









# **TextEvolve**

Turn Ink into Intelligence

Team Name : Dynamic Dreamers

NMNT ID : NMNTSTD7116020

College Name: Kathir College of Engineering

Theme: Artificial Intelligence

#### **Problem Statement:**

How might we develop an AI or OCR solution to digitize and convert handwritten, old registered documents into a readable and accessible format in regional languages, improving public access and readability of historical records? The solution should allow the output to be downloaded in various formats such as PDF and Word, enabling wider distribution and accessibility.



# Existing System:

- Existing manual transcription methods are slow, costly, and error-prone.
- Standard OCR models often struggle with accuracy for handwritten text, regional languages, and historical scripts.
- Physical document degradation and limited accessibility are significant challenges.

# Existing System and Proposed System



## Proposed System:

# • Dual OCR Approach:

Custom ML model for script-specific recognition

Google Vision API, Amazon Textract and Azure AI Vision for improved accuracy

## • Smart Language Tools:

Google Translate API for seamless language conversion

Gemini API for grammar & spelling correction

## • Key Features:

Real-time results & progress tracking

Fast, scalable, and user-friendly



# **Programming Languages**





# Database & Deployment









#### Frameworks & Libraries

















# **Development Tools**









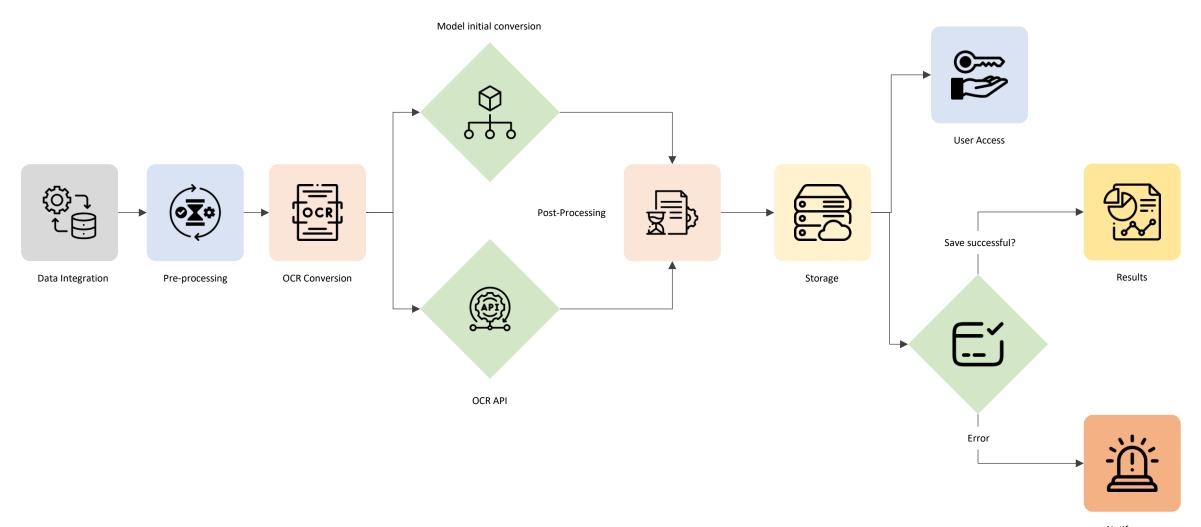






# System Architecture & Workflow

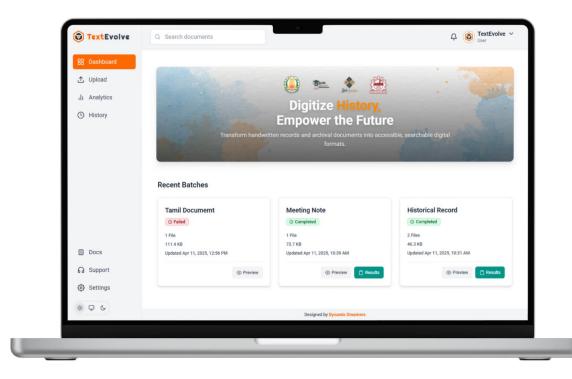




# Demo / Sample Results







www.textevolve.in



# Degradation:

Physical documents deteriorate over time.

# Inaccessibility:

Limited access to rare or regional texts.

# Handwriting Variability:

Handwritten texts present difficulties in standard OCR processing.

# Language Barriers:

Many OCR solutions are not optimized for regional languages.

Cultural Preservation: Safeguard historical documents for future generations.

Enhanced Accessibility: Allow researchers, educators, and the public to easily access digitized content.

Improved Research: Facilitate the study of regional languages and historical texts.

Scalability: A robust system that can grow to handle vast archives.

**TextEvolve** is an AI-driven solution that digitizes handwritten historical documents with high accuracy using **Dual OCR Model**.

By combining innovation with technology, it preserves cultural heritage, enhances accessibility, and supports research — ensuring valuable historical knowledge is safeguarded for future generations.







Ask Questions





Mrs. Kavitha M

Faculty Guide



Yuva Nandhini M

AI/ML Developer



**Praveenkumar S**AI/MERN Developer



Sibi Siddharth S

AI/MERN Developer



Uma Maheswari P

AI/ML Developer



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