**Centre for Development of Advanced Computing (C-DAC)**

**PROJECT: -** **TEAM MANAGEMENT SYSTEM**

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**Objectives: -** The Team Management System (TMS) is an advanced platform designed to facilitate team and project management while centralizing employee data storage and processing. It offers a comprehensive suite of tools for collecting, storing, and managing employee-related information, ensuring that data is accessible and secure. This report highlights the system's approach to employee data management, the technology stack used, features, security protocols, and the anticipated benefits.

**Features:**

* **Employee Database**: Maintains a centralized database of employee information including personal details, contact information, employment history, and performance records.
* **Employee Details**: Collect & Store the data of Employee personal details like Name, Age, Contact No., Email ,Address, Role, Designation, Employee ID.
* **Birthday Reminder**: This functionality in use for birthday reminder.
* **Source of Joining:** Outsource OR CDAC.
* **Duration:** Joining, Resignation.
* **Employee Profiles:** Create and manage detailed profiles for each employee, including contact information, department, role, and skill set.
* **Improved Efficiency**: Automation of routine HR tasks reduces manual effort and streamlines administrative processes.

**Implementation Details:**

* The EMS is developed using Java programming language and Spring Boot framework, with PostgreSQL as the database management system.
* RESTful APIs are utilized for communication between frontend and backend components, enabling seamless integration and scalability.
* Spring Security is employed to enforce authentication and authorization, ensuring data privacy and security.
* The EMS is built using the Spring Boot framework, which provides a robust and scalable foundation for developing enterprise-grade applications.
* The architecture follows a micro-services approach, with modular components for employee management,

**Technology Stack:**

**Backend:** Spring Boot for RESTful API development, data processing, and security.

**Database:** Use of PostgreSQL for secure and structured storage of employee data.

**Frontend:** React for building a user-friendly interface for data entry, retrieval, and management.

**Security:** Implementation of Spring Security and JWT for authentication and authorization.

**Conclusion:** The Team Management System's employee data management component represents a pivotal tool for organizations aiming to enhance the efficiency and security of their HR processes. By leveraging modern technologies and adhering to best practices in data security, the TMS provides a robust solution for managing the complexities of today's workforce data needs. Implementing such a system not only supports operational excellence but also aligns with strategic objectives by enabling informed decision-making and ensuring compliance with data protection standards.