Project Initialization and Planning Phase

Date	15 March 2024
Team ID	739724
Project Title	Analysis of amazon cell phone reviews
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	Analyze Amazon cell phone reviews to extract insights about customer sentiment, product features, and competitor analysis.
Scope	Focus on reviews for top-selling cell phone brands on Amazon.
Problem Statement	
Description	Current methods of analyzing customer reviews are manual and time-consuming. This project aims to automate the process, making it more efficient and scalable.
Impact	Improve product development, marketing strategies, and customer service based on insights from reviews.
Proposed Solution	
Approach	Use natural language processing (NLP) techniques to analyze reviews, including sentiment analysis, topic modeling, and keyword extraction.
Key Features	Sentiment analysis, topic modeling, keyword extraction, competitor analysis.

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 libraries like NLTK, SpaCy, or TextBlob for text processing.	Scikit-learn or TensorFlow/Keras for machine learning models.
Libraries	Pandas for data manipulation.	Matplotlib or Seaborn for data visualization.
Development Environment	Jupyter Notebook or any Python IDE for coding.	Git for version control.
Data		
Data	Source, size, format	e.g., Kaggle dataset