

Project Initialization and Planning Phase

Date	4 July 2024
Team ID	SWTID1720090524
Project Title	Garment Worker Productivity Prediction
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) report

The garment worker productivity prediction model uses machine learning to boost efficiency and accuracy. It has the potential to improve the lives of garment workers by promoting fair and efficient workforce management practices. It can also help manufacturers optimize their workforce management strategies, reduce idle time, and increase productivity.

Project Overview	
Objective	The primary objective is to revolutionize the garment worker productivity prediction process by implementing advanced machine learning techniques, ensuring faster and more accurate assessments.
Scope	The project comprehensively assesses and enhances the garment worker productivity prediction process, incorporating machine learning for a more robust and efficient system.
Problem Statement	
Description	Addressing inaccuracies and inefficiencies in the current system adversely affects operational efficiency of garment industry and worker satisfaction.
Impact	Solving these issues will result in improved operational efficiency, reduced risks, and an overall enhancement in the worker productivity prediction process, contributing to worker satisfaction and organizational success.
Proposed Solution	
Approach	Employing machine learning techniques to analyze and predict productivity, creating a dynamic and adaptable worker productivity prediction system.
Key Features	<ul style="list-style-type: none"> - Implementation of a machine learning-based model. - Implementation of a flask model to provide user friendly interface. - Real-time decision-making for quicker predictions.

	- Continuous learning to adapt to evolution.
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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, seaborn, matplotlib, pickle
Development Environment	IDE, version control	Google Colab
Data		
Data	Source, size, format	Kaggle dataset, 93KB, csv