APPLICATION PERFORMANCE METRICS

Date	16 May 2023
Team ID	NM2023TMID15643
Project Name	Intelligent people and vehicle counting system for secretariat

METRICS:

For the Intelligent People and Vehicle Counting System for the secretariat, several application performance metrics can be measured and monitored to ensure optimal system functionality. Here are some key performance metrics to consider:

Counting Accuracy:

- Measure the accuracy of people and vehicle counting.
- Calculate the percentage of correctly identified individuals and vehicles.
- Monitor any discrepancies or errors in the counting process.

Real-time Updates:

- Measure the time it takes to update and display real-time counting data.
- Monitor the latency between data capture and availability in the user interface.
- Ensure timely updates to provide up-to-date information to authorized personnel.

Response Time:

- Measure the time taken by the system to respond to user requests or queries.
- Monitor the overall system responsiveness during peak usage periods.
- Optimize response time to provide a smooth and efficient user experience.

Scalability:

- Monitor system performance under increasing traffic or load.
- Measure the system's ability to handle a growing number of people and vehicles.
- Evaluate the scalability of the infrastructure and adjust resources as needed.

Availability:

- Measure the system's uptime and availability.
- Monitor any downtime or service interruptions.
- Aim for a high availability percentage to ensure continuous operation.

Resource Utilization:

- Monitor the utilization of system resources such as CPU, memory, and disk space.
- Identify any bottlenecks or areas where resource consumption can be optimized.
- Ensure efficient resource allocation to maintain system performance.

Error and Exception Handling:

- Monitor the occurrence of errors or exceptions within the system.
- Measure the frequency and severity of errors and exceptions.
- Implement proper error handling and logging mechanisms to track and resolve issues promptly.

Data Processing Speed:

- Measure the time taken to process and analyse captured data.
- Monitor the efficiency of data pre-processing, object detection, and tracking algorithms.
- Optimize data processing to minimize delays and enable real-time analysis.

Security and Compliance:

- Monitor the effectiveness of security measures and access control mechanisms.
- Track any unauthorized access attempts or security breaches.
- Ensure compliance with data protection regulations and industry standards.

User Satisfaction:

- Gather user feedback and satisfaction ratings.
- Conduct surveys or interviews to understand user experience and identify areas for improvement.
- Monitor user adoption and engagement with the system.