

Campus Lost & Found Portal

A centralized web platform designed for educational institutions to help students and staff report, track, and recover lost items on campus. This project replaces disorganized WhatsApp groups with a structured, searchable, and secure digital inventory.

Key Features

Authentication & Security

- **Role-Based Access Control (RBAC):** Distinct portals for **Students** and **Admins**.
- **Secure Login:** Powered by **NextAuth.js** with encrypted password storage (bcrypt).
- **Privacy Shield:** Contact numbers are hidden by default to prevent spamming.

Core Functionality

- **Report Items:** Dynamic form with **Image Uploading** (via Cloudinary integration).
- **Smart Search:** Real-time filtering by Category (Electronics, ID Cards, etc.), Status (Lost/Found), and Keywords.
- **Status Tracking:** Users can mark items as "**Resolved**" (Found/Returned) without deleting history.
- **Smart Dates:** Displays relative time (e.g., "2 hours ago") for better urgency context.

User Experience

- **Responsive Design:** Fully optimized for Mobile (with Hamburger Menu) and Desktop.
- **SEO Optimized:** Dynamic metadata and Open Graph tags for social sharing.
- **Admin Dashboard:** specialized view for administrators to moderate content.

Technology Stack

Component	Technology	Description
Frontend	Next.js 15 (App Router)	React Framework with Server-Side Rendering
Styling	Tailwind CSS	Utility-first CSS framework for responsive design
Backend	Next.js API Routes	Serverless functions for handling API requests
Database	MongoDB	NoSQL database for flexible data storage
ODM	Mongoose	Schema modeling for MongoDB

Auth	NextAuth.js	Authentication solution for Next.js
Storage	Cloudinary	Cloud-based image management and optimization

Installation & Local Setup

Follow these steps to run the project locally on your machine.

1. Clone the Repository

```
git clone [https://github.com/yourusername/campus-lost-found.git](https://github.com/yc  
cd campus-lost-found
```

2. Install Dependencies

```
npm install
```

3. Configure Environment Variables

Create a file named `.env.local` in the root directory and add the following keys:

```
# Database Connection
MONGODB_URI=mongodb://localhost:27017/campus-lost-found
# Or use your MongoDB Atlas connection string

# NextAuth Configuration
NEXTAUTH_SECRET=your_super_secret_random_string
NEXTAUTH_URL=http://localhost:3000

# Admin Credentials (Backdoor Access)
ADMIN_EMAIL=admin@college.edu
ADMIN_PASSWORD=admin123

# Cloudinary Configuration (For Image Uploads)
# Get these from your Cloudinary Dashboard
NEXT_PUBLIC_CLOUDINARY_CLOUD_NAME=your_cloud_name
NEXT_PUBLIC_CLOUDINARY_PRESET=your_unsigned_upload_preset
```

4. Run the Development Server

```
npm run dev
```

5. Access the App

Open your browser and navigate to: `http://localhost:3000`

Project Structure

```

src/
└── app/
    ├── admin/           # Admin Dashboard Page
    ├── api/             # Backend API Endpoints (Auth, Items, Seed)
    ├── auth/            # Login & Signup Pages
    ├── items/           # Browse Listing & Edit Pages
    ├── profile/          # User Profile & History
    ├── report/           # Item Reporting Form
    └── layout.js         # Root Layout & Global Navbar
        └── page.js         # Landing Page
    └── components/       # Reusable UI Components (Navbar, ItemCard, etc.)
    └── lib/              # Database Connection Helper (db.js)
    └── models/           # Mongoose Data Models (User.js, Item.js)

```

User Roles

Student

- Can register and login.
- Can report lost or found items.
- Can upload images.
- Can manage their own posts (Edit/Delete/Mark Resolved).

Admin

- Logs in via the universal login page using specific credentials.
- Can view all items.
- Can delete inappropriate or spam posts.
- Has a dedicated dashboard link in the navbar.

Contributing

Contributions are welcome!

1. Fork the project.
2. Create your feature branch (`git checkout -b feature/NewFeature`).
3. Commit your changes (`git commit -m 'Add some NewFeature'`).
4. Push to the branch (`git push origin feature/NewFeature`).
5. Open a Pull Request.

License

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