**By: Kamalesh V B**

[**Kamaleshbalu8838@gmail.com**](mailto:Kamaleshbalu8838@gmail.com)

**Lovely Professional university**

**Instructions for Setting Up, Running, and Testing Cathago Document Scanner**

**Introduction**

This document provides step-by-step instructions to set up, run, and test the Cathago Document Scanner web application. It is a modern tool for uploading, scanning, and matching text documents, featuring a fancy dark-themed interface with 3D effects and analytics.

**Requirements**

* Node.js (version 22.14.0 or higher)
* Python (version 3.x)
* A web browser (e.g., Chrome, Firefox)
* Internet access (for initial dependency downloads and Font Impressive icons)

**Setup Instructions**

1. Download the Project

* Get the project folder (cathago-doc-scanner) from the submission link ,download the repository and you can use it.

2. Install Node.js Dependencies

* Open a command prompt or terminal.
* Navigate to the project folder:
* Command: cd path\to\cathago-doc-scanner
* Install required Node.js packages:
* Command: npm install
* This installs Express, SQLite3, and other dependencies listed in package. Json.

3. Install Python Dependencies

* Ensure Python is installed (run "python --version" to check).
* Install the Google Gemini API package:
* Command: pip install google-generativeai
* This is needed for document matching in src/gemini\_match.py.

4. Prepare Assets

* Place night-sky.jpg (background image) in the public/ folder.
* If missing, download a night sky image and rename it to night-sky.jpg.
* Place three.min.js (for 3D particles) in the public/ folder.
* Download from: https://cdnjs.cloudflare.com/ajax/libs/three.js/r128/three.min.js
* These files are essential for the UI design.

Running the Project

1. Start the Server

* In the command prompt, from the project folder, run:
* Command: node src/server.js
* You will see: "Server running on http://localhost:3000".

2. Access the Application

* Open a web browser.
* Go to: http://localhost:3000
* The login/register page will load with a night sky background and 3D particles.

Testing the Project

1. Register and log in as a User

* Admin credentials
* Username: admin
* Password: 123

Or

For user:

* Username: user
* Password: 123
* Log in with these credentials.
* You will see the User Dashboard.

2. Test User Features

* Upload a Test File:Which is also in the folder test.txt
* Create a file test.txt with content: "The quick brown fox jumps over the resting dog."
* Upload it via the "Scan Document" form.
* Expected Result: Matches with s1.txt (if in uploads/) showing ~80% similarity.
* Check Analytics:
* See "Scans Today" (e.g., 1/20) with a progress bar and top topics.
* Download a Match:
* Click "Download" on a match (e.g., s1.txt) to retrieve it.

3. Test Admin Features

* Log out, then log in as:
* Username: admin
* Password: 123
* You will see the Admin Dashboard.
* Analytics Table:
* View top users, topics, daily scans, and credit stats in a styled table.
* Credit Management:
* Adjust user’s credits (e.g., set to 50).
* Approve a credit request from user (request via user dashboard first).
* Upload to Reference Folder:
* Upload s1.txt ("The quick brown fox leaps over the idle dog.") to uploads/.

4. Verify Design

* Both dashboards feature:
* Dark theme with night-sky.jpg background.
* 3D particles floating across the screen.
* Card-based layout with glowing text, hover effects, and tooltips.

Troubleshooting

* If the server does not start:
* Ensure all dependencies are installed (npm install, pip install).
* Check for night-sky.jpg and three.min.js in public/.
* If matching fails:
* Ensure uploads/ has s1.txt for reference.
* Verify Python and google-generativeai are installed.
* If UI looks off:
* Ensure internet access for Font Impressive icons or download locally.

**Conclusion**

Follow these steps to set up and test the Cathago Document Scanner. The project showcases document matching, analytics, and a modern UI/UX design. For any issues, refer to the console output or contact the submitter.