Project Initialization and Planning Phase:

Date	27 May 2025
Team ID	SWUID20240006489
Project Title	Gemini Decode: Multilanguage Document Extraction by Gemini Pro
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template:

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

Project Overview	
Objective	The GeminiDecode Project: Developing a general artificial intelligence model for the extraction of accurate information from document content written in several languages and interpreting them accordingly. The model, called Gemini Pro, tries to make document processing flawless across languages, hence increasing accessibility and efficiency in multilingual environments.
Scope	Theses covered under the scope include: 1. Development of the Gemini Pro Model for Document Extraction. 2. Multi-lingual support with languages like English, Spanish, French, German, Chinese, and Arabic. 3. Utilize NLP that interprets and understands documents as being vastly text-based. 4. Easy access and use through the interface 5. Model Deployment into real-world Business, Academic, and Government Applications.
Problem Statement	

Description	Documents in the modern, highly globalized business environment are usually in several different languages—which is the main hurdle faced by an organization interested in an appropriate processing and interpretation of such documents. Most traditional document

	extraction tools, configured with some specific languages, usually require intensely laborious manual translation and extraction.
Impact	Implications of solving this problem would be: 1. Improved efficiency of multilingual document processing. 2. Reduced requirement for manual efforts in the translation and extraction process. 3. Enhanced access to information across languages. 4. Improved efficiency and effectiveness of organizations working with international documentation.
Proposed Solution	
Approach	The solution to be recommended would be to develop Gemini Pro with cutting-edge state-of-the-art NLP techniques and machine learning algorithms for extracting and interpreting information in documents in multiple languages. It consists of the following: 1. Gathering diversified data of documents in different languages. 2. Processing data for consistency and quality. 3. Training a Deep-Learning-Based Multilanguage Document Extraction Model. 4. It will then validate the model for its performance through rigorous testing. 5. Deploying the model and integrating it with an intuitive user interface.

Key Features	1. **Multilanguage Support:** It supports documents in multiple languages.
	2. **High Accuracy:** This implies accurate extraction of information, made possible through advanced NLP techniques during information extraction.
	3. **Scalability**: The system has the capability of handling a large number of documents.
	4. **User-Friendly Interface:** Simple and intuitive, incomprehensive interface for easy access and operation.
	5. **Real-Time Processing:** Quick and accurate results in view of the demand expressed by the user.

Resource Requirements:

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	e.g., 2 x NVIDIA V100 GPUs
Memory	RAM specifications	e.g., 8 GB
Storage	Disk space for data, models, and logs	e.g., 1 TB SSD
Software		
Frameworks	Python frameworks	e.g., Flask
Libraries	Additional libraries	e.g., scikit-learn, pandas, numpy
Development Environment	IDE, version control	e.g., Jupyter Notebook, Git
Data		
Data	Source, size, format	e.g., Kaggle dataset, 10,000 images