Synopsis: ENTC GPSakoli – Student Management System
1. Project Title
ENTC GPSakoli – Student Management and Communication Portal
entcgpsakoli.co.in

2. Introduction

In today's educational environment, managing student data, attendance, academic records, and batch-specific communication manually can be time-consuming and prone to errors. The **ENTC GPSakoli Student Management System** aims to digitize and streamline these processes by providing a centralized online platform for students, teachers, and administrators of the Electronics and Telecommunication (ENTC) Department at Government Polytechnic Sakoli.

This system provides a convenient way to manage batch-wise groups, announcements, attendance, and student information securely and efficiently through the Wix web platform.

3. Objectives

- To digitize and centralize all student-related information.
- To enable batch-wise group communication and content sharing.
- To simplify attendance, exam, and academic record management.
- To provide role-based access control (Admin, Teacher, Student).
- To improve communication between teachers and students.
- To generate analytical reports for decision-making.
- To maintain data privacy and secure access.

4. Key Features

1. **User Roles & Authentication**
   - Separate roles: Admin, Faculty, Student.
   - Secure login and role-based permissions.
2. **Batch-wise Group Management**
   - Groups such as *Batch 2024*, *Batch 2025*, etc.
   - Each batch has its own announcements, discussions, and events.
   - Access restricted to respective batch members.
3. **Student Profile Management**
   - Personal details: Name, Email, Contact, Photo.
   - Academic data and course records stored digitally.
4. **Attendance Management**
   - Daily/weekly attendance entry.
   - Automated summaries and reports.
5. **Academic Records and Examination Module**
   - Upload and view marks, grades, and performance reports.
   - Generate report cards for each student.
6. **Notifications and Announcements**

o   Send updates to all students or specific batches.

o   Event management and schedule notifications.

7. **Dashboard and Analytics**

o   Display attendance statistics, performance trends, etc.

8. **Access Control and Security**

o   Pages and content restricted by role or batch.

o   Secure login (HTTPS / SSL encryption).

9. **Responsive Web Design**

o   Works on desktop, tablet, and mobile devices seamlessly.

5. System Architecture / Technical Details

- **Platform:** Wix (using Wix Editor and Velo developer tools)
- **Database:** Wix CMS (Collections for storing student data)
- **Automations:** Wix Automations for batch-based group enrollment
- **Hosting:** Wix Cloud Hosting
- **Frontend:** HTML/CSS (handled by Wix visual editor)
- **Backend Logic:** Wix Velo JavaScript API
- **Security:** Role-based access, SSL encryption

6. Implementation Plan

Phase	Task	Duration
Requirement Analysis	Identify user and institutional needs	1–2 weeks
Design	UI/UX planning and layout creation	1 week
Development	Build groups, CMS, and automation workflows	2–3 weeks
Testing	Functionality, usability, and performance testing	1 week
Deployment	Publish site on live domain	2–3 days
Maintenance	Regular updates and improvements	Continuous

7. Expected Outcomes

- All student information stored digitally in one place.
- Separate batch-wise groups for communication and announcements.
- Reduced manual workload for teachers and administrators.
- Improved transparency and communication.
- Easy monitoring of academic performance and attendance.

8. Limitations

- Requires internet access to operate.
- Limited customization in free Wix plans.
- Migration of existing data may require manual effort.

- Dependent on Wix's infrastructure and available APIs.

9. Future Enhancements

- Mobile app version of the portal.
- Integration of online fee payment and accounting.
- Advanced analytics and attendance reports.
- Integration with external APIs or learning management systems (LMS).
- WhatsApp / SMS notification system.

10. Conclusion

The **ENTC GPSakoli Student Management System** provides a smart, efficient, and secure way to manage academic and administrative activities for the ENTC department. By leveraging the Wix platform, the project successfully combines usability, automation, and accessibility, ensuring that both students and faculty benefit from a modern digital ecosystem.