22k-5195 SRE Assignment 1

**Feasibility Study Report:**

***Art Attack: a virtual art gallery***

**Client:** Artists, Art enthusiasts, event organizers.

**Members and emails:**

* Laiba Fatima k225195@nu.edu.pk
* Mustafa Masood k224818@nu.edu.pk
* Sabina Rasheed k225198@nu.edu.pk

**Task:** Develop a virtual art gallery website called “Art Attack”

**PRELIMINARY REQUIREMENTS ANALYSIS**

**Part I – Application Overview**

*Objectives and Business Objectives:* The purpose of “Art Attack” is to create a visually appealing virtual art gallery that will provide a platform to artists, art collectors, and art enthusiasts. The website aims to increase revenue by attracting artists to earn commission on their art works. It will also strive to make “Art Attack” the leading platform for art-related content and attract a greater user base.

*User Roles and Responsibilities:* The artist can create and manage their profiles, art collectors can purchase art works, event organizers can manage events like exhibitions. Administrators oversee the platforms' operations; web developers help develop the entire system. Content creators write blogs to enhance user experience

**Part II – Functional Requirements**

*Statement of Functionality:* The system will showcase artworks and artist portfolios, facilitate secure artwork sales and transactions, list and promote art-related events. It will also manage and publish art-related content, user management, marketing, and customer support.

*Non-functional Requirements: T*he system will have high performance to ensure no lags. It will be scalable for the growing networks, the system will be reliable, it will also have regular backups to avoid loss.

**Suggested Deliverables**

*1. Requirements Phase:*

* Preliminary Requirements Document
* User Stories and Use Cases
* System Requirements Specification

*2. Design Phase:*

* Wireframes and Mockups

*3. Testing Phase:*

* Test Plan and Test Cases
* Test Reports

*4. Project Documentation:*

* Feasibility Study and Plan
* Project Schedule

In the end, a fully working art gallery website

**Process to be followed**

Agile Methodology will be applied to accommodate the constant changing requirements

**Outline Plan**

1. Elicitation and detailed requirements gathering (Weeks 1-2).

* Conduct stakeholder interviews to gather initial requirements.

2. Design and prototyping (Weeks 3-6).

* Create wireframes and mockups.

3. Development and Iterations (Weeks 7-12):

* Begin iterative development cycles (sprints) lasting 2 weeks each.
* After each sprint, conduct a sprint review to identify improvements.

4. Testing and Quality Assurance (Weeks 13-16):

* Integrate testing throughout the development process.
* Perform unit testing, integration testing, and user acceptance testing.

5. Deployment (Weeks 17-18):

* Prepare the production environment for deployment.
* Deploy the system.

**Milestones:**

* Sprint Review (End of each sprint): Assess progress, gather feedback, and plan for the next sprint.
* Prototype presentation (Week 6).
* Beta version for user testing (Week 12).
* Production Deployment (Week 17-18): Officially launch the platform to the public.

**Visibility Plan**

***Client Communication****:* Weekly status meetings with the client to report progress by giving presentations, discuss requirements.

***Team Communication****:* Regular team meetings via video calls, daily meetings to track progress, and collaboration through project management tools.

**Business Considerations**

***Trade Secrets and Sensitive Information:***

* **Artists' Data**: The personal details of artist, their artworks should be safeguarded
* **User Data Privacy**: Communicate the platform's privacy policy to users, informing how their data will be used, stored, and protected.

***Copyrights and Trademarks:***

* **Intellectual Property Rights**: Ensure that artists' intellectual property rights are protected.
* **Trademark Registration**: Consider trademarking the "Art Attack" name, logo.

**Risk Analysis**

1. Scope Creep: The project scope may expand beyond the initial scope requirements.

Fallback Plan: Implement change control processes and prioritize changes

2. Lack of Resources: Important team members might be busy in other projects

Fallback Plan: Have efficient scheduling plans, take only as much projects as the team can handle

3. Budget Overrun: The project might exceed the initial budget.

Fallback Plan: Regularly monitor the expenses and prioritize.

**Probable Technical Requirements**

* ***Front-end****:* Figma, HTML, CSS, JavaScript.
* ***Back-end****:* Node.js.