

# PiCarousel Team 03

Milestone 1

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## **Executive Summary:**

PiCarousel is a user populated repository for photo storage, upload, download and editing that will serve as a storefront, connecting aspiring and professional photographers with the customers they need to drive a successful business. While our competitors focus on their searching and browsing functions PiCarousel will leverage newer layouts and display techniques that will push the art to the front page. PiCarousel is designed to get our members and content contributors the exposure they need to grow.

PiCarousel shall be an online art gallery for aspiring and professional photographers. Photographers from all walks of life can bring their art to our gallery to display their work. Our main page will display a rotating carousel of recent, trending and most popular photos uploaded to our site. PiCarousel shall incorporate all of the traditional search options available at our competitor sites. However, unlike our competitors who are focused on the “Fast-Food” experience where customers are directed quickly to the exact photo they are looking for PiCarousel offers a more immersive search environment. Our goal is to allow customers an opportunity to browse buffet style all of the best offerings of our artists. When a customer navigates to PiCarousel they will be greeted with a cornucopia of photos from all over the world which encompass all subjects and styles. The PiCarousel site layout will emphasize the art gallery theme allowing the customer to effortlessly move from one piece to the next and view each piece for as long as they want. Much like an art gallery PiCarousel will not only display the photos but inform about them with a placard that will tell the customer who the photographer was, where and when they took the picture and what edits have been made to the original. From the main page customers have the option to search for photos based on artist name, location, subjects, styles, original content or edited photos. Our search shall return the closest approximation of the requested criteria. If there is no match our search shall return a gallery view of the closest approximation of the content the customer searched for.


PiCarousel shall operate as a store front, as such customers will be allowed to purchase copies for personal use and licenses for business use, on all of the public photos on the site. Our artists can choose between several packages to determine their exposure level with the most expensive packages getting them prime positioning on the carousels. PiCarousels goal is to get artists exposure at a minimal cost therefore most of the operating costs we intend to offset using advertising and a small consignment fee added to each purchase. That way our artists can get their name out there without going bankrupt in the process.

The PiCarousel team is a group of CS students starting their senior years at SFSU.


## Personas and Use Cases:

### Personas

#### Daniel

	<p><b>FACTS:</b></p> <ul style="list-style-type: none"><li>• 23 year old</li><li>• Lives in Los Angeles, CA</li><li>• Is a part time photographer</li><li>• Needs an audience for his picture collections</li><li>• Loves computers, and photography</li></ul>
<p><b>BEHAVIORS</b></p> <ul style="list-style-type: none"><li>• Spends hours outside in nature, taking pictures</li><li>• Enjoys compliments for his pictures</li><li>• Has a big collection of different kinds of pictures</li><li>• Uses a professional camera for taking pictures</li></ul>	<p><b>NEEDS AND GOALS</b></p> <ul style="list-style-type: none"><li>• Wants to be able to deliver his pictures to people.</li><li>• Wants to be able to advertise his pictures</li><li>• Wants to know if his pictures are good</li><li>• Wants to share and allow his audience to download his pictures.</li></ul>

## Ashely

	<p><b>FACTS:</b></p> <ul style="list-style-type: none"> <li>• year old</li> <li>• Lives in San Francisco, CA</li> <li>• Goes to SF State</li> <li>• Has many friends</li> <li>• Needs a lot of pictures for her school projects</li> </ul>
<p><b>BEHAVIORS</b></p> <ul style="list-style-type: none"> <li>• Enjoys editing pictures</li> <li>• Likes to browse through pictures to find the best ones for her projects</li> <li>• Likes to use PiCarousel to save pictures to her favorites list and download them later.</li> <li>• Usually uses a PC to edit or save the pictures.</li> </ul>	<p><b>NEEDS AND GOALS</b></p> <ul style="list-style-type: none"> <li>• Would like to be able to browse for images easily</li> <li>• Wants to be able to download and use the pictures for her projects.</li> <li>• Wants to have the ability to edit and filter the pictures to make them look better according to her liking.</li> </ul>

## Use Cases

### Case 1. Non registered user


Jade is a 65-year old grandmother, looking for photos of the New York city to send along with her letters to her grandchildren. She knows how to use a PC, but does not bother with that smartphone stuff. She looks for PiCarousel in an internet search and starts looking through the available options. She knows what kind of pictures she wants so she searches for “New York” in the search. She sees several pictures that she likes, so she decides to save them and is prompted to create an **account** to save them to her **favorites list**. Once she signs up for an **account**, she is then able to save the **photos** and download them in full resolution when she needs to. In order to create an account Jade needs to enter a **username**, **password** and a valid **email** address.

### Case 2. Registered user (Photographer)

Daniel is a 23-year-old photographer. He is really good with computers, he is tech-savvy and enjoys photography. He has a good collection of “nature pictures” but he needs to have a good audience so that he can **advertise** and sell his pictures. He logs into PiCarousel and **uploads** all his new collection of pictures. He feels good about his target audience and hopes that someone will like and appreciate his pictures and possibly download them. Daniel can look at which of his pictures have been downloaded or looked at from his **dashboard**.

### Case 3. Registered user (Looking for Pictures)

Ashely is a 19-year-old geography student. She needs pictures of a desert, mountains, waterfalls and landscapes for a project. She is good at using computers and searching and looking at websites. She is a **registered** user for PiCarousel, she has used other photo stock websites before as well. She particularly likes PiCarousel because it enables her to add **filters** to the pictures before downloading them. She can save the pictures to her



**favorites lists** and then come back to them anytime if she has an account. She likes using PiCarousel and thus she **searches** for all the pictures she needs for her class and **adds** them to her **favorites list**. Then she **edits** some of the pictures to her liking. She returns later during the day to download all the pictures she **saved** previously.

#### **Case 4. Admin**

Jeremy is the site **admin** and logs on to check how the site is doing. Jeremy cannot buy or sell as an admin. He has a few priorities to check on: user reports of two kinds: **photo uploads** that are inappropriate or suspicious, and **accounts** that have been flagged by other users as abusive or fraudulent. Jeremy references the Terms of Use to determine if a report is valid. He may do any of the following for each report: warn the user via their contact info that they have violated the Terms of Use, **delete** the **photos**, and/or **remove** the user account.

## **Data Definitions:**

### **Users**

Users are any people who want to upload, download or browse the Photos on the site. Users will either be registered or unregistered users. Unregistered users will only be allowed to browse the photos and register. Registered users will be allowed to upload or download photos.

### **Admin**

Admin will be responsible for resolving any customer service issues on the sight. They will also be responsible for vetting/removing uploaded photos that are flagged for violating the sites terms of use.

### **Photos**

Photos will be any picture file uploaded to the site by a registered user. The photos will be 3 quality levels HD, medium quality, and thumbnail. The thumbnail photos will be used to facilitate user navigation of the site. Medium quality photos will be displayed in the carousels for users to browse. HD photos will only be available for registered users to purchase, license and download.

### **Private Photos**

Private photos are photos that registered users maintain on the site but have not published for download and purchase

## **Initial list of functional requirements:**

### **1. General Users**

- 1.1. search images by category.
- 1.2. search images by image size.
- 1.3. search images by color type (black & white or colored).
- 1.4. will see top searched images.
- 1.5. will see his recent browse history.
- 1.6. will create an account to upload images.

### **2. Registered Users have to login to upload images.**

- 2.1. shall change images to black & white if it is not black & white.
- 2.2. shall do everything that unregistered user does.
- 2.3. shall upload images.
- 2.4. shall define the category of the images.
- 2.5. shall share images with other users
- 2.6. shall change sharing privileges of his images or albums
- 2.7. shall assign a title and content definition to his images.
- 2.8. shall create albums.
- 2.9. shall delete images and albums.
- 2.10. shall edit image, category, title, content definition and privileges of his image.
- 2.11. shall publish or suspend their images.
- 2.12. shall download original images.
- 2.13. shall edit his account.
- 2.14. shall recover his password.

### **3. Admin Users**

- 3.1. shall do everything that unregistered user does
- 3.2. will enforce licensing agreement
- 3.3. shall create users and define their privilege.
- 3.4. will approve the image to go online.
- 3.5. shall remove or publish user's images.
- 3.6. shall suspend or remove user account.
- 3.7. shall change other user's passwords.
- 3.8. shall be able to remove photos that break terms of service



## **List of non-functional requirements:**

1. Application shall be developed, tested and deployed using tools and servers approved by Class CTO and as agreed in M0 (some may be provided in the class, some may be chosen by the student team but all tools and servers have to be approved by class CTO).
2. Application shall be optimized for standard desktop/laptop browsers e.g. must render correctly on the two latest versions of all major browsers: Mozilla, Safari, Chrome.
3. Data shall be stored in the team's chosen database technology on the team's deployment server.
4. No more than 50 concurrent users shall be accessing the application at any time
5. Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users.
6. The language used shall be English.
7. Application shall be very easy to use and intuitive.
8. Application shall render well on mobile devices (UI shall be responsive)
9. Google analytics shall be added
10. No e-mail clients shall be allowed
11. Pay functionality, if any (e.g. paying for goods and services) shall not be implemented nor simulated.
12. Site security: basic best practices shall be applied (as covered in the class)
13. Modern SE processes and practices shall be used as specified in the class, including collaborative and continuous SW development
14. The website shall prominently display the following exact text on all pages "*SFSU Software Engineering Project CSC 648-848, Summer 2018. For Demonstration Only*" at the top of the WWW page. (Important so as to not confuse this with a real application).

## Competitive analysis:

Categories	ShutterStock	Dreamstime	Getty Images	PiCarousel
Search	++	++	++	++
Registration	++	++	++	++
Prices	++	++	++	++
Organize pictures by Categories	++	++	++	++
Upload Pictures	++	++	++	++

++ = It exists

The top 3 websites that control most of the market have a lot of features that allows them to compete, but they have one big down fall is their pricing is very expensive which is good for us because we can drive a lot of user to our platform by providing photos for free until we have a strong user base. Also, we can compete with them on launch by having most of their features like Search, registration. Organize pictures by categories, and upload pictures option. Furthermore, when going to these websites that don't show any pictures on their homepage, but they show categories. We can do top 20 photos of the week on our main page which will incentive more content uploaders to our website to have their photos featured by us on the main page.

## High-level system architecture:

- Server Host, Instance size ( CPU and RAM )
  - AWS, 1 vCPU, 1 GiB RAM
- Operating System and Version Number
  - Linux version 4.4.0-1060-aws (buildd@lgw01-amd64-036) (gcc version 5.4.0 20160609 (Ubuntu 5.4.0-6ubuntu1~16.04.9) ) #69-Ubuntu SMP Sun May 20 13:42:07 UTC 2018
- Database and Version Number
  - mySQL/5.7
- Webserver and Version Number
  - Apache/2.4.18 (Ubuntu)
- Server-Side language and Version Number
  - Express.JS
- Also list any technologies or packages you will need that you think is important.
  - Enzyme, Jest.

## Team:

### Team Lead:

David Hobby

### Front-End Lead:

Ekta Tandel

### QA:

Michael Estefan

### Back-End Lead:

Sandesh Basnet

## Engineers:

### Front-End:

Arnold Chhay

### Back-End:

Cavit Altindag

## Checklist:

- Team found a time slot to meet outside of the class **DONE**.
- Github master chosen **DONE**.
- Team decided and agreed together on using the listed SW tools and deployment server **DONE**.
- Team ready and able to use the chosen back and front end frameworks and those who need to learn and working on it **ON TRACK**.
- Team lead ensured that all team members read the final M1 and agree/understand it before submission **ON TRACK**