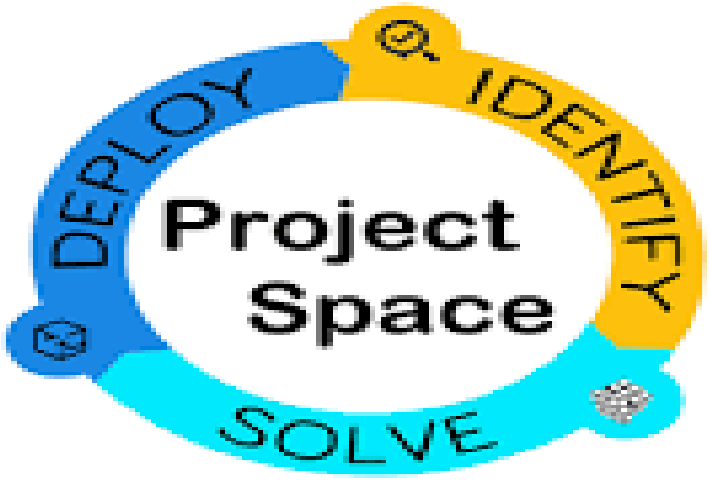
TECHNICAL HUB

Internet Usage Monitoring System



TECHNICAL HUB

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PROJECT OVERVIEW:

The Internet Usage Monitoring System is designed to track and monitor internet usage for users within an organization. This system includes both frontend and backend components, leveraging Oracle Cloud infrastructure to store and process data efficiently.

OBJECTIVES:

Develop a user-friendly frontend interface for users to view their internet usage statistics.

Implement a robust backend system to collect and analyze internet usage data.

Utilize Oracle Cloud services for secure data storage and processing.

Provide administrators with tools to monitor and manage internet usage across the organization**.**

COMPONENTS:

- **Frontend Development**

Interface design for users to access their internet usage statistics.

User authentication and authorization mechanisms.

Dashboard to display usage metrics, such as bandwidth consumption, browsing history, etc.

- **Backend Development**

Data collection from network devices or proxies.Data processing and analysis to generate usage statistics.

API development for frontend interaction.

- **Oracle Cloud Integration**

Setup and configuration of Oracle Cloud services (e.g., Oracle Compute instances).

Integration of Oracle Cloud infrastructure with frontend and backend components**.**

FEATURES:

Real-time monitoring of internet usage.

Historical data analysis and reporting.

User-level usage tracking.

Customizable alerts for abnormal usage patterns.

Administrative controls for managing user access and permissions.

TECHNICAL STACK:

Frontend: HTML, CSS, JavaScript (React.js/Vue.js/Angular**)**

Backend: Node.js, Express.js (or equivalent), Python (for data processing**)**

Cloud Services: Oracle Cloud Infrastructure (Compute, Storage, Networking**)**

REAL-TIME ALERTS:

Trigger alerts or notifications to administrators when security breaches or policy violations are detected.

CONCLUSION:

The Internet Usage Monitoring System aims to provide organizations with a comprehensive solution for monitoring and managing internet usage. By leveraging frontend and backend technologies along with Oracle Cloud infrastructure, the system offers scalability, reliability, and security in tracking internet activities within the organization.