Mobilise School ERP Solution

Overview document

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COMPREHENSIVE SCHOOL ERP SOLUTION

ABOUT MOBILISE

Mobilise is actively working with educational institutions for developing tailored digitalisation solutions for educational institutions in India. With over 12 years of expertise, Mobilise combines advanced cloud-based technologies with user-friendly interfaces to streamline school operations. Our solutions include real-time scalability, 99.9% uptime, and seamless integrations, ensuring that schools remain technologically ahead in an evolving education sector.

PART 1: SCHOOL MANAGEMENT SYSTEM (SMS)

The School Management System is designed to automate and integrate various administrative, financial, and operational functions, providing a centralized platform for managing all school-related activities. Below are the key modules:

CORE ADMINISTRATIVE MODULES:

- **Administration Module**: Centralized data management, including teacher assignments, class schedules, and compliance tracking.

- **HR and Recruitment Management**: Automates the hiring lifecycle, including job postings, interview scheduling, applicant tracking, and onboarding.

- **Fee Management**: Simplifies fee collection through online and offline modes, with detailed reporting and reminders.

- **Attendance Management**: Tracks staff and student attendance using biometric or RFID integrations.

- **Library Management**: Manages book inventories, borrowing history, and overdue notifications.

- **Transport Management**: Schedules routes, tracks buses in real-time with GPS, and provides driver details.

- **Hostel Management**: Handles room allocations, fee collection, and attendance tracking for hostellers.

- **Procurement Management**: Manages vendor relations, purchase orders, and inventory tracking.

- **Asset and Inventory Management**: Tracks school assets, ensures maintenance schedules, and logs inventory usage.

- **Leave Management**: Automates leave application, approval workflows, and integration with payroll.

- **Examination Management:** Simplifies exam scheduling, online assessments, and CBSE-compliant report cards for all classes**.**

- **Visitor Management**: Tracks visitor check-ins and check-outs, capturing photos and reasons for visits.

- **Gate Pass Management**: Manages issuance of gate passes for students and staff, including photo capture for security.

- **Work Order Management**: Assigns and tracks work orders for staff with automated reminders.

- **Vacancy Management**: Posts job vacancies, collects applications, and manages interview processes.

- **Employee Payroll Management**: Handles salary calculations, deductions, and approvals with attendance and leave integration.

- **Alumni Management**: Tracks alumni profiles and connects them via social platforms.

1. **Mobile App for Teachers**: Provides tools for attendance regularization, managing leave requests, , responding to student queries and much more.
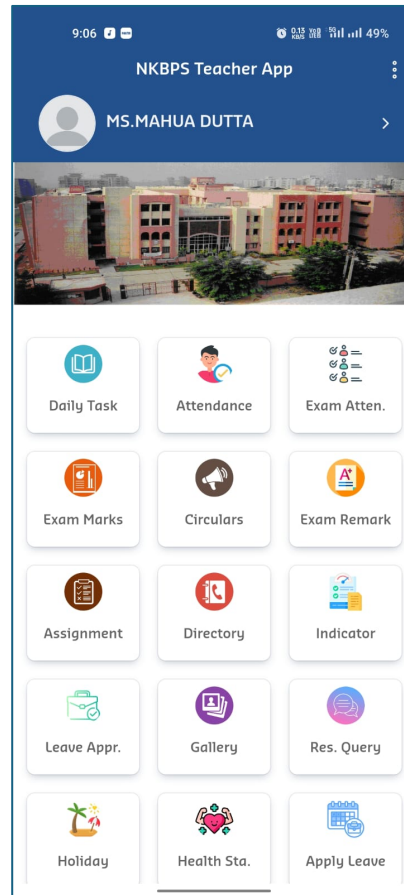
COMMUNICATION AND WORKFLOW MODULES:

1. **Communication Tools**: Enables communication via SMS, email, and app notifications, with role-based access controls.
2. **Query Management**: Provides a platform for addressing parent and student inquiries efficiently.
3. **Employee Management**: Manages employee records, performance reviews, and appraisals.

PART 2: SCHOOL INFORMATION SYSTEM (SIS)

The School Information System serves as an interactive platform for students and parents, offering access to academic, extracurricular, & administrative information. Key modules include:

STUDENT AND PARENT MODULES:

1. **Student Profile**: Provides a comprehensive view of student information, including academic and personal details.

2. **Daily Homework and Classwork**: Tracks current and historical assignments and classroom activities.

3. **Attendance Tracking**: Displays real-time attendance and holiday calendars.

4. **Fee Payment**: Facilitates online fee transactions and provides payment history.

5. **Exam Management**: Includes access to timetables, mock test results, and report cards.

6. **Transport Information**: Provides real-time bus tracking, route details, and emergency contact information.

7. **Health and Clinic Records**: Tracks student visits to the clinic and maintains medical records.

8. **Parent Query System**: Allows parents to submit leave requests, complaints, and other inquiries.

9. **Photo and Video Gallery**: Shares event photos and educational videos with parents and students.

10. **Digital Library**: Offers access to e-books, academic resources, and educational videos.

11. **Certificate Management**: Automates issuance of certificates such as bonafide, character, and transfer certificates.

12. **Course Curriculum**: Shares annual course plans with parents via mobile and web portals.

13. **Notices and Circulars**: Distributes school announcements via email, SMS, and app notifications.

14. **Assignment Management**: Uploads and tracks assignments for students.

15. **Parent Leave Application**: Allows parents to submit leave applications for their children online.

16. **Consent Forms**: Facilitates digital parental consent for trips and events.

17. **Timetable Access**: Shares class schedules and updates with parents and students.

18. **School Directory**: Provides contact information for staff and administration.

19. **News and Updates**: Posts school news articles and achievements.

PART 3: INTEGRATIONS

To enhance functionality, our ERP system integrates seamlessly with external systems:

1. **Payment Gateway**: Enables secure fee payments.
2. **SMS Gateway**: Sends real-time updates for attendance, fees, and results.
3. **Email Gateway**: Automates announcements and reminders.
4. **GPS Tracking**: Offers real-time tracking for school buses.
5. **Biometric and RFID Systems**: Improves attendance accuracy and enhances campus security.
6. **Social Media Integration**: Connects schools with platforms like Facebook to foster community engagement.

PART 4: TECHNOLOGY STACK, HOSTING, AND INFORMATION SECURITY

Technology Stack:

- **Frontend**: Angular for building dynamic and user-friendly interfaces.
- **Backend**: Laravel framework to ensure scalable and secure server-side operations.
- **Database**: MySQL for robust data management and querying.
- **Architecture**: Three-tier architecture ensuring separation of concerns for scalability and maintainability.
- **Single Sign-On (SSO)**: Integrated with Keycloak for seamless and secure user authentication.

HOSTING:

- Hosted on **Microsoft Azure**, utilizing a three-tier architecture with the following components:
    1. **Web Tier**: Load balancers and application gateways for handling traffic.
    2. **Application Tier**: Scalable virtual machines or app services running backend APIs.
    3. **Database Tier**: Managed MySQL services for efficient data storage and querying.
    4. **Storage**: Azure Blob Storage for document and media storage.
    5. **Monitoring**: Azure Monitor and Application Insights for real-time performance tracking.

INFORMATION SECURITY:

1. **Vulnerability Assessment and Penetration Testing (VAPT)**: Conducted regularly to identify and mitigate potential security threats.

2. **Data Backup and Restore**: Daily automated backups with retention policies for disaster recovery.

3. **Encryption**:
   o Data in transit secured using TLS.
   o Data at rest encrypted using AES-256.

4. **Access Control**:
   o Role-based access control (RBAC) ensuring least privilege access.
   o Multi-factor authentication (MFA) for admin and sensitive accounts.

5. **Compliance**:
   o Adherence to GDPR and other local data protection regulations.

6. **Incident Response**:
   o Defined processes for handling security breaches.
   o Real-time alerting and logging via Azure Security Center.

MOBILISE'S UNIQUE PROPOSITION:

- **Customizability**: Tailored solutions to fit the unique branding & operational needs of schools.
- **Real-Time Analytics**: Provides actionable insights through detailed dashboards and reporting tools.
- **Secure Cloud Infrastructure**: Ensures data integrity and compliance with robust security protocols.
- **Comprehensive Support**: Offers training sessions, regular updates, and 24/7 technical assistance.

Mobilise ERP systems empowers schools to enhance efficiency, improve communication, and achieve technological excellence. Contact us today to take your institution to the next level