Milestone 1

Initial Proposal of Warehaus Media

Team One
Lindsey Anne - lhogg@mail.sfsu.edu
Josh Reed
Jasmine Mann
Jason Wong
Tyler Huang
Bo Li
Raymond Feng

Submitted to Dr. Dragutin Petkovic, Anthony Souza
Department of Computer Science, SFSU
Version 1.1
Last Modified July 10, 2017

1. Executive Summary

People love art. Pictures, paintings, videos, or any other types of attractive visuals created and shared among people can evoke strong emotions and memories. According to hubspot.com, over 150 million daily active Snapchatters snap an estimate of 8,796 photos or memories per second. With that being said, people love the sight of a beautiful picture, because the image not only provides an immediate message to the receiver but capturing or collecting images is also a hobby for many of the people today.

In today's world of competitive trade and technology, businesses are aware that one of the most important focus is to constantly make sure that their marketing materials are visually appealing to their audience. With nice looking photos and awesome videos, customers will likely have a greater experience and stay. Media managers need a supply of images and videos to help their businesses better advertise and sell themselves.

This is where Warehaus Media comes in. From big companies to startups, Warehaus Media can provide users with visually attractive components to better attract users. The company can also provide better customer service than other popular media purchasing sites, such as iStock.

Warehouse Media is built by a group of well-trained engineers from San Francisco State University. The company's focus is to give users a great time by having a simple interface and an efficient searching and sorting method that will ensure the best experience when visiting.

2. Use Cases

Guest User

Kevin is an art student. He has never learned about design, and his professor assigns a project to him. He wants to look for some pictures or videos to buy as reference to inspire him to finish the project. As an unregistered guest user, he can only view the information (item's description, customers' reviews) of the item that he searched. Also, if some information shows illegal items, he can report directly to the website administrator. If he decides to buy an item, he is prompted to register an account.

Merchant User

Jonny is a self-employed graphic designer with a lot of photos and art that he would like to sell. He registers an account on the Warehaus Media website. After filling in his merchant information, he posts his items with appropriate prices and descriptions. Upon posting, all Guests and Patrons who search the specific items could see the information that he posted, and they can contact him directly to ask more details about the items.

Patron User

Steve is a frequent customer and needs another stock photo for his expanding tour guide service website. When Steve visits the Warehaus Media website, he signs into his account, where he is greeted and recommended cityscape pictures based on previous transactions and searches. Steve, going off the website's recommendations, finds another similar stock photo that he enjoys, so he proceeds to purchase. Since Steve is already registered and has saved his payment information so he can skip most of the Guest User's registration process and head straight to buying the product.

Administrator

Alex has been hired as the administrator of Warehaus Media. He will manage the database of the website and receive messages from registered and Guest users about illegal media files, complaints, and site bugs. He is easily able to delete media files which violate the Terms and Conditions of the site and send warnings to registered sellers. He is able to suspend/delete any registered accounts which violate the site's policies.

3. Data Definition

1. Registered user – user with an account that can either post or buy content
    a. Email
    b. Username
    c. Password
2. Guest user – user without an account; can browse the site for content; Cannot post or buy content
3. Merchant – registered user selling media files
4. Patron - registered user buying media files
5. Content - The media files users will be selling--images or videos
    a. Owner ID
    b. Media Type
    c. Category
    d. Title
    e. Description
    f. Price
    g. Thumbnail
    h. Full-size media file
6. Administrator – a user with special privileges; will be able to delete any media files and ban any registered accounts; will be able to manage the database.

4. Functional Specifications

1. Guest users shall be able to browse through the site, but not have access to post or download media files.
2. Guest users shall be able to contact administrator.
3. Guest users shall not be able to contact sellers.
4. Guest users shall be able to create accounts and log in.

5. Merchant users shall be able to upload and post photos and videos they wish to sell.
6. Merchant users shall be able to edit or remove their listings.

7. Patron users shall be able to search for media files by owner, media type, and category.

8. Merchant and Patron users shall be able to reset their passwords and add/edit personal information as they wish.
9. Merchant and Patron users shall be able to find their passwords if they forgot, and passwords shall be sent to the their email addresses.
10. Merchant and Patron users shall be able to contact other Merchants, Patrons, and Administrator.

11. Administrator shall be able to delete any listed media files.
12. Administrator shall be able to delete any registered accounts.
13. Administrator shall manage the database.

14. The site shall present the Terms and Conditions and Privacy Policy during the registration process.
15. The site shall ask for username and password.
16. Passwords shall be encrypted.
17. Fuzzy string search shall be used to filter photos and videos.
18. The site shall show most viewed media files if no file matches user’s search.

5. Non-Functional Specifications

1. Application shall be developed using class provided LAMP stack
2. Application shall be developed using pre-approved set of SW development and collaborative tools provided in the class. Any other tools or frameworks must be explicitly approved by Anthony Souza on a case by case basis.
3. Application shall be hosted and deployed on Amazon Web Services as specified in the class
4. Application shall be optimized for standard desktop/laptop browsers, and must render correctly on the two latest versions of all major browsers: Mozilla, Safari, Chrome.
5. Application shall have responsive UI code so it can be adequately rendered on mobile devices but no mobile native app is to be developed
6. Data shall be stored in the MySQL database on the class server in the team's account
7. Application shall be deployed from the team's account on AWS
8. No more than 50 concurrent users shall be accessing the application at any time
9. Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users.
10. The language used shall be English.
11. Application shall be very easy to use and intuitive. No prior training shall be required to use the website.
12. Google analytics shall be added
13. Messaging between users shall be done only by class approved methods and not via e-mail clients in order to avoid issues of security with e-mail services.
14. Pay functionality (how to pay for goods and services) shall not be implemented.
15. Site security: basic best practices shall be applied (as covered in the class)
16. Modern SE processes and practices shall be used as specified in the class, including collaborative and continuous SW development
17. The website shall prominently display the following text on all pages *"SFSU Software Engineering Project, Summer 2017. For Demonstration Only"*. (Important so as to not confuse this with a real application).

6. Competitive Analysis

	Warehaus Media	Shutterstock	Depositphotos
Filter	+	+	+
Preview	+	+	+
Image	+	+	+
Video	+	+	+
Music	-	+	+
Simple, Clean UI	+	-	-

KEY:

- \+ Feature exists
- \- Feature does not exist

7. High-Level System Architecture

Web Application stack - LAMP

- Linux operating system
- Apache Web Server
- MySQL Database
- PHP Framework

Deployment - Amazon Web Services (AWS)

- Dependable cloud based web service
- Great scalability and speed

Framework - CakePHP

- Rapid development
- Active community support
- MVC architecture

UI - Bootstrap/JQuery/React

- Cross browser maintainability
- Modularized and encapsulated

MVC Framework

- Modular
- Scalable
- Lightweight and testable
- Maintainable

8. Team Members

Lindsey Anne	CEO (Team Lead)
Josh Reed	CTO (Tech Lead)
Jasmine Mann	Front End Engineer
Tyler Huang	Front End Engineer
Jason Wong	Database Administrator
Bo Li	Back End Engineer
Raymond Feng	Back End Engineer

9. Checklist

- Team decided on basic means of communications: DONE
- Team found a time slot to meet outside of the class: ON TRACK
- CTO chosen and working out well so far: DONE
- Github master chosen: DONE
- Team ready and able to use the chosen framework: ON TRACK
- Skills of each team member defined and known to all: ON TRACK
- Team lead ensured that all team members read the final M1 and agree/understand it before submission: DONE