

Frontend vs Backend Feature Split (Nigerian Polytechnic Context)

Feature/Module	Frontend (Student/Public)	Backend (Staff/Admin Dashboard)
1. Student Registration (New & Returning)	<ul style="list-style-type: none">✓ New applicants can apply online and check admission status.✓ Returning students can log in and complete semester registration.	<ul style="list-style-type: none">✓ Staff can manage applications, verify documents, approve registrations.
2. Course Registration	<ul style="list-style-type: none">✓ Students can register courses for the semester, see course outlines.	<ul style="list-style-type: none">✓ Lecturers/HODs can approve or reject course forms; Admin can generate course lists.
3. School Fees & Payment Portal	<ul style="list-style-type: none">✓ Students view fees breakdown, pay via Paystack/Remita, download receipts.	<ul style="list-style-type: none">✓ Bursary office verifies payments, generates financial reports, manages invoices.
4. Exam Attendance & Results Checking	<ul style="list-style-type: none">✓ Students can view CA scores, exam results, and GP/CGPA.	<ul style="list-style-type: none">✓ Lecturers upload results; HODs and Exams Officer verify & publish results.
5. Time Table / Academic Calendar	<ul style="list-style-type: none">✓ Students view lecture and exam timetables.	<ul style="list-style-type: none">✓ Staff uploads and manages timetables (both course and exam).
6. Course Materials & Lecture Notes	<ul style="list-style-type: none">✓ Students download lecture slides, notes, and assignments.	<ul style="list-style-type: none">✓ Lecturers upload materials for registered courses.
7. ID Card Management	<ul style="list-style-type: none">✓ Students can request ID cards or print temp slips.	<ul style="list-style-type: none">✓ Staff approve and manage ID card production.
8. Hostel Allocation	<ul style="list-style-type: none">✓ Students apply for hostel space and check status.	<ul style="list-style-type: none">✓ Hostel admin allocates spaces, tracks occupancy, and processes requests.

9. Library Access	<ul style="list-style-type: none"> ✓ Students search books, reserve materials, and check fines. 	<ul style="list-style-type: none"> ✓ Librarian adds books, manages loans, tracks usage.
10. Industrial Training (SIWES/IT)	<ul style="list-style-type: none"> ✓ Students submit logbooks or reports online. 	<ul style="list-style-type: none"> ✓ Supervisors review and grade submissions.
11. Convocation/NYSC Clearance	<ul style="list-style-type: none"> ✓ Graduating students check clearance status. 	<ul style="list-style-type: none"> ✓ Staff manage clearance, verify dues, and approve steps.
12. Help Desk / Complaints	<ul style="list-style-type: none"> ✓ Students raise support tickets or inquiries. 	<ul style="list-style-type: none"> ✓ Support/Admin team responds and tracks resolution.
13. Profile Management	<ul style="list-style-type: none"> ✓ Students update limited personal info (e.g., phone, email). 	<ul style="list-style-type: none"> ✓ Admin/staff update full records and approve changes.
14. Notifications / Announcements	<ul style="list-style-type: none"> ✓ Students see bulletins (e.g. strike notices, fee deadlines). 	<ul style="list-style-type: none"> ✓ Admin uploads news or school-wide alerts.
15. Biometric Attendance (Optional)	<ul style="list-style-type: none"> ✓ Students can see attendance summary. 	<ul style="list-style-type: none"> ✓ Lecturers mark attendance or sync biometric data.

Access Control Suggestions

User Type	Access Level
Student	Frontend only — limited to their data
Lecturer	Backend access to mark attendance, upload results
HOD	Backend access to approve results, view departmental stats
Exams Officer	Backend access to full academic records
Bursary	Backend access to payment management
ICT/Admin	Full access to backend system management

- Use **multi-gateway payment support** (Paystack, Remita, Flutterwave).
- Allow **offline payment upload** for students who pay via bank deposit.
- Ensure **mobile responsiveness** — many students use phones.
- Add **local language support** or simplified English for accessibility.
- Include **NIN/Matric number validation** for authentication.