Face Attendance App - Build Guide

==========

This document explains how the app is structured and what tools are required to build it from source.

Technologies Used:

- React.js (Frontend)
- Flask (Backend)
- OpenCV
- face_recognition
- Google Sheets API
- TailwindCSS
- Webcam API
- CSV logging

Project Structure:

---

face_attendance_system/

- client/ (React Frontend)
  - src/
    - App.js, index.css, etc.
  - tailwind.config.js, package.json
- server/ (Flask Backend)

  - app.py

  - sheets.py

  - credentials.json

- dataset/   (Registered face images)

- logs/   (CSV attendance logs)

Required Python Packages:

----

pip install flask flask-cors face_recognition opencv-python numpy pandas

pip install gspread google-api-python-client google-auth-httplib2 google-auth-oauthlib

Frontend Dependencies (React):

----

npm install react-router-dom react-webcam

npm install -D tailwindcss postcss autoprefixer

npx tailwindcss init -p

Tailwind Setup:

----

tailwind.config.js should include:

content: ["./src/**/*.{js,jsx,ts,tsx}"]

index.css should include:

@tailwind base;

@tailwind components;

@tailwind utilities;