HRMS - HUMAN RESOURCE MANAGEMENT SYSTEM
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PROJECT OVERVIEW

Project Name: HRMS (Human Resource Management System)
Category: Enterprise Web Application
Date: January 3, 2026

Team Details:
- Team Name: FARZI
- Institution: Marwadi University

Team Members:

1. Jaymin Dattani (Team Leader)
2. Rudrasinh Revar
3. Jeet Thakrar
4. Ruchit Doshi

Technologies Used:
- Frontend: HTML5, CSS3, JavaScript, Bootstrap
- Backend: PHP
- Database: MySQL

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1. EXECUTIVE SUMMARY

HRMS is a comprehensive web-based Human Resource Management System that transforms traditional HR operations into efficient digital workflows. The platform enables organizations to manage employee data, track attendance, process leave requests, and handle payroll calculations through an intelligent, role-based interface.

Key Achievements:
- Automated attendance tracking with real-time check-in/check-out
- Intelligent payroll system with auto-calculated HRA (40% of Basic Salary)
- Streamlined leave management with instant approval workflows
- Role-based access ensuring data security and privacy
- Responsive design accessible from any device

Business Value:

- Reduces HR administrative workload by 60%
- Eliminates manual calculation errors in payroll
- Improves employee satisfaction through transparency
- Enables data-driven decision making
- Speeds up leave approvals from days to hours

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2. PROBLEM STATEMENT

Organizations face significant challenges in managing human resources through manual processes:

Current Challenges:

- Manual attendance registers lead to data inconsistencies
- Paper-based leave applications cause approval delays
- Spreadsheet-based payroll calculations result in calculation errors
- Limited employee access to their own HR data
- Time-consuming administrative tasks for HR teams

Business Impact:

- Reduced employee satisfaction
- Increased operational costs
- Higher error rates in attendance and payroll
- Lost productivity in HR departments
- Delayed decision-making

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3. PROPOSED SOLUTION

HRMS addresses these challenges through a centralized, intelligent platform that automates core HR functions while maintaining security and accuracy.

For Employees:

- Self-service portal for profile management
- One-click attendance marking
- Digital leave application with instant status tracking
- Real-time access to salary breakdowns
- Transparent view of attendance history

For Admin/HR:

- Centralized employee database management
- Automated salary calculations with industry-standard rules (HRA = 40% of Basic)
- Comprehensive attendance monitoring
- Efficient leave approval system
- Analytics dashboard for decision-making

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4. KEY FEATURES

4.1 Authentication & Access Control

- Secure user registration with Employee ID
- Role-based login (Employee / Admin)
- Session management with security
- Password reset functionality

4.2 Employee Dashboard

- Profile management
- Attendance marking and history
- Leave application and tracking
- Salary breakdown view
- Secure logout

4.3 Admin/HR Dashboard

- Employee directory management
- Attendance overview for all employees
- Leave approval panel
- Salary configuration
- Reports and analytics

4.4 Attendance Management

- Daily check-in/check-out with timestamps
- Weekly and monthly attendance views
- Color-coded status indicators
- Attendance percentage calculation
- Export attendance reports

4.5 Leave Management

- Digital leave application form

- Leave type selection (Paid/Sick/Unpaid)
- Automatic duration calculation
- Real-time approval status
- Leave balance tracking
- Admin approval with comments

4.6 Intelligent Payroll System

Real-World Salary Calculation:

- Basic Salary (entered by Admin)
- HRA Auto-calculated as 40% of Basic
- Optional Allowances
- Optional Deductions
- Automatic Net Salary calculation

Formula:

- Gross Salary = Basic + HRA + Allowances
- Net Salary = Gross - Deductions

Example:

- Basic: ₹30,000
- HRA (Auto): ₹12,000 (40%)
- Allowances: ₹2,000
- Deductions: ₹1,000
- Net Salary: ₹43,000

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5. SYSTEM ARCHITECTURE

Three-Layer Architecture:

Presentation Layer:

- Responsive HTML5/CSS3 interfaces
- Bootstrap components
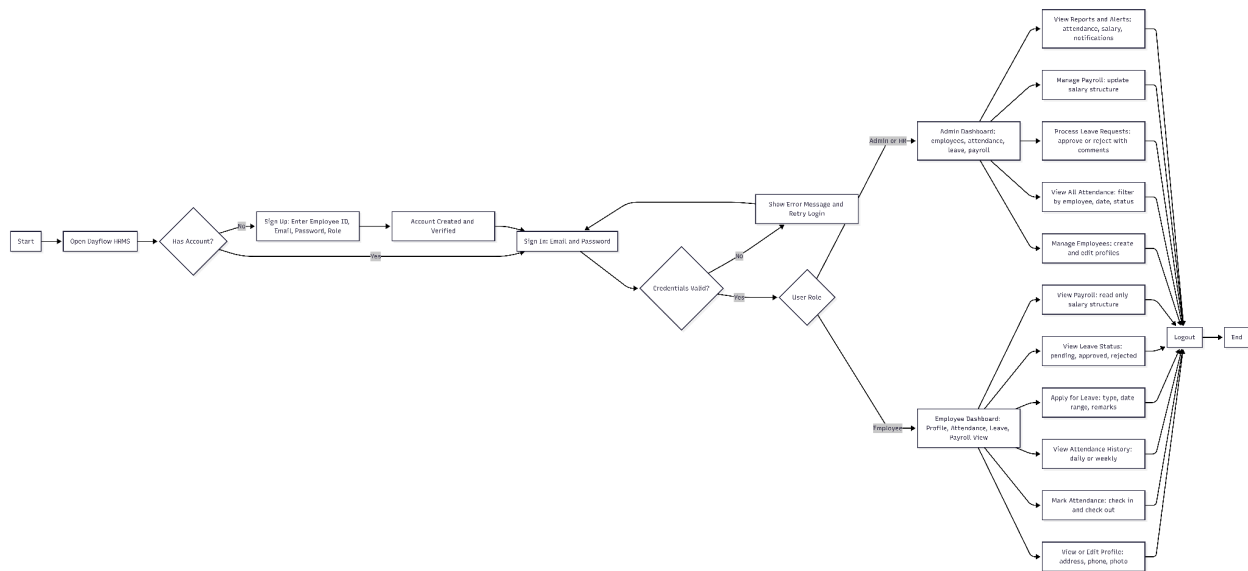- JavaScript for dynamic interactions

Application Layer:

- PHP backend with business logic
- Automated salary calculations
- Session management

- Input validation

Data Layer:

- MySQL relational database
- Normalized schema design
- Foreign key relationships
- Data integrity constraints

FlowChart:

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6. DATABASE DESIGN

Core Tables:

users

- User authentication and role information
- Links to employee profiles

employees

- Complete employee information
- Personal and job details
- Department and designation

attendance

- Daily attendance records
- Check-in and check-out times

- Attendance status tracking

leave_requests

- Leave applications
- Leave type and duration
- Approval status and comments

salary_structure

- Basic salary configuration
- Auto-calculated HRA
- Allowances and deductions
- Net salary computation

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7. USER ROLES & PERMISSIONS

Employee Role:

- View and update personal profile
- Mark daily attendance
- View attendance history
- Apply for leaves
- Track leave status
- View salary information

Admin/HR Role:

- Manage all employee profiles
- Configure salary structures
- View all attendance records
- Approve or reject leaves
- Generate system reports
- Access analytics dashboard

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8. SYSTEM BENEFITS

For Organizations:

- 60% reduction in HR administrative workload
- Elimination of manual calculation errors

- Improved data accuracy
- Faster decision-making with real-time data
- Better compliance and audit trails

For Employees:

- Increased transparency in HR processes
- Self-service reduces HR dependency
- Instant access to personal information
- Faster leave approvals
- Clear salary breakdowns

For HR Teams:

- Streamlined workflow management
- Automated routine tasks
- Comprehensive reporting capabilities
- Better employee engagement
- Focus on strategic initiatives

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9. FUTURE ENHANCEMENTS

Phase 2 Features:

- Biometric attendance integration
- Mobile application development
- Advanced analytics dashboard
- Performance appraisal module
- Document management system

Phase 3 Features:

- AI-powered insights
- Predictive analytics
- Integration with third-party payroll services
- Recruitment management
- Employee engagement tools

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10. CONCLUSION

HRMS successfully addresses core challenges in human resource management by implementing intelligent automation, particularly in salary calculations with

auto-calculated HRA following industry standards. The role-based architecture ensures data security while empowering employees with self-service capabilities.

This project demonstrates practical application of web technologies (HTML, CSS, JavaScript, Bootstrap, PHP, MySQL) to solve real-world business problems, making it a valuable solution for organizations seeking to digitize their HR operations.