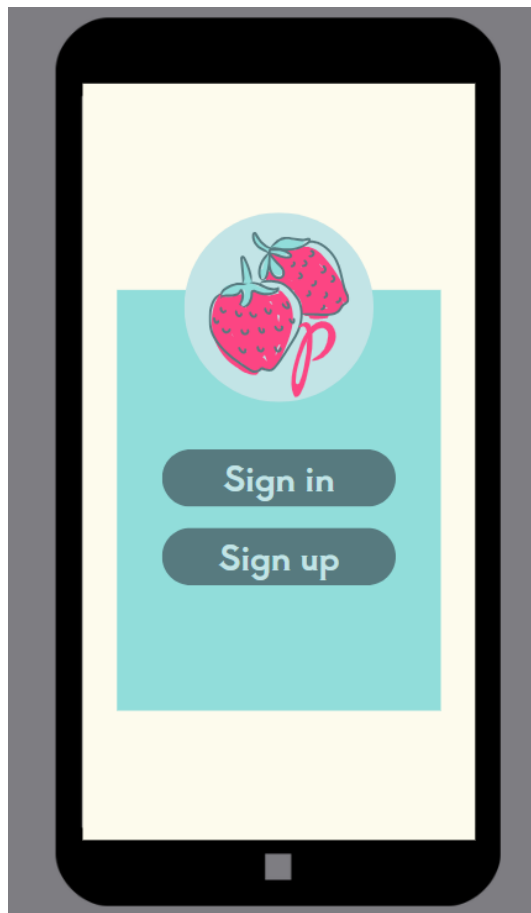
Cell Phone Interface

- Application startup

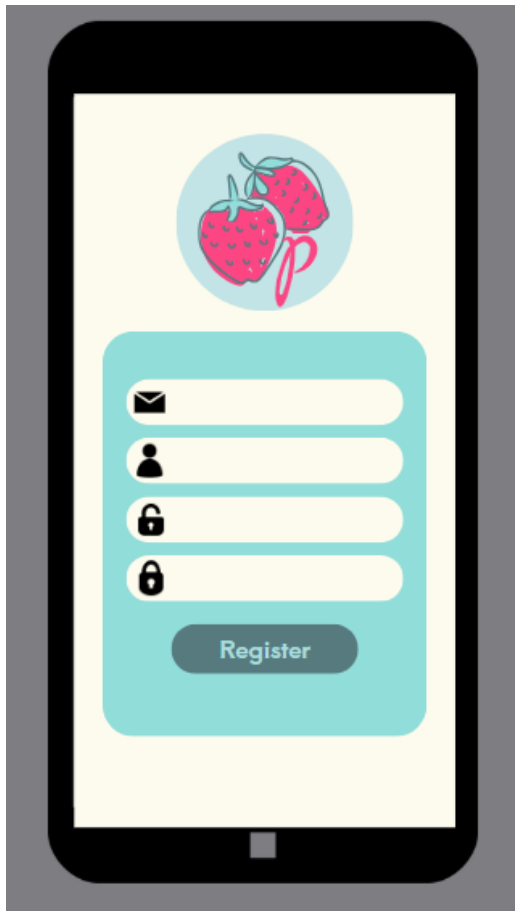
At the moment, this is only the beginning of



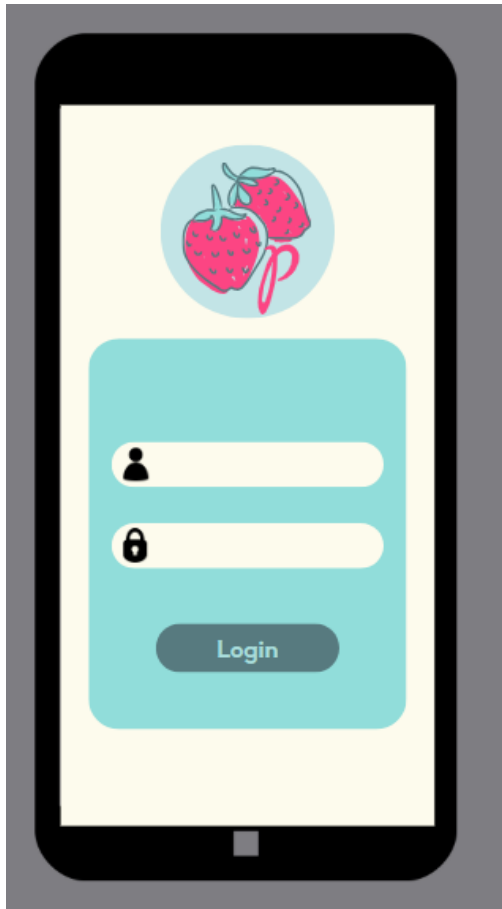
When the user enters the application, has the option to register or login if they already have an account



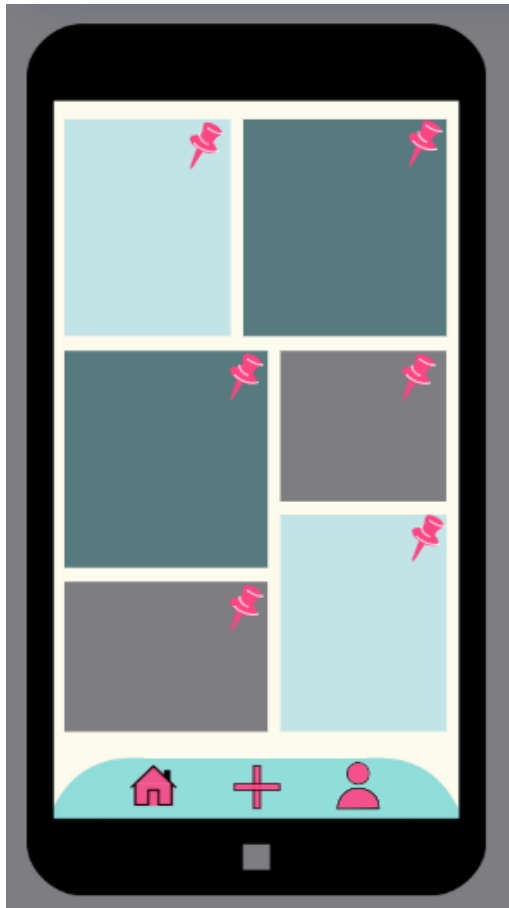
If the user decides to register, will be directed to the following interface:



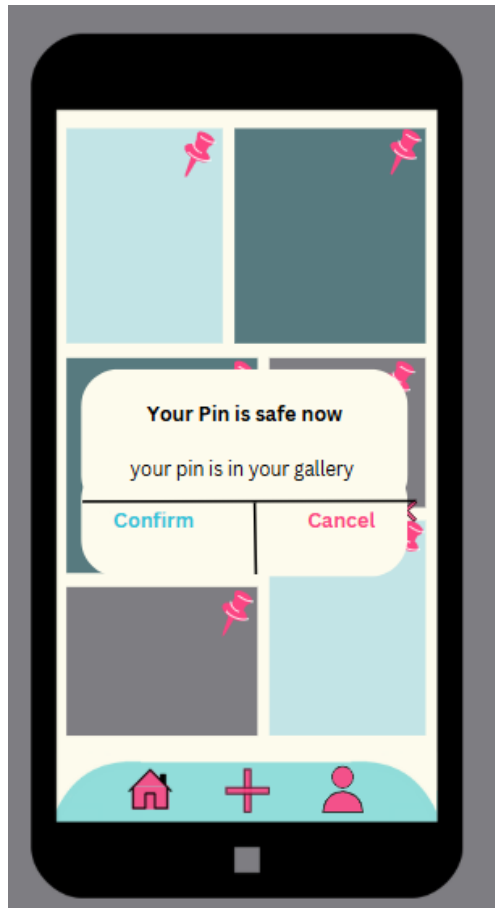
If, instead, decide to log in their account or they have already registered and are about to log in, they will be redirected to the following interface:



Once the user is logged in, they will be able to enter completely to the application, and it will be presented with the main interface.



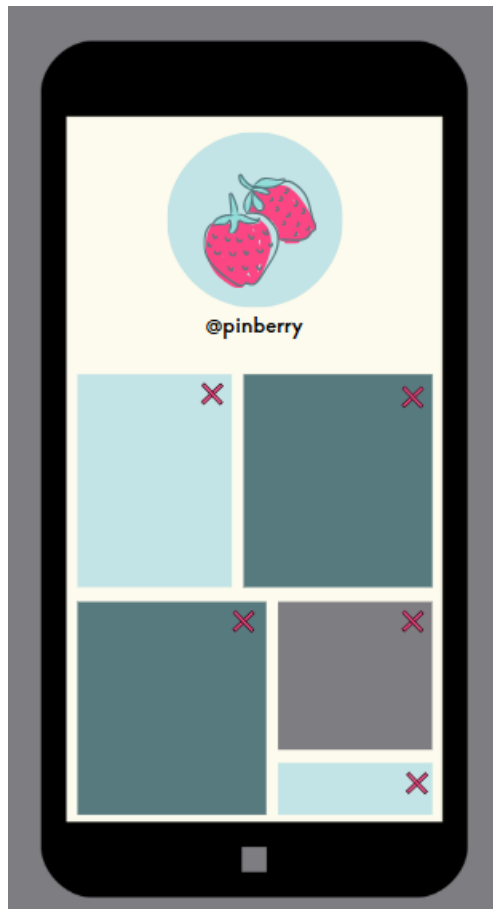
In this main interface, the user will be able to see the various photos that have been uploaded by other users and if he/she wishes, will be able to save the photo of his/her choice, if they click the pink pin. Then it is going to appear a warning box showing that the pin has been saved.



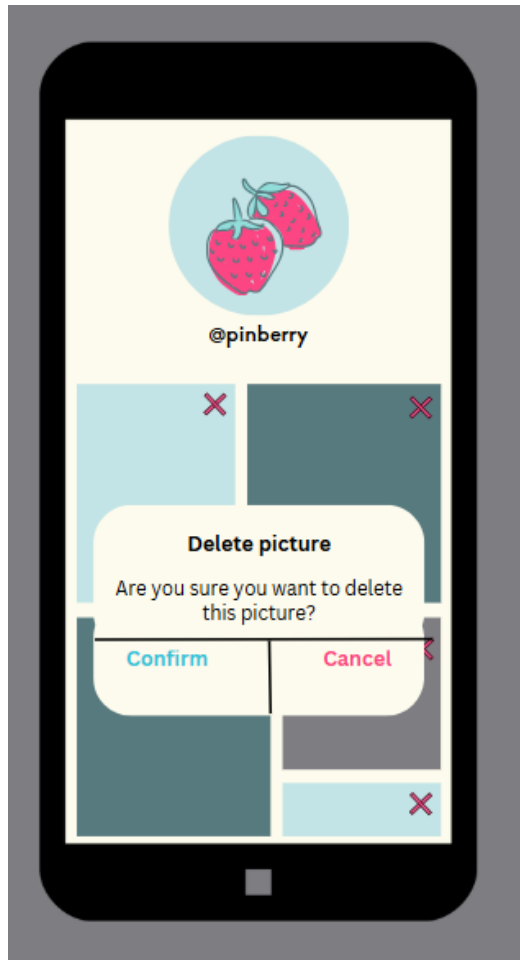
Also, apart from being able to save the photos they want, the user can also upload pictures to the application from their gallery. They just need to click on the plus in the middle of the low screen.



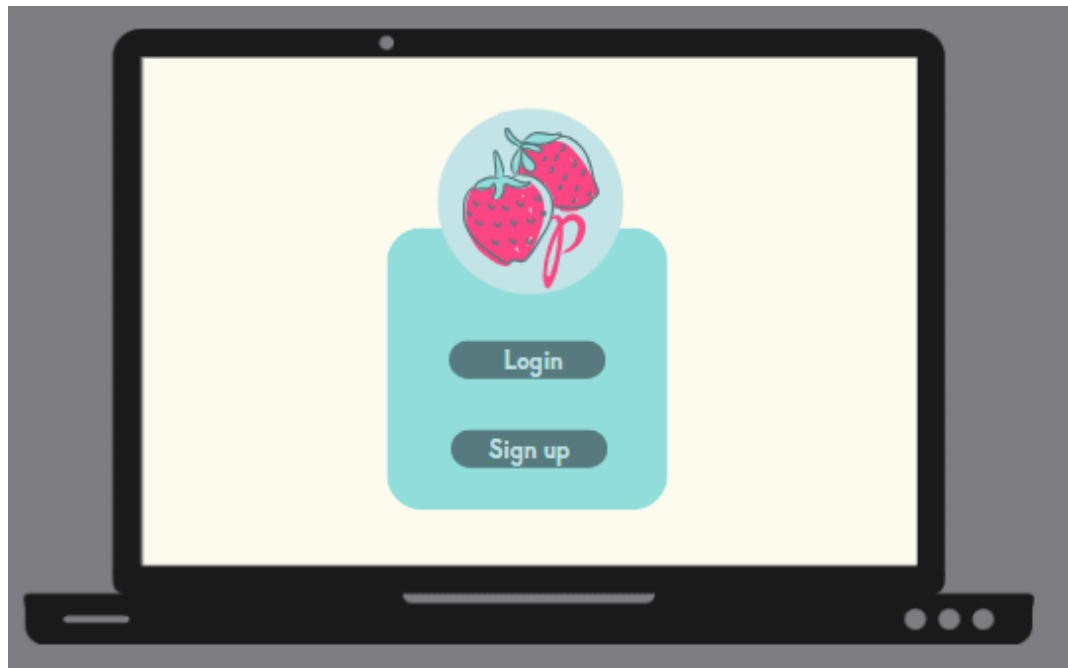
In addition, if the user clicks on the person's icon at the bottom right, they can also review their own profile to review the photos that has been uploaded



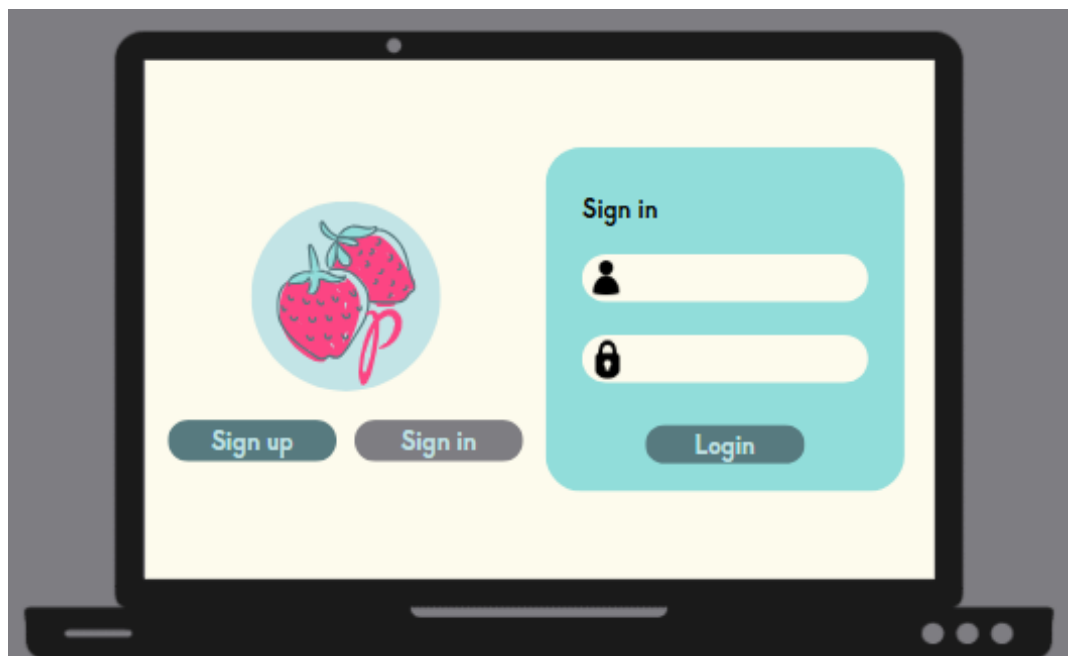
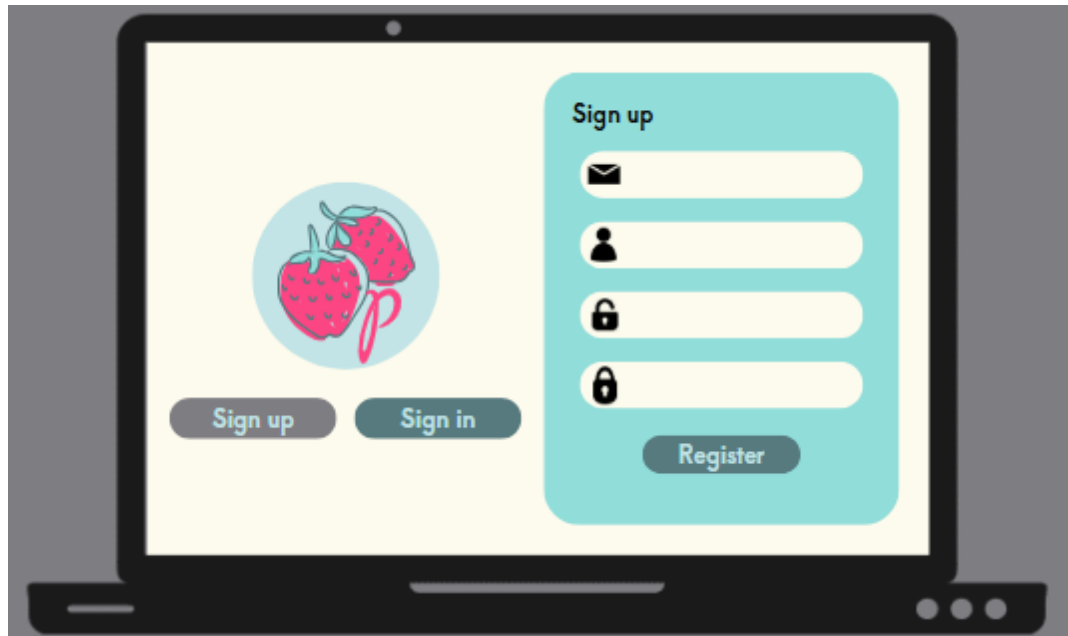
Once they are in their own profile, they also have the option to delete any of the pictures they have previously uploaded, just click on the "X" found at the top right corner of the photo that they want to remove. Once they click on the "X" a warning box will appear to confirm if they really want to delete the photo



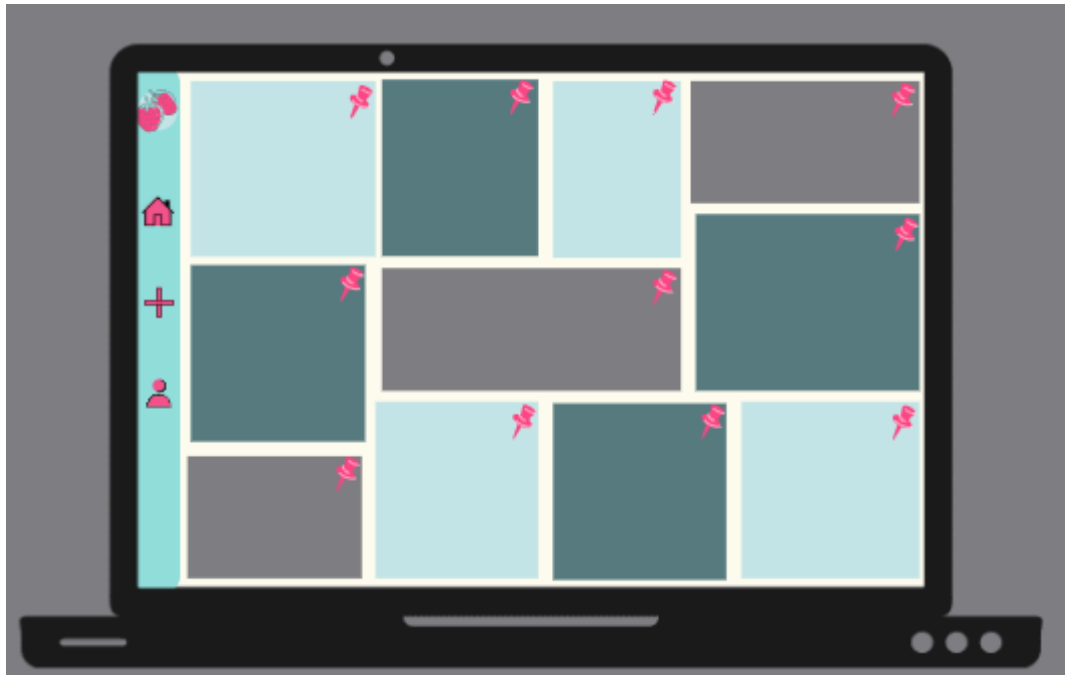
It is expected that the application can also works on computer, so here is a presentation of how we want to create the interfaces.



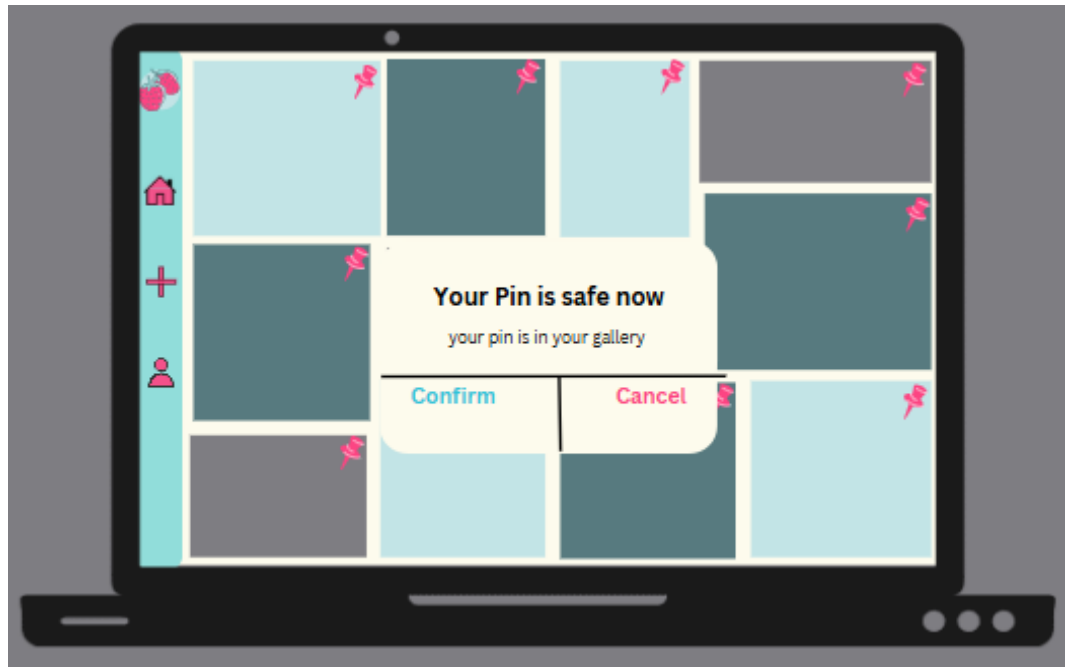
On the computer, it changes the interface, but not the process that the user must do, in this case if the click on the Sign up button, the corresponding space will open for the user to enter the necessary data



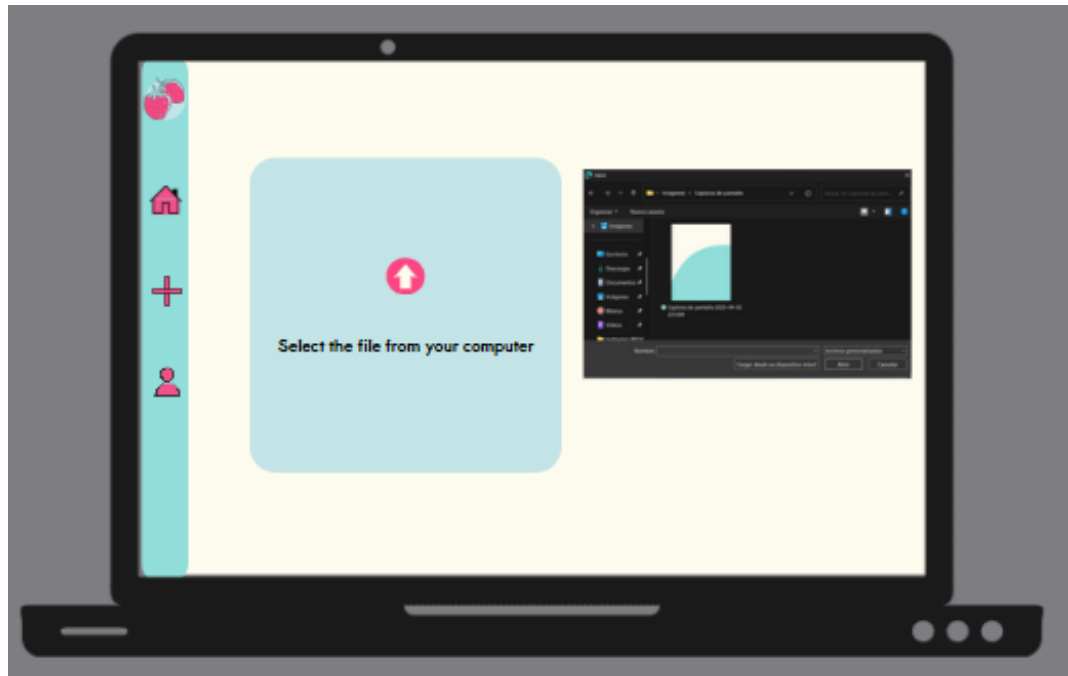
Once you have registered or logged in, you will be redirected to the main page of the application.



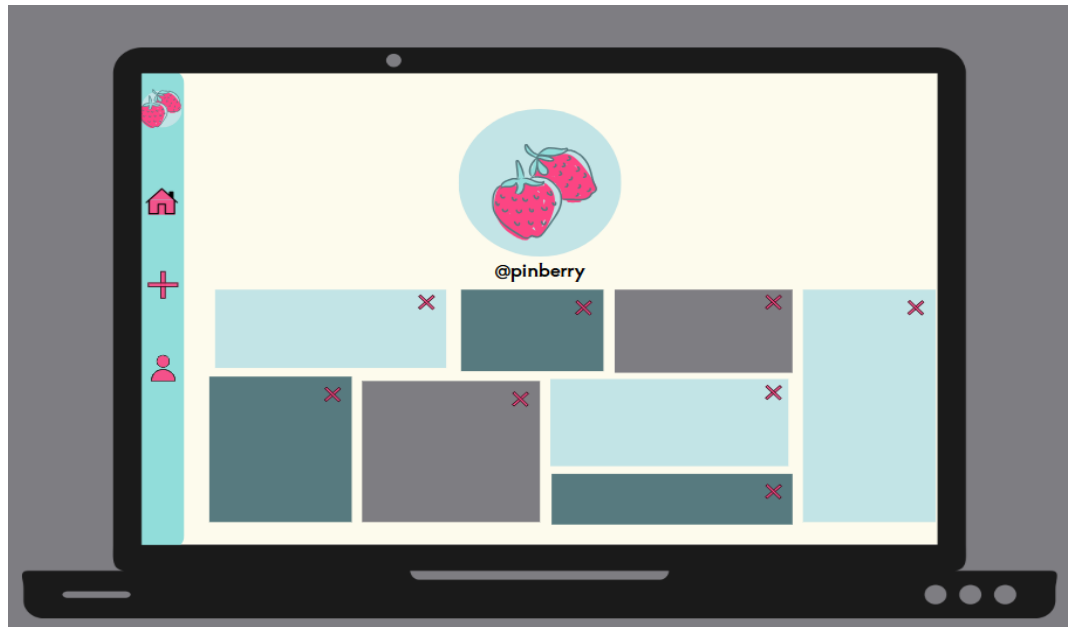
Here they can also save the photos that they like the most or that are of their preference. It is practically the same, just click on the pink pins and it will be safe in your gallery.



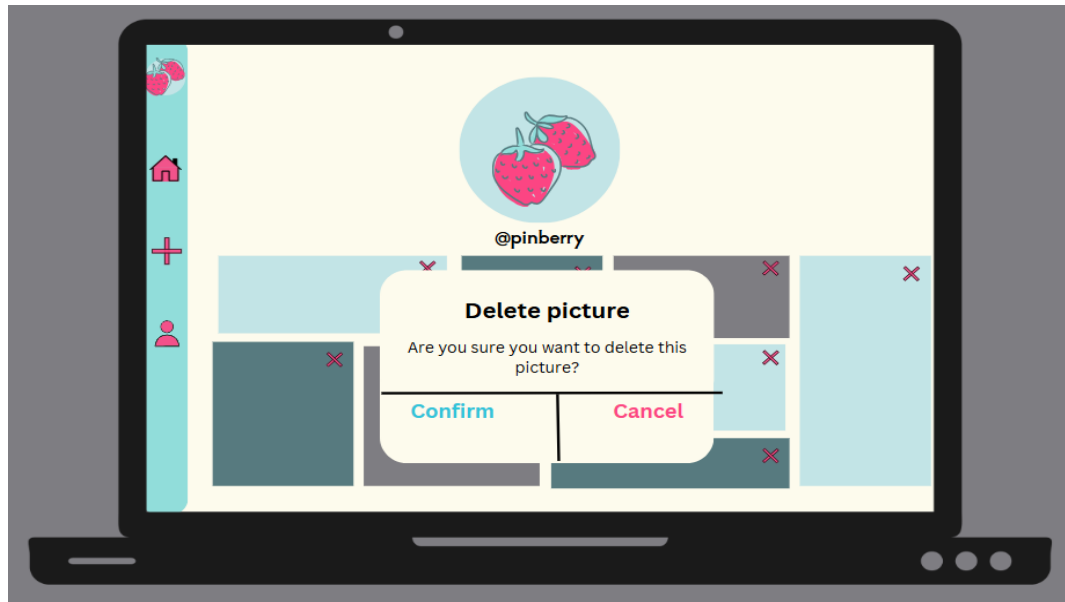
In addition, they can also upload photos from their computer, but in this case the file explorer will open to choose the photos they want to upload. Just like the above, the user must click on the plus, but this time it is at the left of the screen.



Again, the user can check their profile from their computer to view the photos they have uploaded. The user should click on the person's icon on the screen's left panel.



And finally, they can also delete the pictures they want, and they have uploaded in their profile, it is the same as in mobile, just click the "X" in the upper right corner and they will get the confirmation box to delete



4. CRC Cards:

Class: User	
Responsabilities: <ul style="list-style-type: none">– Register with username, password, and profile picture– Log in and log out– Edit profile (password, picture)	Collaborator: <ul style="list-style-type: none">• Photo• Folder• AuthenticationService
Class: Photo	

<p>Responsibilities:</p> <ul style="list-style-type: none"> – Store image data and metadata (upload date, source, etc.) – Handle upload (from gallery or camera) – Handle download – Delete photo 	<p>Collaborator:</p> <ul style="list-style-type: none"> • User • Folder • StorageService
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Class: Folder	
<p>Responsibilities:</p> <ul style="list-style-type: none"> – Create and delete folders – Add and remove photos – List photos within the folder 	<p>Collaborator:</p> <ul style="list-style-type: none"> • Photo • User

Class: Gallery	
<p>Responsibilities:</p> <ul style="list-style-type: none"> – Display photos with scrolling – Load more photos dynamically 	<p>Collaborator:</p> <ul style="list-style-type: none"> • Photo • User

Class: AuthenticationService	
Responsibilities: <ul style="list-style-type: none"> – Verify login credentials – Manage session tokens 	Collaborator: <ul style="list-style-type: none"> • User • DataBase

Class: StorageService	
Responsibilities: <ul style="list-style-type: none"> – Save and retrieve photos – Manage file system or cloud storage 	Collaborator: <ul style="list-style-type: none"> • Photo • Folder

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