

Full Session Activity Report

Development & Debugging Log

Date: January 15, 2026

Summary: This report documents the entire development session, including feature implementations, critical bug fixes, and system configuration updates.

1. Chronological Activity Log

Phase	Action / Details
1. Admin Login Debugging	Issue: Admin login was stuck on 'loading' state. Debug: Traced redirect flow, verified database user. Fix: Resolved `NameError` in `auth_routes.py` and fixed DB locking issue caused by concurrent access.
2. Profile Image Feature	Req: Allow students to upload profile pics. Action: Added `profile_image` col to DB. Updated `student_routes.py` for uploads. Outcome: Students can now upload and view profile images.
3. Admin Panel Updates	Req: Show student images in Admin List. Action: Modified `admin/students.html` to show images or a default FontAwesome icon.
4. Admin Credentials	Req: Change Admin to ACV@gmail.com. Action: Ran `update_admin.py` to update DB. Updated `app.py` seed logic.
5. Enrollment Numbers	Req: Fix NULL enrollment numbers. Action: Created `fix_enrollment.py` to backfill existing users ('UNIV2026xxx'). Updated `app.py` to handle missing values.

2. Installed Packages & Environment

The following Python packages were installed and used during development:

Package	Purpose
Flask	Web Framework
Flask-SQLAlchemy	Database ORM
Flask-Login	User Session Management
Flask-Migrate	Database Migrations
Flask-Mail	Email Notifications
reportlab	PDF Generation
mysql-connector-python	MySQL Driver
pyngrok	Public URL Tunneling

3. Session Command Log

Commands executed during this session for reference:

Action	Command / Script
Start Server	python app.py
Update Admin Creds	python update_admin.py
Add New Admin	python add_admin.py <email> <pass>
Backfill Enroll Nos	python fix_enrollment.py
Check Database	python inspect_db.py