



SYMBIOSIS INSTITUTE OF TECHNOLOGY

SERVICE LEARNING PROBLEM STATEMENT REPORT

BY

GROUP NO:8

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NGO NAME: AKSHAR PAAUL

INTRODUCTION:

Akshar Paul NGO is committed to improving literacy and providing support to underprivileged children. Founded in Pune in 2013, the organization has since extended its reach to Nashik and Satara, with the aim of making education accessible to more children in need.

Akshar Paul targets children of pavement dwellers and those from families living at construction sites, who often miss out on formal education due to their transient lifestyles and lack of resources. These children typically have limited access to books and educational materials, making it difficult for them to keep up with their peers in more stable environments.

To address these challenges, Akshar Paul provides free educational programs tailored to the unique needs of these communities. They offer a range of services, including basic literacy and numeracy classes, access to books and learning materials, and additional support to help children stay engaged and motivated in their studies. By creating a supportive and nurturing learning environment, Akshar Paul aims to give these children the tools they need to build a brighter future.

PROBLEM STATEMENT:

Akshar Paul NGO faces challenges in efficiently tracking student attendance, impacting their ability to support underprivileged children's education. To address this, the NGO plans to implement a biometric attendance management system for accurate monitoring and use Power BI for comprehensive attendance reports. This integration aims to enhance educational outcomes by ensuring consistent student participation and providing actionable insights for better support.

OBJECTIVE:

The objective is to develop and implement an efficient and user-friendly attendance management system for Akshar Paul NGO, which serves underprivileged students. Given the challenges in maintaining accurate attendance records using traditional hard copy methods, the new system will leverage biometric technology to ensure precise and consistent tracking of student attendance. This advanced system will simplify the process for both students and teachers, reducing administrative burdens and minimizing errors.

Additionally, we will incorporate monthly Power BI reports to offer comprehensive and insightful data analysis. These reports will provide valuable insights into attendance patterns and trends, helping teachers and administrators identify issues and take timely actions to improve student engagement and participation. By integrating biometric attendance tracking with robust data analytics, we aim to enhance the overall educational experience, ensuring that every student receives the support and resources they need to succeed.

REQUIREMENTS:

The requirements for the above objective will be as follows:

- **Data Cleansing and Preprocessing:** The student details provided are currently unstructured in CSV format. This data will require thorough cleansing and preprocessing to ensure uniformity and accuracy.
- **Data Integration:** Once the data is cleaned and standardized, it will be imported into the attendance management system for efficient tracking.
- **Monthly Reporting:** Based on the attendance records, a monthly Power BI report will be generated to provide insights for both students and teachers.

- **Detailed Analysis:** The final report will include an analysis of attendance data segmented by gender, caste, and religion to understand attendance trends and identify areas needing attention.

SUMMARY:

Akshar Paul NGO seeks to improve attendance tracking for underprivileged students by implementing a biometric attendance management system. This system will replace traditional methods, ensuring accurate and consistent monitoring. Monthly Power BI reports will provide insights, and data will be analyzed by gender, caste, and religion to identify trends and improve student engagement.