

Glassroom Art

Software Engineering
ITSC-3155
Final Project Report

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Table of Contents

1. INTRODUCTION	1
1.1 PROJECT DESCRIPTION	1
1.2 PRODUCT VISION AND/OR SCOPE	1
1.3 USER STORIES	1
1.4 LIST OF SYSTEM REQUIREMENTS AND FEATURES	1
1.5 CONTEXT DIAGRAM AND DATA FLOW DIAGRAM	2
1.6 ABSTRACT USE CASES AND USE CASE DIAGRAM	3
2. SPRINTS	6
2.1 LIST OF TASKS AND EFFORTS	6
3. USER INTERFACES	7
3.1 USER INTERFACES	7
4. TEST PLAN	10
4.1 WHAT WILL BE TESTED?	10
5. APPENDIX	10
A.1 APPENDIX 1:SYSTEM ANALYSIS USE CASE 1	10
A.2 APPENDIX 2:SYSTEM ANALYSIS USE CASE 2	11

1. Introduction

After many weeks of using HTML and CSS in 3155, the group decided they wanted to create their own web page due to the creativity and flexibility that come with those languages. Jacob, Luke, and Melvin all expressed an appreciation and love for art and agreed to create the Glassroom Art web page as their final project. This project would be accompanied by a product vision, a list of user stories, a context diagram, an activity diagram, a use-case diagram, and many more types of analysis and use cases.

1.1 Project Description

The group decided to create the Glassroom Art webpage through an HTML & CSS file on visual studio. The website demonstrates what the user will see upon opening the link. The website allows users to upload, download, and critique art from all other users on the site. The website's functionality allows login to account, comment on art pieces, and newsletter subscription through email.

1.2 Product Vision/Scope

For the people out there who appreciate art and all the forms it can manifest itself in, the group decided to create the Glassroom Art website for all lovers and appreciators of the hobby. This website allows people to not only download their favorite art pieces from their favorite artists, but it also allows new and upcoming artists the ability to upload their own art and receive recognition for it.

1.3 User Stories

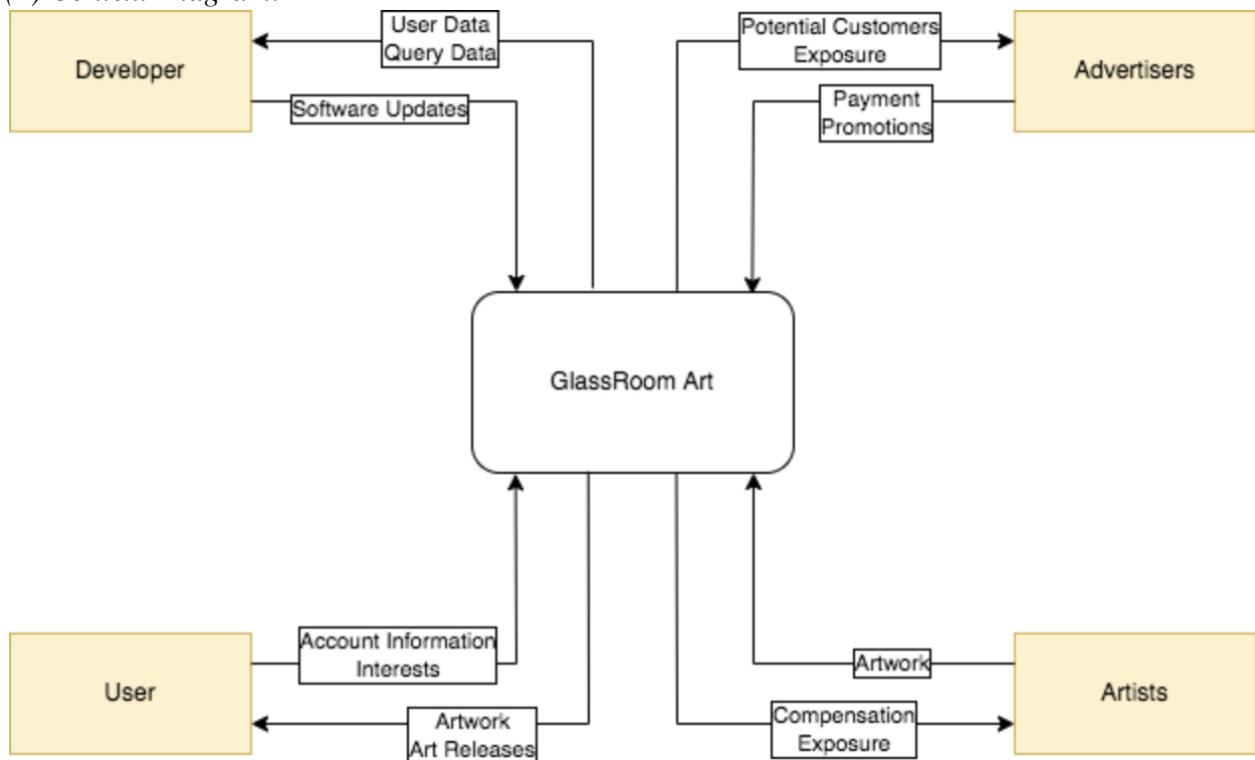
As a	Stakeholder	I would like to	Objective	So that	Driver
As a	GlassRoom owner	I would like to	promote and display the creative art of many artists	So that	we can display and promote the art of many upcoming artists
As a	customer Phil	I would like to	search different pieces of art from featured artists	So that	I can learn more art techniques and get inspiration!
As a	customer Nick	I would like to	download art from upcoming artists	So that	I can support good artists with little fans.
As a	customer Steve	I would like to	upload my best art pieces	So that	get eyes on my work since I am just starting out.
As a	GlassRoom Artist	I would like to	keep uploading my art as a featured artist	So that	regular users can be exposed to my own work.
As a	GlassRoom owner	I would like to	create a weekly newsletter	So that	everyone knows what's happening with GlassRoom
As a	customer Luke	I would like to	comment on different art pieces on GlassRoom	So that	artists can use my valuable critiques to better themselves.
As a	customer Jacob	I would like to	receive more information from GlassRoom's newsletter	So that	I can get more news and stories going on in the art community.
As a	GlassRoom owner	I would like to	create a premium membership	So that	featured artists can get paid for their work!

1.4 Requirements and Features

- Login
- Upload Art
- Download Art
- Newsletter Subscription
- Comment & Like Art
- Search Art
- Art Database
- User Database
- Bill Customer

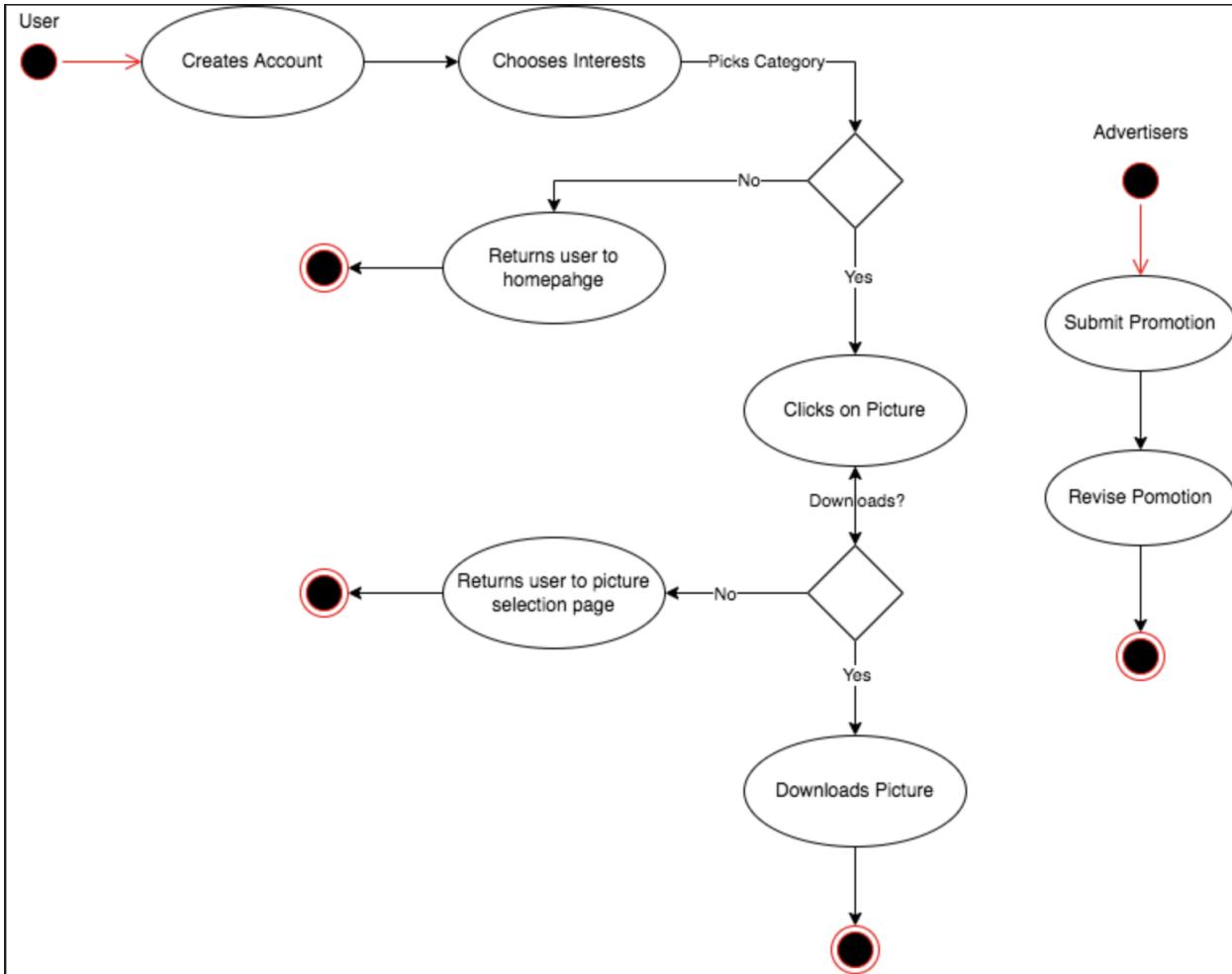
1.5 Context Diagram and Activity Diagram

(1) Context Diagram:



(2) Activity Diagram of the system:

Glassroom Art



1.6 Abstract Use Cases and Use Case Diagram

This subsection should:

(1) *Abstract Use Cases*

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{Glassroom Art}

USE CASE NAME:	Member Login	USE CASE TYPE <i>Abstract:</i> <i>b</i>
USE CASE ID:	001	
PRIORITY:	High	<i>Extension:</i> <i>o</i>
INVOKED BY:	Lead Software Engineer	
PARTICIPATING ACTORS:	Member	
DESCRIPTION:	Members should be able to login so that their preferences and previously viewed art can be accessed more quickly.	
PRE-CONDITION:	User has an account on Glassroom Art	
TYPICAL COURSE OF EVENTS:	<p>Step 1: User clicks the “Login” button.</p> <p>Step 2: User types their username and their password into the associated fields and clicks “Submit”.</p> <p>Step 3: User is able to view and download art.</p>	
ALTERNATE COURSES:	<ul style="list-style-type: none"> ● <i>Alt step 2: Wrong login information</i> 	
POST-CONDITION:		

{Glassroom Art}

USE CASE NAME:	Download Art	USE CASE TYPE <i>Abstract:</i> <i>b</i>
USE CASE ID:	002	
PRIORITY:	High	<i>Extension:</i> <i>o</i>
INVOKED BY:	Lead Software Engineer	
PARTICIPATING ACTORS:	Member	
DESCRIPTION:	Members should be able to download art pieces digitally to their computer.	
PRE-CONDITION:	User is a member and logged in	
TYPICAL COURSE OF EVENTS:	<p>Step 1: User navigates to the art piece that they want to download and clicks on it.</p> <p>Step 2: User clicks the “Download” button.</p>	

Glassroom Art

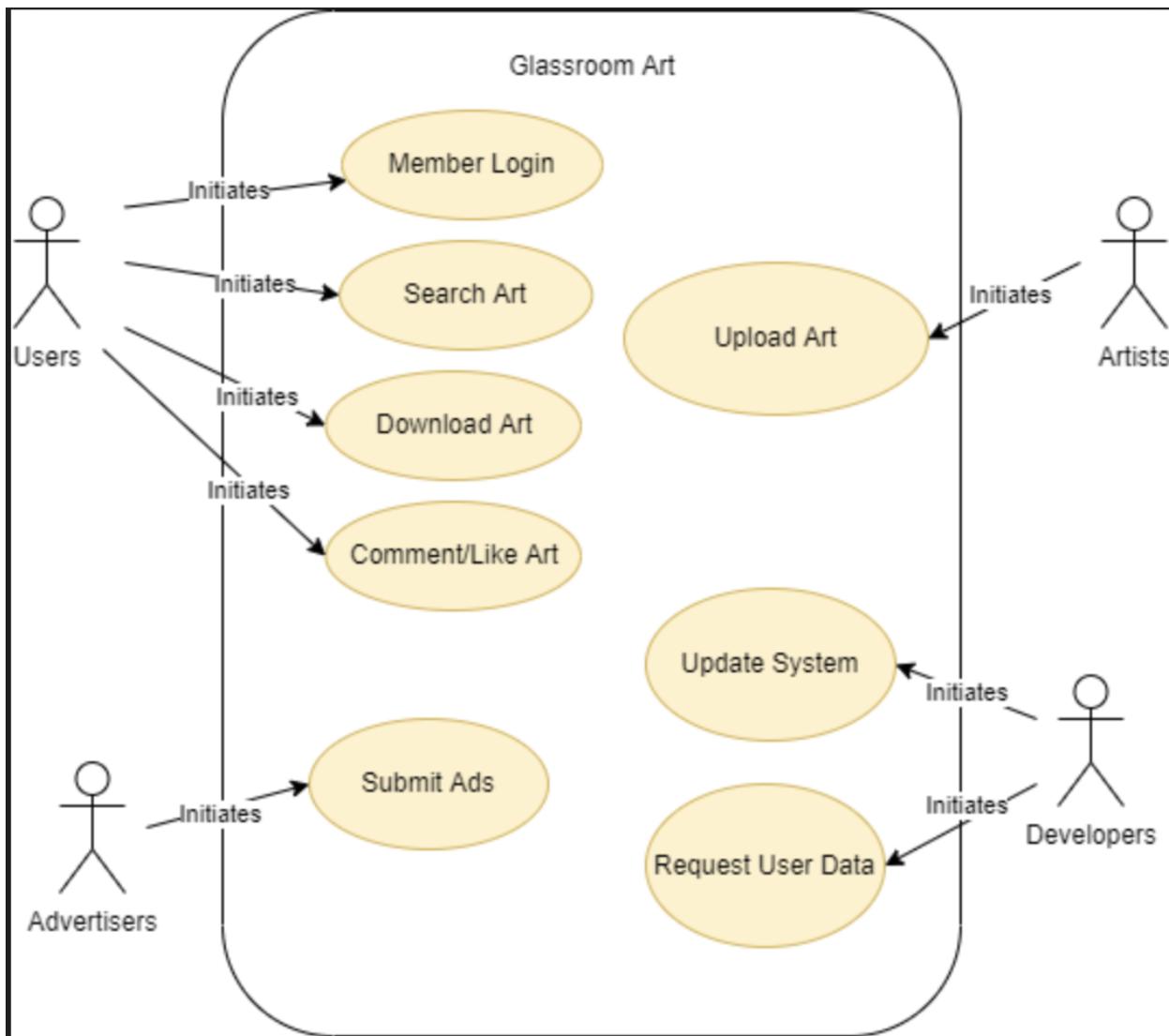
ALTERNATE COURSES:	<ul style="list-style-type: none"> Alt step 2: User has no memory space left on their computer, error is given
POST-CONDITION:	

{Glassroom Art}

USE CASE NAME:	Upload Art	USE CASE TYPE <i>Abstract:</i> <i>b</i> <i>Extension:</i> <i>o</i>	
USE CASE ID:	003		
PRIORITY:	High		
INVOKED BY:	Lead Software Engineer		
PARTICIPATING ACTORS:	Artist		
DESCRIPTION:	Artists should be able to upload art pieces to the website.		
PRE-CONDITION:	Artist is a member and logged in.		
TYPICAL COURSE OF EVENTS:	<p>Step 1: Artist clicks on the “Upload” button.</p> <p>Step 2: Artist chooses a file from their drive and gives a description of the art piece.</p> <p>Step 3: Artist submits the file and description.</p>		
ALTERNATE COURSES:	<ul style="list-style-type: none"> Alt step 3: Incorrect/Unsupported file type given, error is given 		
POST-CONDITION:			

(2) Use Case Diagram

Glassroom Art



2. Sprints

Efforts

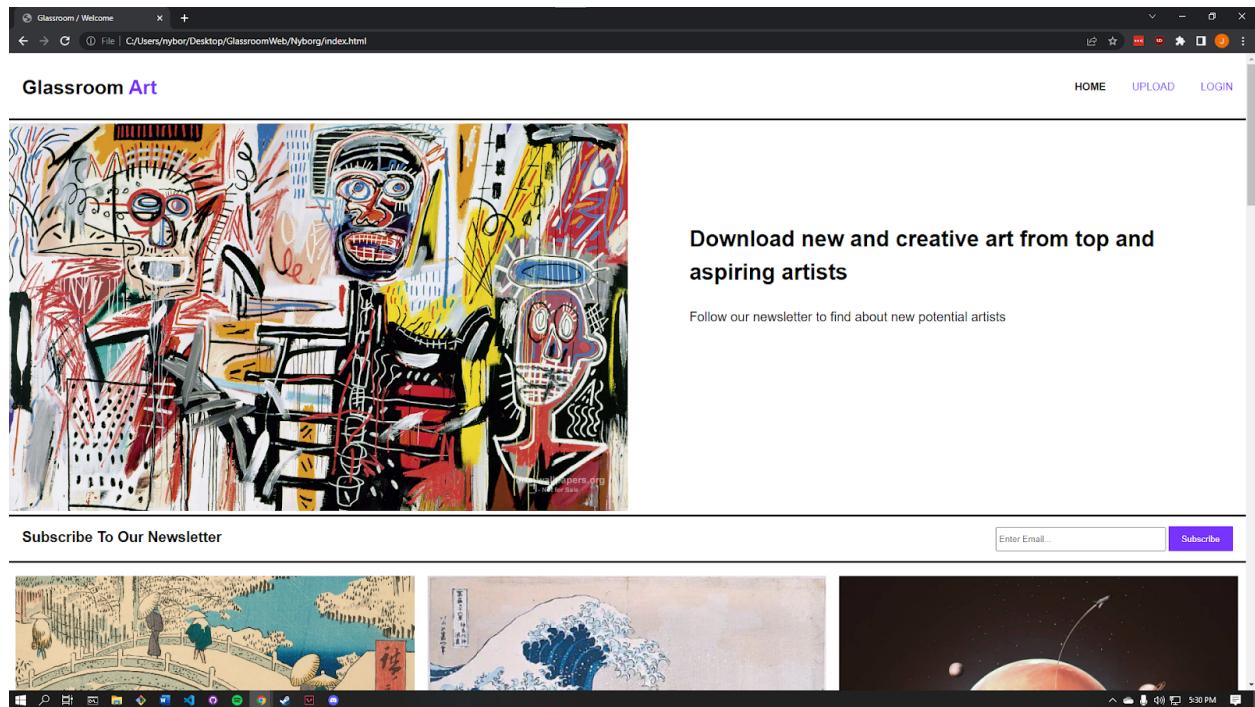
User Story (Requirement) Tasks	Assigned To	Estimated Time of Research	Actual Time of Research	Estimated Development Effort	Actual Effort
Project Discussion	Group	1 hour	45 minutes	15 minutes	100%
Task 1. Context Diagram	Group	30 minutes	20 minutes	10 minutes	100%

Glassroom Art

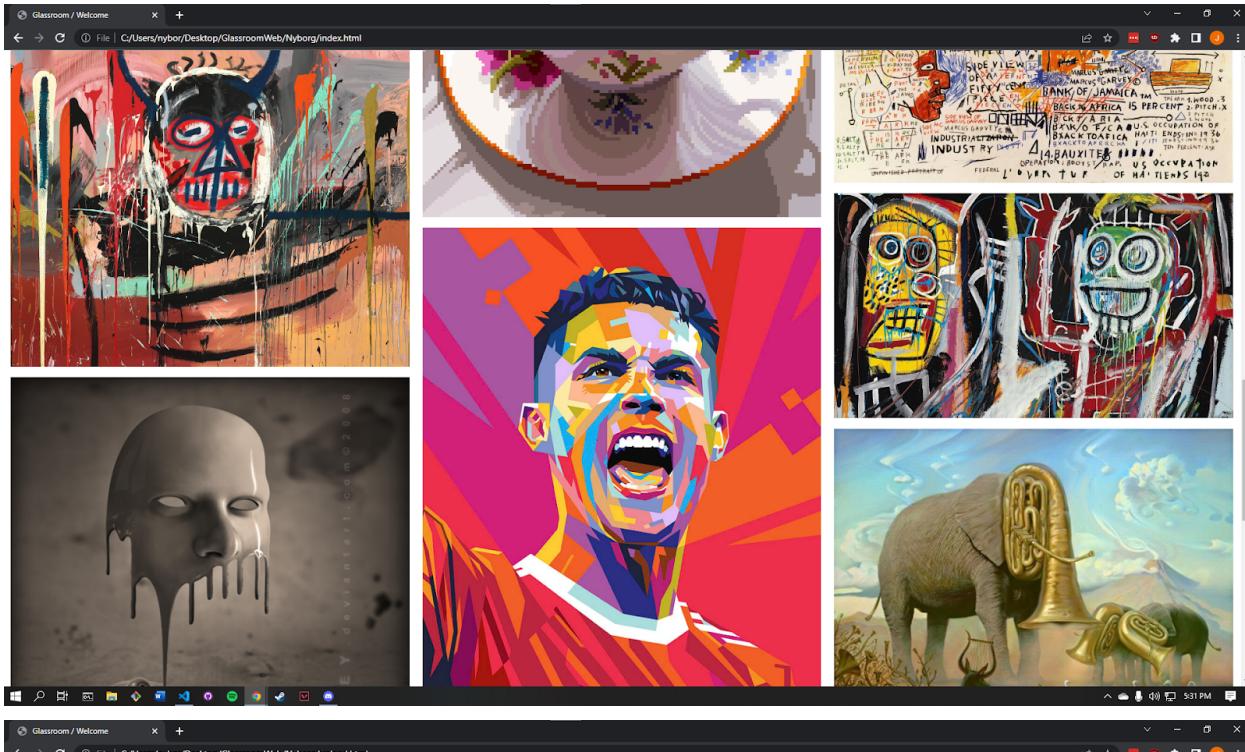
Task 2. Activity Diagram	Group	30 minutes	15 minutes	15 minutes	100%
Task 3. Use Case Chart	Group	30 minutes	13 minutes	17 minutes	100%
Task 4. Use Case Diagram	Group	1 hour	30 minutes	30 minutes	100%
Task 5. System Analysis (3)	Group	2 hours	1 hour	1 hour	100%
Task 6. Main Interface	Group	4 hours	2 hours	2 hours	100%
Task 7. Fill Document	Group	2 hours	30 minutes	1 hour 30 minutes	100%

3. User Interfaces

User Interfaces:

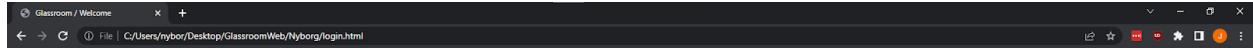


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A screenshot of the Glassroom Art website. At the top, there is a navigation bar with links for "HOME", "UPLOAD", and "LOGIN". Below the navigation, there is a form titled "Upload Art" with fields for "Name", "Email", and "Message", each accompanied by a text input field. A blue "Send" button is located at the bottom left of the form. Below the form, there are three preview images of uploaded artworks: a political cartoon with dense text and figures, a traditional-style painting of red blossoms on a tree, and a pixelated blue rhinoceros.

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HOME UPLOAD LOGIN

Undergoing Maintenance....

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```
File Edit Selection View Go Run Terminal Help
GLASSROOMWEB ...
Nyborg
  <!-- DOCTYPE html -->
  <html>
    <head>
      <meta charset="utf-8">
      <meta name="viewport" content="width=device-width">
      <title>Glassroom / Welcome</title>
      <link rel="stylesheet" href="/css/style.css">
    </head>
    <body>
      <header>
        <div class="container">
          <div id="company">
            <h1><span class="highlight">Glassroom</span> Art</h1>
          </div>
          <nav>
            <ul>
              <li class="current"><a href="index.html">Home</a></li>
              <li><a href="upload.html">Upload</a></li>
              <li><a href="login.html">Login</a></li>
            </ul>
          </nav>
        </div>
      </header>
      <section id="uploadImg">
        <div class="gray">
          <h3>Upload Art</h3>
          <form class="quote">
            <div>
              <label>Name:</label><br>
              <input type="text" placeholder="Name">
            </div>
            <div>
              <label>Email:</label><br>
              <input type="email" placeholder="Email Address">
            </div>
            <div>
              <label>Message:</label><br>
              <textarea placeholder="Message"></textarea>
            </div>
            <div>
              <button class="button_1" type="submit">Send</button>
            </div>
          </form>
        </div>
      </section>
      <section id="pictures">
        <div class="imgRow">
          <div class="imgColumn">
            
            
            
          </div>
        </div>
      </section>
    </body>
  </html>
```

Ln 22, Col 13 Spaces:2 UTF-8 LF HTML ⚡

Glassroom Art

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure under "GLASSROOMWEB". It includes files like index.html, upload.html, log.html, and style.css.
- Code Editor:** The current file is "style.css". The code is a CSS stylesheet with various rules for classes like .body, .container, .button, .gray, and .header.
- Status Bar:** Shows "In 205, Col 21" and "Spaces: 2, UTF-8, LF, CSS".

```
body{ font: 15px/1.5 Arial, Helvetica, sans-serif; padding: 0; margin: 0; background-color: #ffffff; } /* global container */ .container{ width: 100%; margin: auto; overflow: hidden; } /* Header about services home thing */ ul{ margin: 0; padding: 0; } /* Newsletter subscribe button */ .button { height: 38px; background: #7733ff; border: 0; padding-left: 20px; padding-right: 20px; color: #ffffff; } /* for upload page */ .gray{ padding: 15px; background: #dbdbdb; color: #eeeeee; margin-top: 10px; margin-bottom: 10px; } /* Box for Header */ .header{ background: #ffffff; color: #7733ff; padding-left: 20px; padding-top: 0px; min-height: 78px; border-bottom: #000000 3px solid; } /* home about services */ .header--l{
```

4. Test Plan

The plan is to create test functions for login, the newsletter subscription, and all the other complicated features that come with the web page. The group plans to release a beta version 1.0 of the Glassroom Art site to allow customers to write more use cases on what can be improved.

5. Appendix

System Analysis or System Design Use Cases.

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USE CASE NAME:	Member Login	USE CASE TYPE
USE CASE ID:	001	Business Requirements: <input type="checkbox"/>
PRIORITY:	High	System Analysis: <input checked="" type="checkbox"/>
SOURCE:	Lead Software Engineer	
PRIMARY BUSINESS ACTOR	Member	
PRIMARY SYSTEM ACTOR	Member	
OTHER PARTICIPATING ACTORS:	•	
OTHER INTERESTED STAKEHOLDERS:	• Higher Level Management	
DESCRIPTION:	Members should be able to login so that their preferences and previously viewed art can be accessed more quickly.	

Glassroom Art

PRE-CONDITION:	User has an account on Glassroom Art	
TRIGGER:	Member clicks on the “Login” button	
TYPICAL COURSE OF EVENTS:	Actor Action	System Response
	Step 1: User clicks the “Login” button.	Step 2: System receives the “Login” command from the user.
		Step 3: System displays the Login screen.
	Step 4: User types their username and their password into the associated fields and clicks “Submit”.	Step 5: getUsername(user); getPassword(user);
		Step 6: System takes the information given and verifies that a matching profile exists in the database.
		Step 7: System retrieves the preferences and data related to the user from the database and redirects the user into the website.
	Step 8: User is able to view and download art.	
ALTERNATE COURSES:	Alt step 4: Incorrect login information given to getUsername() or get Password() Alt step 7: Member is prompted to re enter login information.	
CONCLUSION:	Users are able to view and download art.	
POST-CONDITION:		
BUSINESS RULES	•	
IMPLEMENTATION CONSTRAINTS AND SPECIFICATIONS	•	
ASSUMPTIONS:	•	
OPEN ISSUES:		

{Glassroom Art}

USE CASE NAME:	Download Art	USE CASE TYPE
USE CASE ID:	002	Business Requirements: <input type="checkbox"/>
PRIORITY:	High	System Analysis: <input checked="" type="checkbox"/>
SOURCE:	Lead Software Engineer	
PRIMARY BUSINESS ACTOR	Member	
PRIMARY SYSTEM ACTOR	Member	
OTHER PARTICIPATING ACTORS:	•	
OTHER INTERESTED STAKEHOLDERS:	• Higher Level Management, Artists	
DESCRIPTION:	Members should be able to download art pieces digitally to their computer.	
PRE-CONDITION:	User is a member and logged in	

Glassroom Art

TRIGGER:	User clicks the “Download” option on an art piece	
TYPICAL COURSE OF EVENTS:	Actor Action	System Response
	Step 1: User navigates to the art piece that they want to download and clicks on it.	Step 2: System displays the image alongside the artist’s information and a “Download” button.
	Step 3: User clicks the “Download” button.	Step 4: imageDownload(selectedImage);
		Step 5: Using the imageDownload() method the system passes the package/png to the user’s computer.
	Step 6: User’s computer receives and downloads the package/png.	
ALTERNATE COURSES:		
CONCLUSION:	Users now have the art piece locally on their computer.	
POST-CONDITION:		
BUSINESS RULES	•	
IMPLEMENTATION CONSTRAINTS AND SPECIFICATIONS	•	
ASSUMPTIONS:	•	
OPEN ISSUES:		

{Glassroom Art}

USE CASE NAME:	Upload Art	USE CASE TYPE
USE CASE ID:	003	Business Requirements: <input type="checkbox"/>
PRIORITY:	High	System Analysis: <input checked="" type="checkbox"/>
SOURCE:	Lead Software Engineer	
PRIMARY BUSINESS ACTOR	Artist	
PRIMARY SYSTEM ACTOR	Artist	
OTHER PARTICIPATING ACTORS:	•	
OTHER INTERESTED STAKEHOLDERS:	• Higher Level Management	
DESCRIPTION:	Artists should be able to upload art pieces to the website.	
PRE-CONDITION:	Artist is a member and logged in.	
TRIGGER:	Artist clicks on the “Upload” button	
TYPICAL COURSE OF EVENTS:	Actor Action	System Response
	Step 1: Artist clicks on the “Upload” button.	Step 2: System prompts the user for a file to be uploaded and a description(optional).
	Step 3: Artist chooses a file from their drive and gives a description of the art piece.	Step 4: imageUpload(artPiece); imageDescription(artDesc);
		Step 5: System posts the image on the website so that others users can see and download it.
ALTERNATE COURSES:	Alt step 2: User does not give a description for the image.	

Glassroom Art

CONCLUSION:	Artists are able to upload their own art for others to see.
POST-CONDITION:	
BUSINESS RULES	•
IMPLEMENTATION CONSTRAINTS AND SPECIFICATIONS	•
ASSUMPTIONS:	•
OPEN ISSUES:	