***HRMS Database***

Based on the codebase context, here's an analysis of storage requirements for one employee's data:

Core Employee Data:

• Basic information (name, ID, contact details)

• Contract details (from contractController.js)

• Payroll information (from PayrollController.js)

• Timesheet records (from timesheetService.js)

• Documents (from documentController.js)

• Allowances and deductions (from allowanceController.js)

Estimated Storage Requirements:

1. Database Storage:

• Basic employee record: ~2-5 KB

• Monthly payslip data: ~10-15 KB

• Timesheet entries: ~1-2 KB per day

• Documents metadata: ~1-2 KB per document

2. File Storage:

• Employee documents (PDFs, images): ~1-5 MB depending on document types

• Generated payslips: ~100-200 KB per monthly PDF

• Profile picture: ~100-500 KB

3. Additional Considerations:

• API request logs

• Audit trails

• Backup storage

Total Estimated Storage per Employee:

• Minimum: ~5-10 MB for basic usage

• Average: ~20-30 MB with regular document uploads

• Maximum: ~50-100 MB for heavy document users

This is a scalable system, so storage requirements grow linearly with employee count and duration of employment.

The storage required for saving one employee's data in your HRMS depends on several factors, including:

**1. Basic Employee Information**

* Name, Email, Phone Number, Address (~200 bytes)
* Employee ID, Department, Designation (~50 bytes)
* Profile Photo (if stored as a file, ~50-100 KB for a compressed image)

**2. Attendance Data**

* Daily records with timestamps (~100 bytes per entry)
* Monthly records: 22 workdays × 100 bytes = ~2.2 KB per month
* Yearly records: ~26 KB per year

**3. Leave Records**

* Leave requests, approvals, and history (~1-2 KB per entry)

**4. Holidays & Office Calendar**

* Shared across employees, minimal additional storage

**5. Payroll & Salary Slips**

* Monthly payroll details (~5-10 KB per month)
* Yearly payroll records: ~60-120 KB per year

**6. Documents (e.g., Resume, Contracts, ID Proofs)**

* PDF/Images per employee (~100 KB to 5 MB, depending on the number of documents)

**Estimated Storage per Employee**

| **Data Type** | **Approx. Size per Year** |
| --- | --- |
| Basic Info | ~200 bytes |
| Attendance Data | ~26 KB |
| Leave Records | ~12 KB |
| Payroll Data | ~60-120 KB |
| Documents | ~100 KB to 5 MB |
| **Total (approx.)** | **300 KB to 5 MB+** |

This means that for **1,000 employees**, you would need **300 MB to 5 GB** of storage per year, depending on document storage. If you are storing additional HR-related data (performance reviews, project details, training records), the size may increase.