README: Flask Demo Account Registration App

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Overview

This is a simple, single-file Python web application built with Flask. It allows users to create a demo account with full name, email, and password. The app includes server-side validation, password hashing, and SQLite database integration.

Features

- User registration with full name, email, and password
- Server-side validation (email format, password strength, duplicate check)
- Password hashing using Werkzeug
- SQLite database integration
- Clean routing and modular logic
- All code combined in one file for simplicity

Setup Instructions

Dependencies

Install Flask and Werkzeug:

```
pip install flask werkzeug
```

Run the App

Save the code as `app.py` and run:

```
python app.py
```

Open your browser and visit:

```
http://127.0.0.1:5000
```

Usage

Fill out the registration form with:

- Full Name

- Email Address

- Password (minimum 8 characters, includes uppercase and digit)

- Confirm Password

On successful submission, the account is saved in `users.db` and a success message is displayed.

Validation Rules

- Email must be valid and unique

- Password must be strong: ≥ 8 characters, one uppercase letter, one digit

- Passwords must match

Database Schema

```
CREATE TABLE users (
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    full_name TEXT NOT NULL,
    email TEXT NOT NULL UNIQUE,
    password_hash TEXT NOT NULL
);
```

Extensibility Ideas

- Add login and session management

- Add image upload for profile pictures

- Deploy to Render, Replit, or Vercel

- Add email confirmation via Flask-Mail

License

This project is open for educational and personal use. Feel free to modify and extend it.