

AI-Powered Artist Promotion Assistant – Midterm Proposal

Client: Joe Fleishman

Course: ITAI 4373 — The New Nature of Work in AI

Project Type: Midterm Proposal

Date: November 24, 2025

Executive Summary

Joe Fleishman is a professional artist with expressive abstract, heritage-inspired, and symbolic artwork, showcased on his website which includes e-commerce functionality. However, he has minimal online visibility, no marketing budget, and limited technical experience.

This proposal outlines an **AI-Powered Artist Promotion Assistant** that helps Joe ethically and effectively engage with potential customers on **Reddit and Pinterest**—two platforms highly aligned with his ideal buyers' browsing behaviors. The system monitors conversations, identifies relevant opportunities, and generates context-rich response suggestions that Joe can approve or edit before posting. This maintains compliance with platform rules and ensures authentic, human-centered communication.

The proposal includes the full business analysis, system design, ethical framework, ROI projections (using the provided hypothetical data), and project plan required for final project implementation.

Part 1: Business & Market Analysis

1. Client & Brand Analysis

Joe's artwork features:

- **Abstract Expressionism** — bold brushwork, emotional color dynamics
- **American Heritage Pieces** — culturally reflective themes
- **Cave Art-inspired Works** — earthy symbolism
- **Metaphysical & Spiritual Motifs** — story-driven meaning

Unique Selling Proposition

Joe creates expressive, culturally informed pieces that resonate with home decorators, small business designers, and buyers seeking meaningful or symbolic art.

2. Target Audience Personas

Persona 1: Hannah – Home Decor Enthusiast

- **Age:** 30–45
- **Status:** Homeowner
- **Platforms:** Pinterest
- **Behaviors:**
 - Builds mood boards for interior design
 - Searches for “living room art,” “modern decor,” “abstract wall art”
 - Saves décor inspiration and art ideas
- **Needs:**
 - Unique artwork that complements contemporary home designs
 - Visual inspiration and aesthetic cohesion

Persona 2: Office Designer Dana

- **Age:** 35–55
- **Profession:** Business Manager / Office Designer
- **Platforms:** Reddit (r/Entrepreneur)
- **Behaviors:**
 - Seeks advice on office aesthetics and client-facing spaces
 - Looks for bulk art purchases or themed collections
 - Searches for modern, professional-looking artwork
- **Needs:**

- Affordable bulk options
- Professional, cohesive art that fits office branding

3. Platform & Competitive Analysis

Platform 1: Reddit

Target Communities:

- **r/Entrepreneur** (Dana)
- **r/Art, r/Decor, r/InteriorDesign**

Norms/Rules:

- Strict anti-spam policies
- Only value-first commenting is allowed
- Sharing personal art is only acceptable when contextually relevant
- Users appreciate authenticity, personal experiences, and helpful advice

Platform 2: Pinterest

Target Areas:

- “Living room art” mood boards
- “Modern decor” inspiration
- “Abstract wall art” collections

Norms/Rules:

- High emphasis on visuals rather than text
- Users search for inspiration and solutions
- Rich pins and high-quality previews matter
- Comments are less common; saved pins = main engagement

Part 2: Technical & System Design

1. System Architecture Overview

Components remain the same, now applied exclusively to:

- **Reddit API monitoring**
- **Pinterest search monitoring (keywords, visual categories)**

Core components:

1. Reddit & Pinterest Monitoring Engine
2. Keyword/Theme Relevance Classifier
3. AI Opportunity Analyzer
4. AI Response Generator
5. PostgreSQL Database
6. Artist Dashboard
7. Analytics Engine

2. Technology Stack

Component	Technology	Rationale
Backend	Python + FastAPI	Simple, fast, API-focused
Frontend	React / Next.js	Clean UI, easy to maintain
Database	PostgreSQL	Stable and scalable
AI Models	GPT-4.1 or Claude 3	High-quality contextual responses
Hosting	Render / Vercel / Railway	Low-cost and beginner-friendly

3. Monitoring Engine Design

Reddit

- Use Reddit API with keyword filters:
 - “office art”
 - “abstract painting”
 - “decor advice”

- Respect rate limits and community rules

Pinterest

- Use:
 - Search APIs (limited but adequate)
 - Keyword scanning (“living room art,” “modern decor”)
- This monitors **trends**, not users (fully ethical).

4. AI Analysis & Prompt Engineering

AI evaluates:

- Relevance to Joe’s themes
- Sentiment (positive → better recommendation)
- Opportunity type (advice request? decor idea? bulk purchase?)
- Recommended art category (abstract, heritage, symbolic, etc.)

AI then generates suggestions such as:

"If you're exploring modern decor ideas, one of my recent abstract pieces uses warm tones designed specifically for living room spaces—happy to share if it fits your mood board!"

All messages require **explicit human approval**.

5. Artist Dashboard UI/UX

Key goals:

- Simple
- Clean
- No technical language

Pages:

1. **Opportunity Feed**
2. **Opportunity Details** (post + AI suggestion)

- 3. Approve / Edit / Reject Screen
- 4. Analytics

Part 3: Ethical, Legal & Financial Plan

1. Ethical & Compliance Framework

Transparency

- No automated posting.
- Artist must approve every engagement.

Value-First Engagement

- Provide help, suggestions, or inspiration—not sales pitches.

Platform Compliance

Reddit:

- No cold messaging
- No mass posting
- Only contextual replies

Pinterest:

- AI suggestions generate content ideas, not automated pin posting

Human-in-the-Loop

Artist approval > AI suggestion > Artist posts manually

Metric	Scenario 1	Scenario 2	Scenario 3
Traffic (Clicks)	40	250	500

Sales (Units)	2	9	40
Revenue (@ \$150/unit)	\$300	\$1350	\$6000
Commission (10% max)	\$0	\$67	\$600
System Cost	\$50	\$50	\$50
Joe's Gross Profit	\$250	\$1233	\$6350

ROI Interpretation

- Even low traffic produces meaningful profit
- Higher engagement dramatically multiplies revenue
- Costs remain fixed and minimal

Conclusion:

The system offers **high upside, low cost, and significant revenue potential**—especially for Pinterest-driven decor buyers and Reddit-driven office designers.

Week	Milestone
Week 1	Backend setup + Reddit/Pinterest API integration
Week 2	Monitoring engine operational
Week 3	AI scoring + prompt engineering
Week 4	Dashboard front-end
Week 5	Full integration + initial testing
Week 6	KPI analytics
Week 7	Demo preparation + documentation

2. Roles & Responsibilities

- **Project Manager**

- **Backend Developer**
- **Frontend Developer**
- **AI Engineer**
- **Business Analyst**
- **Ethics & Compliance Lead**
- **Presenter**

Conclusion

This updated proposal reflects:

- Two targeted platforms: **Reddit and Pinterest**
- Two refined personas aligned with decor and business customers
- A data-backed ROI model
- A complete ethical, technical, and business plan