

**A**

***PBL REPORT***

*On*

**< Building a Process Monitoring and Control System >**

*Submitted in partial fulfilment of the requirements of the degree of*

**BACHELOR OF Computer Application**



**SUBMITTED TO:**

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## **Group Details & Role of Members:**

**Topic:** Building a Process Monitoring and Control System

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## Project Based Learning

### TITLE -: Building a Process Monitoring and Control System

#### Title of the Project: -

**"Building a Process Monitoring and Control System: Enhancing System Efficiency"**

#### **Quote:**

*"The key to efficient computing lies in the ability to monitor and control processes effectively."*

#### **SYNOPSIS:**

In modern computing, managing system processes efficiently is essential for ensuring optimal performance and resource utilization. This project aims to develop a tool that allows users to monitor and control active processes in a system. By implementing features such as process creation, termination, and priority adjustment, this system will enable users to have better control over running applications. The inclusion of a graphical user interface (GUI) will ensure user-friendly interaction and visualization of process activities, making process management more accessible and intuitive.

#### **OBJECTIVE:**

The primary objective of this project is to design and implement a process monitoring and control system that enhances system performance and resource management. This project will:

- Develop a tool to monitor and manage active system processes in real time.
- Implement key functionalities like process creation, termination, and priority adjustment.
- Provide a graphical user interface (GUI) for easy interaction and visualization of system processes.
- Optimize resource allocation by allowing users to prioritize processes effectively.

## SCOPE:

This project will serve as a valuable resource for students, developers, and IT professionals in understanding and managing system processes.

The outcomes include:

- **Academic Learning:** Enhances knowledge of operating system concepts, process scheduling, and system resource management.
- **System Optimization:** Helps in improving system performance by allowing efficient control over processes.
- **Future Expansion:** Can be extended to include features like real-time analytics, machine learning-based process prioritization, and cloud-based process management.

This project will act as a foundation for efficient process management and system optimization, benefiting both learners and professionals in the field of computing.