**AI Social Media Manager**

**Project Description**

AI Social Media Manager is an application that leverages artificial intelligence to automate social media management for platforms such as Instagram, Facebook, and TikTok. This system allows users to schedule posts, generate trend-based content, and analyze profile performance efficiently.

**Project Structure**

AI-Social-Media-Manager/

├── backend/

│ ├── app/

│ │ ├── main.py # Backend entry point (FastAPI/Django)

│ │ ├── models/ # Database models

│ │ ├── routes/ # API routes

│ │ ├── services/ # Business logic and external API integrations

│ │ └── utils/ # Utility functions

│ ├── tests/ # Unit tests

│ ├── requirements.txt # Backend dependencies

│ ├── Dockerfile # Backend container

│ └── .env.example # Example environment variables

│

├── frontend/

│ ├── public/ # Static files (favicon, images)

│ ├── src/

│ │ ├── components/ # Reusable components

│ │ ├── pages/ # Application pages

│ │ ├── services/ # API connection services

│ │ ├── styles/ # Global styles

│ │ └── utils/ # Utility functions

│ ├── package.json # Frontend dependencies

│ ├── Dockerfile # Frontend container

│ └── .env.example # Example environment variables

│

├── docs/

│ ├── API.md # API documentation

│ ├── INSTALLATION.md # Installation guide

│ └── ROADMAP.md # Future project planning

│

├── .github/

│ ├── workflows/ # CI/CD with GitHub Actions

│ ├── ISSUE\_TEMPLATE/ # Issue templates for GitHub

│ └── PULL\_REQUEST\_TEMPLATE.md # Pull request template

│

├── tests/ # General automated tests

│

├── .gitignore # Git ignore file

├── docker-compose.yml # Container orchestration

├── LICENSE # Project license

├── README.md # Project overview

└── SECURITY.md # Security policies

**.gitignore**

# Python

\_\_pycache\_\_/

\*.py[cod]

venv/

.env

# Node.js

node\_modules/

.npm/

.env.local

# Logs

logs/

\*.log

# Docker

\*.dockerignore

docker-compose.override.yml

# IDE

.vscode/

.idea/

.DS\_Store

**docker-compose.yml**

version: '3.8'

services:

backend:

build: ./backend

container\_name: ai-social-backend

ports:

- "8000:8000"

env\_file:

- backend/.env

depends\_on:

- db

frontend:

build: ./frontend

container\_name: ai-social-frontend

ports:

- "3000:3000"

env\_file:

- frontend/.env

depends\_on:

- backend

db:

image: postgres:13

container\_name: ai-social-db

environment:

POSTGRES\_USER: user

POSTGRES\_PASSWORD: password

POSTGRES\_DB: ai\_social

ports:

- "5432:5432"

volumes:

- postgres\_data:/var/lib/postgresql/data

volumes:

postgres\_data:

**System Requirements**

**Backend**

* Python 3.8+
* FastAPI or Django
* Database: PostgreSQL or MongoDB
* Key libraries:
  + requests
  + sqlalchemy
  + openai

**Frontend**

* Node.js 16+
* React, Vue.js, or Next.js
* Key libraries:
  + axios
  + material-ui or tailwindcss

**Others**

* Docker 20+
* Access to Meta Graph API and TikTok API

**Installation and Configuration**

**Clone the Repository**

git clone https://github.com/usuario/ai-social-media-manager.git

cd ai-social-media-manager

**Run with Docker**

1. Build and run containers:
2. docker-compose up --build

**Contact**

For questions or suggestions, contact the developer at: [cetelco@cetelcocti.com](mailto:cetelco@cetelcocti.com).