SW Engineering CSC648/848 Spring 2020
Gator Media

Team Number 5

Ahmad Moussalli (Team Lead) amoussalli@mail.sfsu.edu

Felipe Carmona - Frontend Team Lead

Pak Lik Siu - Backend Team Lead

Viral Amin - Github Master

Olivia Wissig - Frontend Team Member

Nicole Bernardo - Frontend Team Member

Milestone 1

History table: V 1.0

Gator Media

1. Executive Summary

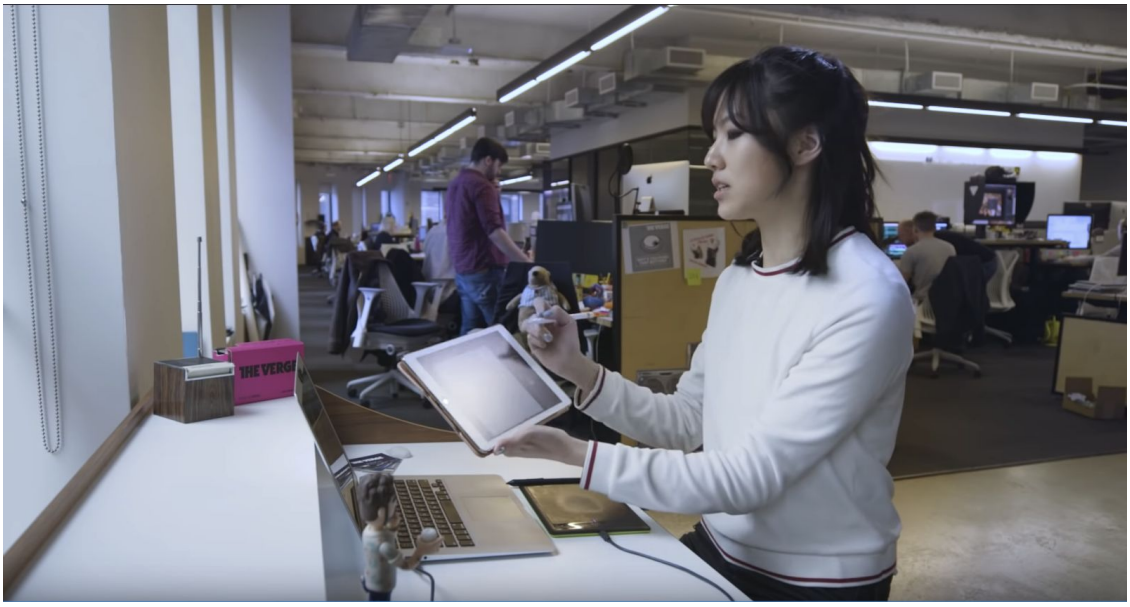
Many students and faculty tend to have the need to utilize a medium where they can sell and purchase digital media content that they own in hopes to earn a little bit of extra income. There are plenty of sites that offer this kind of service, however some of these sites are not as secure and digital media can be replicated, stolen or plagiarized. There are some sites that require professional skills in order to be used, and there are times where students and faculty prefer to purchase locally from other fellow students/faculty members to support them. Some websites may also contain a lot of ads and unnecessary web trackers that could affect consumers when making purchases/transactions, and there can be instances where consumers aren't aware of who they're purchasing digital media from, as it could be from an unverified/unreliable resource.

Our product offers a system specifically for SFSU students and faculty where they can purchase/sell digital media for extra income. Our site ensures that digital media being sold/shared won't get stolen/plagiarized through admins who will approve each post. There are no ads and web trackers, and students and faculty who create accounts on our site will be verified so buyers will know who they're purchasing from. Only SFSU students and faculty will be able to access our site, however we are hoping to expand to other campuses as well.

We are a team of San Francisco State University computer science students hoping to provide our community with a better multimedia platform.

2. Personae and Main Use Cases

Jennifer (Personae 1):



About Jennifer:

- Attending SFSU as a digital arts student.
- Loves to freelance draw (digitally on ipad) for clients for extra income.
- Has experience selling drawings to clients online.
- She attends multiple classes which does not leave her with the time to find buyers for her drawings.
- She is familiar with navigating through WWW applications.

Goals and scenario:

- For fun, Jennifer decided to draw some art work in between class breaks on her ipad. Jeniffer wants to make some extra income by selling her art.
- She doesn't have time to find people who want to buy her art, so she wants to be able to post it somewhere and have people contact her to buy it.

Ben (Personae 2):

About Ben:

- A student at SFSU studying film.
- Frequently makes short films/videos for class projects/assignments.
- Uploads films/videos to YouTube for his portfolio.
- Uses royalty free music for videos to avoid copyright claims.
- Spends his free time editing or shooting video content which makes it difficult to advertise or promote his projects.
- Familiar with using WWW applications.

Goals and scenario:

- Is working on a senior project film about SFSU students for his final assignment and wants to use local music created by SFSU students.
- He doesn't have time to go out of his way to find and interact with students who are willing to sell their music to him for his video.

Maria (Personae 3):

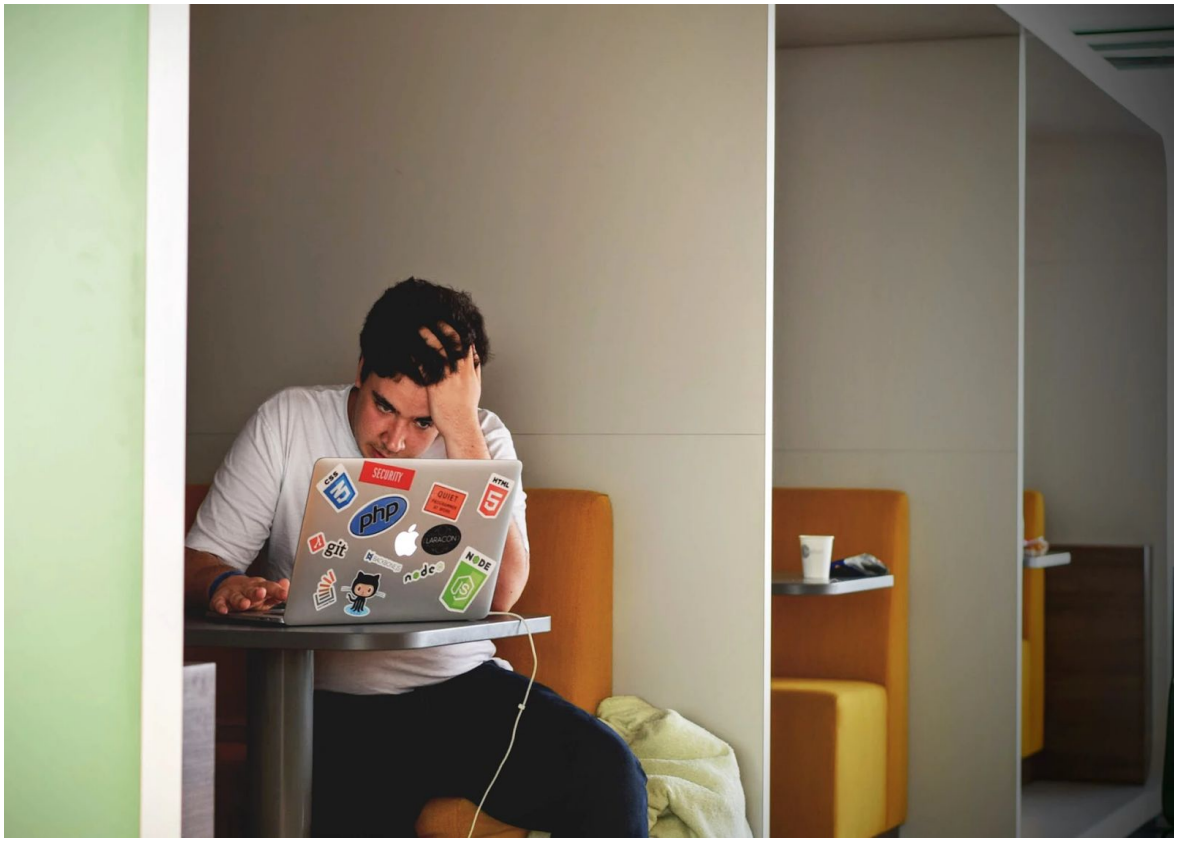
About Maria:

- SFSU professor that teaches ERTH 310.
- Updates her lecture slides each semester in order to provide students with updated/better material.
- Her lecture information is updated, but the media she uses as examples is made up of outdated earth/nature videos.
- Has basic WWW skills.

Goals and scenario:

- Wants to update some of her lectures to include more modern Earth/nature videos.
- Can search for/use YouTube videos, but would prefer to support the fine arts and use videos filmed/uploaded by local students.

Kevin (Personae 4):



About Kevin:

- SFSU student that is enrolled in ARTH 201 Western Art History.
- Is looking for Western Art for an assignment.
- Knows our website due to using it previously for other courses.
- Knows that his professor has uploaded related course content on our website.

Goals and scenario:

- Is currently working on an assignment for ARTH 201 and is supposed to find related content for his topic.
- Would prefer not to spend all day searching for related content when he knows that his professor uploads content to the website.

Crystal (Personae 5):

About Crystal:
- SFSU Media Professor that wants to help her students sell their content.
- Has basic WWW skills.

Goals and scenario:
- Normally helps students sell their content on campus, but knows few people attend.
- Want's an online platform where her students can sell their media content.
- Doesn't trust large platform users from stealing and selling content on other sites.

Use Case 1:
Jennifer wants to sell some of her digital artwork online for some extra income. She goes to our site and clicks on the link to post her own listing. She is prompted to login, and since she is an SFSU student, she is able to login with her credentials and uploads some previews of her art work along with the pricing for each piece. She waits for a buyer to contact her about her art via messaging, and sells it to them.

Use Case 2:
Ben wants to buy/obtain some music created by SFSU students for his film project, but doesn't have time to look for students willing to sell/give him music due to his tight schedule with school. Ben goes to our site and browses through the music section, listening to samples of students' uploaded songs. Ben attempts to contact one of the students selling a song, and is given a pre-field message window. Upon hitting contact, he's prompted to register/login. Once logged in, Ben contacts the owner and purchases their song.

Use Case 3:
Maria wants to search for and possibly download nature videos for her lectures. She goes to our site and looks for videos under the "nature" category. She finds a video (for free) that she would like to use for one of her lectures. She logs into her account and downloads the free content.

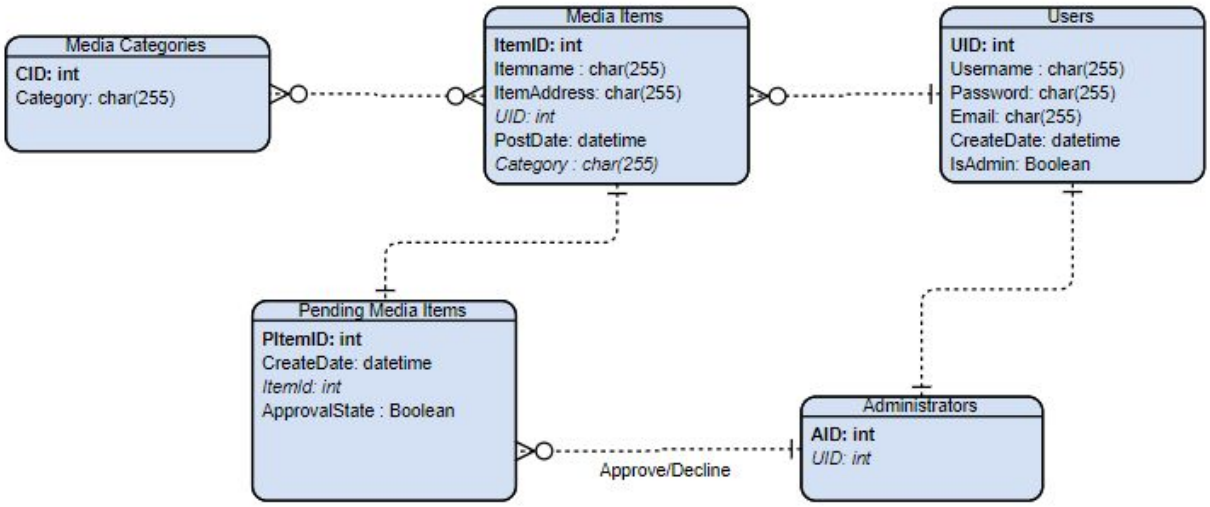
Use Case 4:
Kevin wants to find related content about his topic so that he can finish his assignment. Kevin already knowing about our site due to past courses decides to visit it. Kevin goes to our site and logs in since he already has an account. He searches based on Western Art and looks for images relating to his topic that are free. Kevin then finds the related content for his assignment and downloads it.

Use Case 5:
Crystal is looking for an online platform where her students can sell their media content. Crystal has heard from other faculty members in her department about our site. Since it's a site for only San Francisco State University Students and Faculty, Crystal trusts it more than other large platforms. Crystal decides to visit our website and browse it. Crystal finds the site easy to use and clearly sees a Post/Sell page. Crystal then navigates to the register page on our site. Crystal, finding it easy to use our site and register, then goes on to explain to her students how to use our site and sell their media content.

3. List of Main Data Items and Entities

Table:

1. User:
   - 1.1. Holds all the registration information of users.
   - 1.2. Determine the privileges/accessibility of different types of users.
   - 1.3. Each user can own multiple items.
   - 1.4. Holds logs on the user's purchased items.
2. Administrator :
   - 2.1. Holds information on all administrators..
   - 2.2. Able to approve/decline items from a pending list.
3. Pending Media Items:
   - 3.1. Holds all the items which are awaiting administrative approval.
4. Media Items :
   - 4.1. Holds all the information of each media item.
   - 4.2. Each media item can only have one owner/user.
   - 4.3. Holds the address of the actual items.
5. Media Categories:
   - 5.1. Holds each possible category and the pointers to the referenced items.



4. Initial list of functional requirements

1. Search bar
- Allows users to search our site for media content.
2. Registration
- Users are able to register on our website.
3. Sign in
- Users are able to sign in to our website once registered.
4. Post/Sell option
- Users are able to post/sell content once signed in.
5. Buy option
- Users are able to buy content once signed in.
6. Download option
- Users are able to download free content and or have to contact the seller to buy in order to download.
7. Comments
- Allows for comments on posts.
8. Thumbnail
- Allows users to preview media content.
9. Information about product
- Once a user clicks on a thumbnail it directs the user to information about the media content.
10. Contact seller/Messaging
- If the media content is not for sale, the user has to contact the seller in order to buy it.
11. Dropdown Category menu
- Allow users to pick types of content.
12. Profile page
- Allow users to check out their page, which will contain their posts/ other information.
13. In profile page settings
- Will allow users to remove media content of theirs which will be located as an option in their profile page.

5. List of non-functional requirements

a. 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).
b. Application shall be optimized for standard desktop/laptop browsers e.g. must render correctly on the two latest versions of two major browsers.
c. Selected application functions must render well on mobile devices.
d. Data shall be stored in the team's chosen database technology on the team's deployment server.
e. Full resolution free media shall be downloadable directly, and full resolution media for selling shall be obtained after contacting the seller/owner
f. No more than 50 concurrent users shall be accessing the application at any time.
g. Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users.
h. The language used shall be English (no localization needed).
i. Application shall be very easy to use and intuitive.
j. Google analytics shall be used.
k. No email clients shall be allowed.
l. Pay functionality, if any (e.g. paying for goods and services) shall not be implemented nor simulated in UI.
m. Site security: basic best practices shall be applied (as covered in the class) for main data items.
n. Media formats shall be standard as used in the market today.
o. Media material shall be either free or for sale, as determined by the media owner.
p. Each media material shall have its license info as one of the following:
   a) Free use and modification.
   b) Free but only allowed for SFSU related projects.
   c) For sale.
q. Modern Software Engineering processes and practices shall be used as specified in the class, including collaborative and continuous Software Engineering development.
r. The website shall prominently display the following exact text on all pages "SFSU Software Engineering Project CSC 648-848, Spring 2020. For Demonstration Only" at the top of the WWW page. (Important so as to not confuse this with a real application).

6. Competitive analysis

Feature	Shutterstock	GettyImages	Adobe Stock	Gator Media
Browse	++	+	+	+
Post	+	-	+	+
Search	++	++	++	++
Product info	-	+	+	++
Comment	-	-	-	+

Planned advantages that we will provide compared to current products that are already available is being able to comment on media content in order for other customers to get an idea how other users felt about the media content. Other advantages are displaying product information about the media content, since other products either lack and or have minimalistic product information. A competitive relationship that we share with other platforms is the ability to post, which will allow for SFSU students/faculty to be able to share their media content as well as be able to profit from it.

7. High-level system architecture and technologies used

Server Host: AWS 2vCPU 4 GB RAM
Operating System: Debian 10.3
Database: MySQL 8.0
Web Server: Node 13.8
Server-Side Language: Javascript
Additional Technologies: N/A

8. Team and roles

- Ahmad Moussalli - Team Lead
- Felipe Carmona - Frontend Team Lead
- Pak Lik Siu - Backend Team Lead
- Viral Amin - Github Master
- Olivia Wissig - Frontend Team Member
- Nicole Bernardo - Frontend Team Member

9. 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 are working on learning and practicing: DONE
- Team lead ensured that all team members read the final M1 and agree/understand it before submission: DONE
- Github organized as discussed in class (e.g. master branch, development branch, folder for milestone documents etc: DONE