

Student Management System

A React Native application for efficiently managing student profiles.

Quick Setup

1. **Install dependencies:**
2. `npm install`
3. **Configure API URL:**
 - o Run `ipconfig` to get your local IP address
 - o Update API URL in `constants/api.ts`
 - o *Note:* If facing IP connection issues, use: `setx /M REACT_NATIVE_PACKAGER_HOSTNAME your.ip.address`
4. **Start backend server:**
5. `npx json-server db.json`
6. **Launch the app:**
7. `npm expo start`

Use Expo Go on your device by scanning the QR code.

Key Features

- **Student Records:** Add, edit, and delete student profiles with name, email, phone, address, and enrollment status
- **Media Management:** Upload profile photos with size and type restrictions
- **Search & Organization:** Search students, filter by enrollment status, sort by name/email/date
- **Data Operations:** Export student data as JSON, clear cache when needed

Known Issues & Planned Improvements

Bugs Fixed

- IP connection issues with custom hostname configuration
- Component re-rendering optimization for performance
- Type consistency for Cloudinary IDs between database and queries

Future Enhancements

- Streamlined image deletion from student profiles
- Pagination for improved performance with large datasets
- Expanded settings functionality
- Alternative image upload service for faster processing
- Undo functionality for critical actions like student deletions

Technical Notes

Built with React Native, Expo, and JSON Server as mock backend. Implements form validation and responsive design for various screen sizes.