README FILE

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**Semester: 4th Submitted to: Mr.Arvinder Singh**

**Subject Name: DBMS Subject Code: 23CAP-252**

**ARMY MANAGEMENT SYSTEM**

## ****Project Title:**** Army Management System

## ****Project Description:****

The **Army Management System** is a comprehensive database-driven application designed to efficiently manage military operations, personnel, equipment, missions, logistics, and training activities. The system ensures **data integrity, security, and streamlined record-keeping** for critical military components.

## ****Features & Modules:****

### **1. Soldier Management**

* **Registers soldiers** along with personal details, rank, and unit assignment.
* Stores **contact details** for communication purposes.

### **2. Unit Management**

* Defines **military units** and associates them with a designated **base**.
* Categorizes units by **Infantry, Artillery, Special Forces**, etc.

### **3. Base Management**

* Tracks **military bases**, including **location and capacity**.
* Ensures **soldiers and units are appropriately stationed**.

### **4. Equipment Tracking**

* Manages **weapons, vehicles, and communication gear**.
* Assigns equipment to **specific soldiers or units** for operational use.

### **5. Mission Planning**

* Schedules **missions**, assigns **units**, and defines **status updates** (Planned, Ongoing, Completed).
* Logs **mission locations** and **start/end dates**.

### **6. Deployment Records**

* Maintains logs of **soldiers deployed** to different bases or missions.
* Tracks **deployment status** (Active, Completed).

### **7. Financial Transactions**

* Records **military budget allocations, salaries, and procurement expenses**.
* Categorizes transactions by **base and date**.

### **8. Logistics & Supply Chain Management**

* Maintains records of **military supply inventory** (Ammunition, Medical Kits, Fuel, Food, etc.).
* Allocates resources to **missions and bases**.

## ****Database Schema Overview:****

The system operates on a **relational database structure** with **eight interconnected tables**:

| **Table Name** | **Description** |
| --- | --- |
| **Soldiers** | Stores soldier details & unit assignment |
| **Units** | Tracks units assigned to bases |
| **Bases** | Manages military base locations & capacity |
| **Weapons** | Lists military weapons linked to units |
| **Missions** | Maintains mission details & unit involvement |
| **Assignments** | Connects soldiers to mission roles |
| **Inventory** | Tracks military supplies per unit |
| **Training** | Records training programs & trainers |
| **Attendance** | Logs soldier participation in training |

## ****Technology Stack:****

* **Frontend:** HTML, CSS
* **Backend:** PHP
* **Database:** MySQL
* **Hosting:** Local Server (XAMPP/WAMP)

## ****Installation Steps:****

1. **Clone the repository** or download project files.
2. **Set up a local server** (XAMPP/WAMP).
3. **Import the SQL database schema** (army\_management.sql) into MySQL.
4. **Configure the connection settings** in config.php.
5. **Run** index.html to access the Army Management System.

## ****Usage Instructions:****

1. **Add Soldiers** → Enter soldier details, rank, and unit.
2. **Assign Missions** → Schedule military operations & update statuses.
3. **Deploy Soldiers** → Track soldier movements between bases.
4. **Manage Inventory** → Allocate equipment and military supplies.
5. **Record Training & Attendance** → Log soldier participation in skill development.

## ****Limitations & Future Improvements:****

✅ **Current Limitations:**

* **No real-time tracking of soldier movements.**
* **Limited scalability for large military datasets.**
* **Absence of user authentication & security layers.**

✅ **Future Enhancements:**

* **Integrating role-based access control for data security.**
* **Implementing GPS tracking for real-time soldier deployment updates.**
* **Enhancing mission analytics with AI-based predictive insights**