



# TEAM DETAILS AND PROBLEM STATEMENT



- **Problem Statement** : Intelligent Document Management (Track 2)
- **Team Name** : Splendor
- **Team Leader** : GVV Krishna , [krishnagvv@gmail.com](mailto:krishnagvv@gmail.com) , +91 9121521845
- **Institution Name** : Amrita Vishwa Vidhyapeetham, Amaravati
- **Course Enrolled** : Computer Science



# Ideas and Methodologies

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01

Explain the problem statement you have chosen.

02

Outline the goals and objective of your approach and what you are aiming to achieve.

03

Describe your Methodology.

04

Add process flow or any relevant image related to your idea.

05

Mention your technology stack.

# **1. Explain the problem statement you have chosen.**

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- Modern businesses struggle with large volumes of unstructured documents.
- Manual document classification and search are time-consuming and inefficient.
- Industries like legal and healthcare require intelligent solutions.

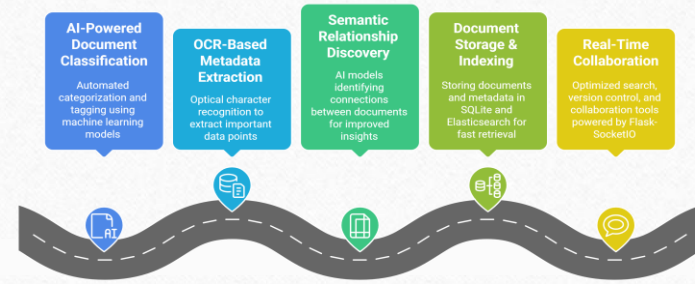
## 2. Outline the Goals & Objectives

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- **Automated Classification & Tagging:** Leverage AI to classify and tag documents, enhancing organization and searchability.
- **Intelligent Content Extraction:** Use OCR for extracting key metadata (dates, amounts, names) from documents.
- **Semantic Understanding & Relationship Discovery:** AI-driven analysis to identify semantic relationships between documents.
- **Niche Document Organization:** Tailored document categorization for specific industries or domains.
- **Innovative Document Management & Collaboration:** Real-time collaboration, version control, and AI-powered search tools.



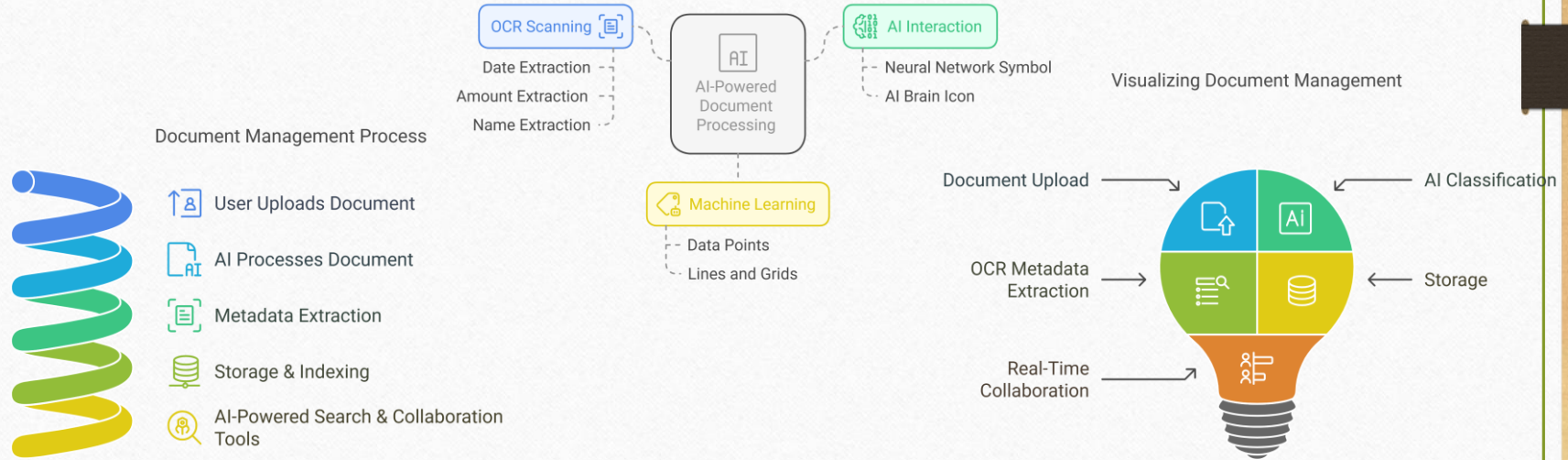
# 3. Methodology



- AI-Powered Document Classification:** Automated categorization and tagging using machine learning models.
- OCR-Based Metadata Extraction:** Optical character recognition to extract important data points (e.g., dates, amounts).
- Semantic Relationship Discovery:** AI models identifying connections between documents for improved insights.
- Document Storage & Indexing:** Storing documents and metadata in SQLite and Elasticsearch for fast retrieval.
- Real-Time Collaboration:** Optimized search, version control, and collaboration tools powered by Flask-SocketIO.

# 4. Process Flow or Relevant Image

AI-Powered Document Processing: Components and Flow



## 5. Tech Stack

- Frontend: Flask
- Backend: Flask, Python
- Database: SQLite3
- AI/ML: TensorFlow, PyTorch, spaCy, Tesseract OCR
- Search & Indexing: Elasticsearch
- Collaboration: Flask-SocketIO
- API Integration: DeepSeek API





Thank you