

## Project Initialization and Planning Phase

Date	8 July 2024
Team ID	740074
Project Title	Rhythmic Revenue: Unveiling The Future Of Music Sales With Machine Learning
Maximum Marks	3 Marks

### Project Proposal (Proposed Solution) template

The proposal report aims to transform the music sales industry using machine learning, boosting efficiency and revenue generation. It tackles industry inefficiencies, promising better operations, reduced risks, and increased customer satisfaction. Key features include a machine learning-based sales prediction model and real-time trend analysis.

Project Overview	
Objective	The primary objective is to revolutionize the music sales process by implementing advanced machine learning techniques, ensuring more accurate sales predictions and enhanced revenue generation strategies.
Scope	The project comprehensively assesses and enhances the music sales process, incorporating machine learning for a more robust and efficient system.
Problem Statement	
Description	Addressing inaccuracies and inefficiencies in the current music sales prediction system adversely affects operational efficiency and revenue generation.
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Proposed Solution	
Approach	The primary objective is to revolutionize the music sales process by implementing advanced machine learning techniques, ensuring more accurate sales predictions and enhanced revenue generation strategies.
Key Features	Implementation of a machine learning-based sales prediction model. Real-time trend analysis for quicker strategic adjustments. Continuous learning to adapt to evolving market dynamics.

### Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications,	2 x NVIDIA V100 GPUs

	number of cores	
Memory	RAM specifications	8 GB
Storage	Disk space for data, models, and logs	1 TB SSD
<b>Software</b>		
Frameworks	Python frameworks	Flask
Libraries	Additional libraries	seaborn,matplotlib,tensorflow,keras,scikit-learn, pandas, numpy
Development Environment	IDE, version control	Jupyter Notebook, pycharm
<b>Data</b>		
Data	Source, size, format	music sales datasets,historical sales data sets, various formats (csv,json,etc.)