Art Gallery Website for Diane Ohnemus

CST489

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Executive Summary

The goals and objectives for this project consist of creating a user-friendly website that artists can use to display their artwork online while maintaining ease-of-use when it pertains to uploading photos of artwork from the end user's mobile device. Many artists have ways of creating websites, whether they are custom websites or template based; however, the usability of the websites may not be as efficient as desired.

The purpose of this project is to offer a solution to the issue of gallery websites that are difficult to manage. Currently, our client has a website that was built using a template-based design process. The website is usable but it is not efficient enough when it pertains to adding photos of artwork. This must be done through the template website itself, and goes beyond the general knowledge of the end user. When this project is completed, the main goal is to enable the end user to upload pictures of their paintings through their mobile device, whether it be from the webpage itself or a mobile application that integrates with the website.

When it comes to the population affected by this project, it would include artists who do not have a website currently or artists who have a website that is too difficult to use or impossible to maintain from the front-end alone. The general aesthetic of the webpage can be customized to the clients' liking, but the important feature of the project remains the ability to upload pictures directly from the webpage behind an administrator login, which includes mobile device accessibility.

We anticipate the outcomes of this project to be well received. The main outcome that will be achieved is being able to upload pictures to the website directly from a mobile device. In the long run, the intention is to offer this solution to artists around the world who would like to access these features.

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Introduction/Background

Project name and description

Our client is an individual by the name of Diane Ohnemus. She is an artist local to Southern California. The product consists of a website which will house pictures of her paintings in order to offer a look into her works to interested parties. The website will showcase different categories of paintings and the project can be duplicated for any artists interested in the product. This project is important because the website will enable the ease-of-use feature of uploading pictures to the website directly from the end user's mobile device.

Problem and/or issue in technology

Currently, our client has a website that contains pictures of paintings that another party has uploaded to the website through a 3rd party template website service. Our client's website does the intended job, but our client would like their experience with the website to be easier and more efficient. Aside from creating a new, modern-looking website, our client's main issue is not being able to upload pictures of their artwork directly from their mobile device.

Solution to the problem and/or issue in technology

Our team will solve this issue in technology by providing a solution that includes the end user being able to log into the administrative section of their website to upload photos. In theory, this would be done on a PC, Mac, or mobile device of their choosing. Theoretically, the end user would simply upload a portrait or landscape image and our team would program the front-end to communicate with the backend to generate a link to a compressed image that would be viewable

on the website. The administrator would be able to choose the type of painting and fill out the description of the painting which would include an image name, dimensions, media type, and availability of the painting if for sale. The image would then be compressed, linked, and added to the website on the appropriate gallery page (still life, portrait, etc…).

Environmental Scan/Literature Review

We have searched and found a few examples of this type of project being done throughout the internet. We will review three websites including Joseph Todorovitch's, Wendy Wirth's, and our client Diane Ohnemus'. Todorovitch's website is designed and managed through an organization by the name of FASO. ("Todorovitch's Fine Art", n.d.) FASO is an organization that helps market artists and their portfolios through FASO's client-created websites. Todorovitch's website features a home, paintings, newsletter, galleries, about, contact, and workshops page.

Todorovitch's website does not contain any copyright information other than the credit given to FASO for the premade website edited by Todorovitch. Unlike Todorovitch, Wirth's website does feature copyright information at the bottom of the website. ("Wendy Wirth Fine Art – Painting as a Passion", n.d.) Wirth's website also features a welcome, about, paintings, archive, events, and contact page. There is no indication that Wirth's website is prebuilt or coded from scratch. Wirth's website also features a search bar and indicates whether a painting has been sold or not. Our client's website is similar to Wirth's, being that it also features a search bar, copyright information, and six pages. Our client's website is not as user-friendly as the other two websites, but that is one area that our client entrusts us to fix.

Our client's website features a home, figurative, landscapes, other, archive, and contact page. ("Diane's Paintings – Portfolio of Paintings", n.d.) Each website carries similar values and ideas. Each website, except Wirth's (maybe), seems to be created through some sort of website building provider. Each website featured a way to contact the artist through email, social media, or their contact page. Each website also had a dedicated space for archived paintings. In conclusion to our review of each website, we now have ideas to build on and improve our client's website.

Stakeholders

The stakeholders of this project include the developers Alex O'Brien, Adam Momand, Royal Williams, and Zachary Hester. Also included is our client, Diane Ohnemus. In the future, end users who use this service will become stakeholders in the project, as this effort can be duplicated and offered to anyone seeking a user-friendly artwork gallery website.

The developers of this project stand to gain valuable knowledge of how to manage a successful software development project, and how to communicate effectively amongst the software development team and to the client. The client, Diane Ohnemus, will gain a usable artwork gallery website that is an upgrade to their current website. End users will enjoy a custom-made website that is user-friendly. This solution will include the ability to upload artwork photos directly to their website using a mobile device or computer.

Ethical Considerations

During the production of the website, ethical issues may affect the developers more than any other stakeholder. For example, the developers could use information/artwork without the

permission of the client, affecting the developers' progress and the client's trust. The developers could try to implement too much or overcomplicate things, affecting the finished product and readiness of the capstone showcase. The client could possibly shut down the production of the website without warning, affecting the developers in multiple ways. The website could be hacked or changed by an outside source, affecting the developer's work and the client's website. Ethically speaking, all stakeholders can be affected by legal considerations such as copyright issues, failure to come to terms, reneging on written/verbal agreements, or reusing images without consent. All stakeholders have to prioritize making positive ethical decisions during and after the completion of the website because issues can arise from ethical misdecision.

Legal Considerations

Legal considerations for this project include permissions to maintain the website as much as the developers need to do so. A contract would be produced and signed by both parties in order to make sure everyone is aware of the terms of use of the website along with any limitations. Additionally agreed upon terms will also be added to the contract before being signed by both parties. Any copyrights used by the website will be noted appropriately. This includes quoted verbiage, pictures, logos, company names, products, etc…

Project Goals and Objectives:

Part of project planning is to set goals and objectives. Use a table for this section.

Goals

The goal is to create a gallery web application that also acts as a marketplace for consumers to purchase art they are interested in. The website would have pictures of paintings in a gallery view that would have an option for purchasing the piece if desired. This web application could serve as a template for future

opportunities with artists who would like to have a website or update their current website. Our team will be meeting with the client to go over the specifications and requested features of the website.

This goal will keep in mind the credit card/debit card security and responsibilities that the California government requires to implement to ensure customers' payment information is secured. This will be discussed with the client to make sure the client is aware of the responsibilities and we as developers need to make sure as well how to implement and use the type of security required by the governments so that the application we create can be trusted and used with confidence. It will be made sure to write code that can handle user input and avoid all the security-related issues that come with user inputs and our code must handle errors.

Objectives

This web application will be only accessible to the IP addresses in the United States and outside IP addresses will be restricted. The application will have a MySQL database and for the backend of the application we plan to use NodeJS. The application will have a user-friendly look with a menu bar that will include Home, Figurative, Other, Archive, Contact, and Landscapes pages and each page will have relevant information with links to easily go back from one page to another. There will also be a nice-looking footer with links to all the important pages.

Final Deliverables

By the end of the CST 499 course we will have a functional gallery web application that also acts as a marketplace for consumers to purchase art they are interested in. The website would have pictures of paintings in a gallery view that would have an option for purchasing the piece if desired. This web application could serve as a template for future opportunities with

artists who would like to have a website or update their current website. Our progress will be shared with clients throughout the course so we meet their requirements and the website meets their needs.

Approach/Methodology

We are going to use Github for our development environment and all the team members agreed. Our second choice would be Replit since we have experience using Replit in our Internet Programming class CST 336 and we have experience using GitHub for our Software Engineering course CST 438. These online platforms will help us to share our project progress with our team members and we all can review the code and bring changes and improvements as needed.

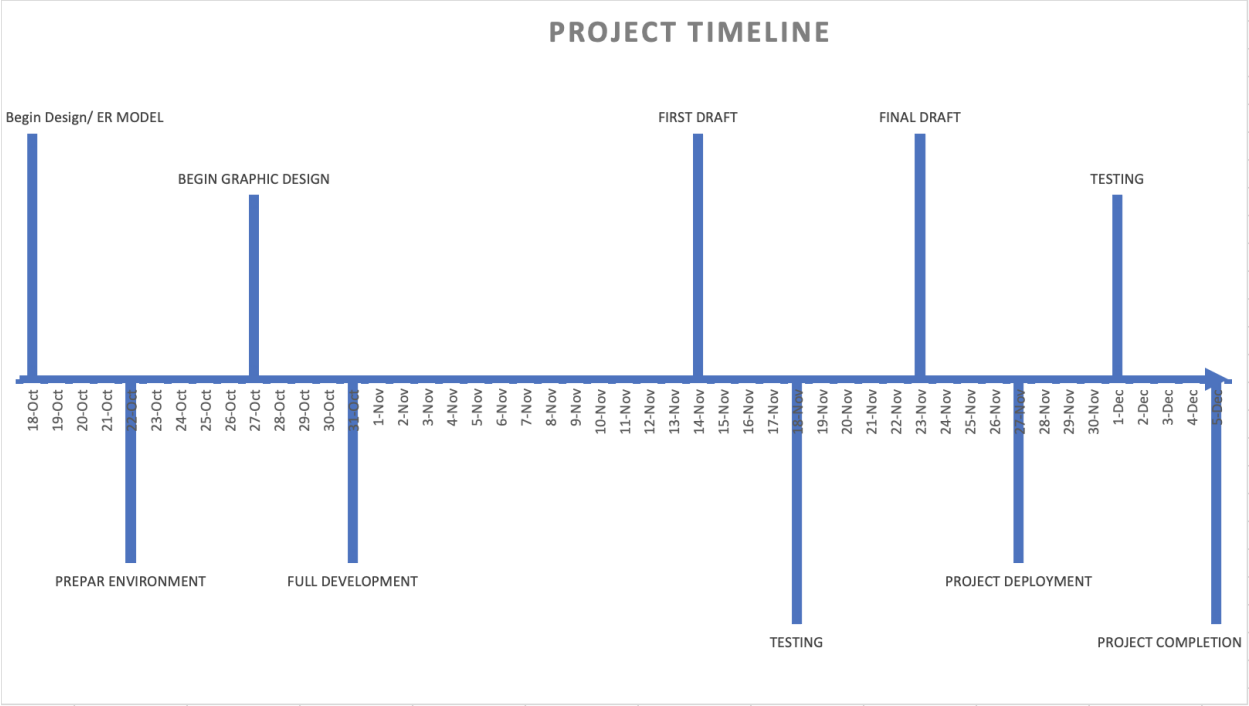
Timeline/Resources

This schedule is subject to change based on our project priorities and scope of work.

Weekly Schedule	Daily Tasks	Daily Tasks	Daily Tasks	Daily Tasks	Daily Tasks	Daily Tasks	Weekly Progress Report
	Module 1 10/25-10/31						
	Design of the Project	Design of the Project	Design of the Project	Low Sketch of the Project	Low Sketch of the Project	Design of the Project	Sharing Progress with Team Members
	Module 2 11/1-11/7						
	Frontend development of the project	Frontend development of the project	Frontend development of the project	Frontend development of the project	Frontend developme nt of the project	Frontend developme nt of the project	Sharing Progress with Team Members
	Module 3						

Weekly Schedule	Daily Tasks	Daily Tasks	Daily Tasks	Daily Tasks	Daily Tasks	Daily Tasks	Weekly Progress Report
	Module 1 10/25-10/31						
	Design of the Project	Design of the Project	Design of the Project	Low Sketch of the Project	Low Sketch of the Project	Design of the Project	Sharing Progress with Team Members
	11/8-11/14						
	Backend development of the project	Backend development of the project	Backend development of the project	Backend development of the project	Backend developme nt of the project	Backend developme nt of the project	Sharing Progress with Team Members
	Module 4 11/15-11/21						
	Project Testing	Project Testing	Project Testing	Project Testing	Project Testing	Project Testing	Team meeting
	Module 5 11/22-11/28						
	Project Testing	Project Testing	Project Testing	Project Testing	Project Testing	Project Testing	Team meeting
	Module 6 11/29-12/5						
	Video Prep	Video Prep	Video Prep	Video Prep	Video Prep	Video Prep	Video Prep
	Module 7 12/6-12/12						
	Festival Prep	Festival Prep	Festival Prep	Festival Prep	Festival Prep	Festival Prep	Festival Prep
	Module 8 12/13-12/15						
	Capstone Festival	Capstone Festival	Capstone Festival	Capstone Festival	Capstone Festival	Capstone Festival	Capstone Festival

Detailed Timeline



Milestones

Our Capstone project will have 4 major stages. The first stage will be the design which will include a paper scratch and non-graphic design using HTML and all this will be done in the first week of the project.. The second stage will be mostly frontend with CSS and HTML and this stage will be done in the second week. Stage three will consist of frontend and backend development and we will give this stage more than one week to complete. The final stage will be

testing and modification and this stage will be given more than one week because we might have to bring changes and modify things if needed.

Resources Needed

Resources that our team going to use for this project will be as follows:

- GitHub
- MySQLWorkbench
- Visual Studio
- Functioning Computers for all team members
- Domain Name (If the Client would like to test the application with a registered domain Domain Name and account in one of the online services such as GoDaddy)
- We might also use Replit as a backup if for some reason we didn't want to use GitHub
- Git

Platform

The platform that will be used to complete this project includes HTML, CSS Node.JS, Express MySQL Bootstrap Illustrator and online Domain Name Services. HTML, CSS will be used for frontend and MySQL, Javascript and Express will be used for the backend. Node.JS library will be used for backend as well depending on what features the client required our team to include in our project.

Risks and Dependencies

Risks

Events or conditions that have the potential to impact at least one of this project's objectives or milestones include a team member becoming unable to contribute or deliver within a given timeframe, or a change in one or more of the technologies used. In the unforeseen event that a

team member can no longer contribute, our response will be convening a meeting among the remaining team members to discuss the reassignment of the unavailable team member's workload. Any changes to the proposed timeline will also be addressed. The stakeholders will be notified once the team has agreed upon an amended proposal. If a team member cannot meet a specific deadline, the team will coordinate a solution internally and notify the appropriate stakeholders and professors responsible for this course management. If there is a change in one or more of the technologies used, such as an overrun in hosting costs, all stakeholders will be notified immediately.

Dependencies

The first step of the project will be designing the software and understanding how each part of the stack will be implemented. One of the biggest design challenges and most important dependencies is the API to upload new images to the application without the assistance of a webmaster. Understanding this functionality and how it will be implemented will be one of the largest deliverables in the design dependency. Whereupon this dependency is designed, we will be moving onto frontend development, and simultaneously developing the back end by another team. The core dependencies here will be setting up and testing the API and upload features and then building out around that. Focusing on the UI/UX portion is a fool's errand if the core data exchange framework is not functioning properly. Once the back-end programmers have implemented the core features of the API, we will begin the implementation of the database and connect it to the application. The database will need to store the image data and pass it to the front end to display the gallery so integrating this will be crucial for the project. Once all of the core dependencies are in place, the process of hosting it, likely on AWS, will be undertaken.

Running a web application locally is a far cry from running it in the cloud, and we want a working prototype before we begin implementing it onto a web server. Once these are all complete, testing can begin.

Testing Plan

The testing of the project will of course be completed in stages, beginning with the developers using automated testing, as the code is completed automated unit tests will be completed by the developer in charge of that section. While the project is being completed we will aim to have 50% test coverage of the code, and after development is complete we will begin completing system tests to ensure that all of the project's components are interacting properly. The benefit of coding unit tests alongside the integration of individual components is it enables us to localize possible failures as they arise, as opposed to uncovering them down the line.

When a working alpha or beta of the project has been completed, we will begin UAT testing with various people in our personal lives. Zachary has identified a prospective client who is interested in obtaining a website similar in functionality to our project, and she will be testing the project blindly. Meaning she is not a software developer, and we can simulate the experience of a technically naive user interacting with the finished product. Focus groups could be an option if we are able to recruit the required members, however this feels needlessly resource-intensive. Zachary has a colleague who is a technical project manager for a web development company and

he is willing to complete an expert functionality check, but only when the project is nearing completion.

Team Members if applicable

Alex O'Brien, Adam Momand, Royal Williams, Zachary Hester

Division of labor, including clear roles and responsibilities

Alex O'Brien: Fullstack development (taking part in the frontend and backend development of the project), interacting with clients and organizing Zoom meetings with client and team members.

Zackary Hester: Documentation, Fullstack development, review code, merge code and bring changes as needed.

Royal Williams: Front-end development, documentation of important functionality of the website.

Adam Momand: Fullstack development, weekly progress report, and documentation.

References

Diane's Paintings – Portfolio of Paintings. (n.d.). Retrieved September 19, 2023, from https://dianeohnemus.com/

Todorovitch's Fine Art. (n.d.). Retrieved September 19, 2023, from *https://www.todorovitch.com/*

Wendy Wirth Fine Art – Painting as a Passion. (n.d.). Retrieved September 19, 2023, from https://wendywirth.com/