# Contents

# 1 Final Group Project Plan: Art Gallery Website

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### 1.1.1 Introduction

This document provides an exhaustive, step-by-step plan for our Art Gallery Website project, elaborating on our strategies and methods to bring the project to life. By partitioning our project into two main phases, we aim to streamline our progress while ensuring a thorough, complete, and high-quality result.

### 1.1.2 1. Detailed List of React Components and their Interactions

To establish clarity and a systematic approach, we have divided our components into two categories - "core" and "supportive". Our core components are integral for the main functionality of our application, while the supportive components enrich user interaction and assist in managing the data handling process.

- Core Components:

    - Home
    - Gallery
    - ArtworkDetail

– UserAccount

– Navbar

- Supportive Components:

  – ArtworkCard

  – Search

  – LoginForm and RegisterForm

### 1.1.3  2. Functions and Application Logic

We have identified the core functions that will govern the primary operations of our application:

- User registration and authentication: Functions like registerUser, loginUser, logoutUser will handle user registration and authentication. They will interact with the LoginForm and RegisterForm components and update the state of UserAccount and Navbar components.

- Artwork handling: Functions like uploadArtwork, searchArtwork will manage artwork-related operations. They will coordinate with the UserAccount, Home, Gallery, and Search components for various use-cases.

- User interactions: Functions like interactWithArtwork will handle user interactions like liking, commenting, and sharing the artwork. They will mainly interact with the ArtworkDetail component.

### 1.1.4  3. API Request-Response Formats

Our application will maintain consistent interaction with the backend using the following primary endpoints:

- User Registration (POST /api/users)

- User Login (POST /api/users/login)

- Upload Artwork (POST /api/artworks)

- Search Artwork (GET /api/artworks/search)

- User Interactions (POST /api/interactions)

### 1.1.5 4. Endpoint Routes

Each of our API endpoint routes will serve a clear purpose and handle distinct data operations. We have carefully selected and designed these routes to make the process of data handling efficient, secure, and reliable. Each route and its functionality, along with the expected data for each endpoint, have been meticulously explained in our previous plan.

### 1.1.6 5. Design References

For the design of our Art Gallery Website, we are focusing on maintaining a minimalist aesthetic while ensuring intuitive user navigation and high-quality artwork showcase. Our design inspiration is drawn from established digital art platforms and current web design trends to provide our users with a fresh, contemporary, and enjoyable user experience. For each component and the overall website design, we will create wireframes and mockups to provide a clear visual guide during our development process.

### 1.1.7 6. Phase-1 and Phase-2 Deliverables

To ensure a manageable workload and efficient development process, we have divided our project into two major phases. Each phase will focus on distinct aspects of our project, allowing us to maintain an organized approach throughout our development process.

- Phase-1 Deliverables:

    - Project setup and environment preparation
    - Design and implementation of the database schema
    - Development of basic components and user registration/login functionalities
    - Initial API endpoints for user registration and login

- Phase-2 Deliverables:

    - Development of advanced components and functionalities
    - Additional API endpoints to handle artwork upload, search, and user interactions
    - Thorough testing, debugging, and deployment

### 1.1.8   7. Task Breakdown and Member Allocation

Our project task breakdown is primarily divided between frontend and back-end development tasks. The roles and tasks assigned to each team member ensure a fair distribution of workload and an effective division of responsibilities based on each member's strengths and areas of expertise.

- Anton:

  - Phase-1 Tasks:
    * Environment Setup
    * Home Component Development
    * Navbar Component Development
    * LoginForm and RegisterForm Component Development
    * Design Wireframes and Mockups
  - Phase-2 Tasks:
    * Gallery Component Development
    * ArtworkCard and ArtworkDetail Components Development
    * UserAccount Component Development
    * Testing and Debugging

- Ethan:

  - Phase-1 Tasks:
    * Project Initialization
    * Database Schema Implementation
    * User Registration and Login API Endpoints
    * Initial Backend Testing
  - Phase-2 Tasks:
    * Artwork Upload and Search API Endpoints
    * User Interaction API Endpoints
    * Backend Optimization
    * Final Backend Testing

- Collaborative Tasks:

  - Project Planning and Design
  - Component Integration
  - Project Review and Debugging
  - Final Project Deployment

### 1.1.9 Conclusion

In conclusion, this detailed plan and task breakdown ensure a systematic approach to the project, efficient workload distribution, and effective collaboration between team members. By adhering to this plan along with other tools like our ER schema guidelines, we aim to deliver a high-quality, fully functional Art Gallery Website within the allocated timeframe.