Project Initialization and Planning Phase

Date	5thJuly 2024
Team ID	SWTID1720673861
Project Title	Garment Worker efficiency Calculator
Maximum Marks	3 Marks

Project Proposal report

A literature survey for a garment worker productivity prediction project would involve researching and reviewing existing studies, articles, and other publications related to machine learning in the field of manufacturing and workforce management. The survey would also examine any gaps in knowledge and research opportunities in the field of garment worker productivity prediction, including the use of new machine learning techniques, such as reinforcement learning, and the integration of other data sources, such as wearable technology and environmental sensors.

Project Overview	
Objective	To use AI to create a program which accurately predicts the efficiency of any project in the Garment industry
Scope	This project can further enhance the knowledge of the managers of the Garment industry, hence enhancing the overall efficiency of the process as they can make more educated decisions
Problem Statement	
Description	Create a reliable, accurate machine learning model to predict garment worker productivity, enhancing productivity management and operational efficiency.
Impact	An accurate productivity prediction model will optimize resource management, enhance operational efficiency, and support informed decision-making, ultimately boosting productivity and profitability.
Proposed Solution	
Approach	Gather and clean historical productivity data, identify patterns and insights, train and select the best machine learning model. Fine-tune for high performance, Deploy the model and interface publicly.
Key Features	High Accuracy: Reliable productivity predictions.

	Interpretability: Explainable predictions. Scalability: Handles large datasets.

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	T4 GPU
Memory	RAM specifications	8 GB
Storage	Disk space for data, models, and logs	1 TB SSD
Software		
Frameworks	Python frameworks	Flask
Libraries	Additional libraries	scikit-learn, pandas, numpy, matplotlib, seaborn
Development Environment	IDE	Jupyter Notebook, pycharm
Data		
Data	Source, size, format	Kaggle dataset, 614, csv UCI dataset, 690, csv