Smart Attendance Management System

A web-based attendance system developed as a final year capstone project to digitize and streamline attendance tracking.

Team Members

- **Vikas Gaikwad (Group Leader):** UI Design & Flask Integration
- **Vedant Shivade:** Frontend Development & Templates
- **Rushad Adikane:** Database & Backend Logic
- **Divesh More:** Testing & Documentation

Guided by

- Megha Shinde (HOD)

Subjects Involved

- Network and Info Security – Saloni Purkar
- Mobile App Dev – Jyoti Chandwade
- Class Advisor – Ashwini Patil

Features

- Role-based access control (Admin, Teacher, Student)
- Real-time attendance tracking
- Automated reports
- Dashboard interfaces for different user roles
- Attendance status visualization
- Export reports to CSV

Tech Stack

- Backend: Python with Flask framework
- Database: SQLite
- Frontend: HTML, CSS, JavaScript
- Styling: Bootstrap 5
- Icons: Bootstrap Icons

Setup Instructions

Prerequisites

- Python 3.8 or higher
- pip (Python package manager)

Installation

1. Clone the repository:

```
git clone https://github.com/yourusername/attendance-management-system.git
cd attendance-management-system
```

2. Create and activate a virtual environment (recommended):

```
# Windows
python -m venv venv
venv\Scripts\activate

# macOS/Linux
python3 -m venv venv
source venv/bin/activate
```

3. Install dependencies:

```
pip install -r requirements.txt
```

4. Run the application:

```
python app.py
```

5. Access the application at: `http://localhost:5000`

Default Login Credentials

Admin

- Username: MeghaShinde
- Password: admin123

Teachers

Name	Subject	Username	Password
Saloni Purkar	Network & Info Security	saloni	teach123
Ashwini Patil	Class Teacher	ashwini	teach456
Jyoti Chandwade	Mobile App Dev	jyoti	teach789

Students

Name	Username	Password
Vikas Gaikwad	vikas	stud123
Vedant Shivade	vedant	stud456
Rushad Adikane	rushad	stud789
Divesh More	divesh	stud101

Project Structure

```
attendance-system/
├── app.py              # Main Flask application
├── database.db         # SQLite database (created on first run)
├── requirements.txt    # Python dependencies
├── schema.sql          # Database schema
├── static/             # Static files
│   ├── css/            # CSS stylesheets
│   ├── js/             # JavaScript files
│   └── images/         # Images and icons
└── templates/          # HTML templates
    ├── base.html       # Base template with common structure
    ├── index.html      # Landing page
    ├── login.html      # Login page
    └── ... (other templates)
```

License

This project is created as a capstone project for educational purposes.