

BSE20-25

LABOR OPTIMIZATION SYSTEM

Project Plan

GROUP MEMBERS:

#	Names	Registration Number	Signature
1	MUWONGE EMMANUEL	16/U/7842/PS	
2	KISEMBO ERINAH TUMUSIIME	16/U/6168/PS	
3	MUTEBI WILSON	16/U/7751/EVE	
4	SUNDAY DEOGRATIAS	16/U/11792/PS	

Date: March, 03rd 2020

Project Scope

Labor optimization has been an issue for as long as individuals are being employed. Most current systems in Uganda present the problem of labor underutilization and over utilization in many organizations.

This can be solved by having a correct estimation of the workload and correct allocation of labor in organizations.

The labor optimization system will have machine learning model predicting workload so that workforce and labor is distributed fairly. It focuses on the company, stakeholders, organizations record of daily operations and external conditions like weather condition which allow for accurate prediction of future work.

Project Activities

#	Activity	Assigned to	Start Date	End Date	Duration (Day)	Deliverable	Challenges
1	Setting up required software environment						
1.1	Anaconda and Jupiter Notebook	All Members	02 nd /03/2020	03 rd /03/2020	1	Working Python Environment for data science	
1.2	Django Framework	All Members	03 rd /03/2020	04 th /03/2020	11	Working Django Environment	
2	Git hub repo creation and update	Muwonge Emmanuel	04 th /03/2020	05 th /03/2020		Up to date git hub repo	
3.	Database design	Erinah Kisembo	05 th /03/2020	07 th /03/2020	2	SQL file and DB Tables and data in MySQL	
4	User Interface Design	Erinah Kisembo and Mutebi Wilson	09 th /03/2020	11 th /03/2020	2	User Interface	
5.	Module Programming						
5.1	Building	Muwonge	11 th /03/2020	24 th /03/2020	13	Predictive	Inadequate

	Machine learning Model	Emmanuel and Mutebi Wilson				Model	PC resources
5.2	Analyzing Dataset	Sunday Deogratias and Erinah Kitembo	11 th /03/2020	24 th /03/2020	13	Visualization	Unclean data
5.3	Embedding the predictive model in an API	Muwonge Emmanuel	24 th /03/2020	30 th /04/2020	6	API	
5.4	Building the Web App	All Members	24 th /03/2020	04 th /04/2020	10	Web App	
6	System testing and bug fixes	All Members	04 th /04/2020	07 th /04/2020	3	Test case document, results of bugs identified and strategy to fix them	
7	User Manual Writing	All Members	07 th /04/2020	10 th /04/2020	3	User Manual	
8	Hosting	All Members	10 th /04/2020	11 th /04/2020	1	Accessible and working URL	