Final Project Report

Title: Art Buy and Sell Platform

Designation: Software Engineer

Team Members:

1. Abinesh C
2. Priyadharshini S
3. Varshini G
4. Karshana B G
5. Kandru Rachel Nissi

Team Lead:

Abinesh C

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Abstract Art Buy and Sell Platform

Chapter1: Introduction

The Art Buy and Sell Platform is a digital marketplace designed to connect artists, collectors, and art enthusiasts in a seamless, secure, and user-friendly environment. The platform serves as a hub where users can showcase, discover, buy, and sell original artwork, ranging from paintings and digital illustrations to sculptures and photography.
This project aims to empower independent artists by providing them with a dedicated space to monetize their creations without relying on traditional galleries or middlemen. It also caters to buyers who are looking for unique, original pieces and want to support creative talent from around the world.

Chapter2: Objective

The primary objective of the Art Buy and Sell Platform is to create a digital marketplace that empowers artists to showcase and sell their work directly to buyers, while providing art enthusiasts and collectors with easy access to unique, original artwork from around the world. The platform aims to **democratize the art industry**, **promote creative talent**, and **facilitate secure, seamless transactions** between creators and consumers.

Chapter 3: Technology Stack

Frontend (Client-side)

- React.js / Angular / Vue.js – For building a dynamic, responsive user interface
- HTML5, CSS3, JavaScript – Core web technologies for layout and styling

Backend (Server-side)

- Node.js with Express – For creating RESTful APIs and handling business logic
- Python with Django / Flask

MongoDB – NoSQL database for flexible document storage (good for images and user data)

MySQL / PostgreSQL – Relational databases for structured data like orders, users, etc.

Storage & Hosting

- AWS S3 / Firebase Storage – For storing and retrieving images securely.

Payment Integration

- Stripe / PayPal / Razor-pay – For secure online payment processing.

Version Control: GitHub

Chapter4: Team Members & Roles

Abinesh C-Team Lead

- Responsible for project architecture and workflow.
- Managed version control and coordinated integration between modules.
- Oversaw documentation, testing, and final deployment.
- Tools: GitHub, AWS, Firebase, Docker.

Priyadharshini S- Back-End Developer

Design and implement database schemas for:

- Users (buyers, artists, admins)
- Artworks (metadata, images, tags)
- Orders & transactions
- Reviews & ratings
- Messages (if chat is supported)

Choose appropriate databases (e.g., PostgreSQL, MongoDB)

Write and optimize queries for performance

Varshini G – Front-End Developer

User Interface (UI) Development

- Implement design mockups (from UI/UX designers)
- Ensure cross-browser and mobile compatibility
- Turn UI/UX designs into responsive web pages
- Create reusable components

- Write tests to ensure reliability

Karshana B G-Database

User Data Storage

- Store data for:
    - Buyers (name, email, address, purchase history)
    - Artists/Sellers (bio, portfolio, earnings)
    - Admins (permissions, access level)

Artwork & Product Management

Orders & Transactions

Authentication & Authorization

Security and Data Integrity.

Kandru Rachel Nissi-Admin & Support Agent

Manages the platform

- Approves/rejects users/artworks
- Handles reports and issues
- Manages commissions and analytics

Guest User

Can view artwork and artist profiles.
Needs to register to buy or sell

Chapter 5: System Architecture

1. User Input (Front-End)

• **Users:** Artists, Buyers, Admins

Interface: Web or mobile app (built using React, Angular, or Flutter)

Responsibilities:

Display UI

Handle user interactions (search, filter, post art, buy art)

2. Back-End:

- Flutter-based mobile UI presents content in interactive formats.

Handle API requests (GET, POST, PUT, DELETE)
Manage user roles (artist, buyer, admin)
Process orders and payments

Perform server-side validations

3. Database:

Relational DB (e.g., MySQL / PostgreSQL):

- Stores users, orders, reviews, and categories

NoSQL DB (e.g., MongoDB):

- Stores artwork data, image references, and portfolios.

Chapter 6: Testing & Debugging

Testing ensures that all features and functions of the platform work correctly, reliably, and securely for all users — artists, buyers, and admins. It also helps catch issues early in development, ensuring a smooth and bug-free user experience.

Chapter 7: Future Enhancements

The Art Buy and Sell Platform will evolve into a global hub for digital and physical art commerce, combining technology, creativity, and community into one seamless ecosystem. It will not only serve as a marketplace but also as a dynamic space for discovery, collaboration, and empowerment for artists and buyers alike.

With the integration of advanced technologies such as AI-based recommendations, augmented reality (AR) for real-time art previews, and blockchain-powered NFT support, the platform will redefine how people experience and engage with art.

Chapter8: Conclusion

The Art Buy and Sell Platform is a powerful solution designed to bridge the gap between artists and art enthusiasts by providing a seamless, secure, and accessible digital marketplace.

It empowers artists to showcase and monetize their work globally, while offering buyers a curated and personalized experience for discovering unique and original art pieces.

With features like user-friendly interfaces, secure payment integration, and scalable architecture, the platform lays a strong foundation for future growth.

Chapter 9: GitHub URL

All the source code and project details are available at:

https://github.com/URK21CS1175/Art-Buy-and-Seller-_Platform