
Answer-Sheet-Studio

發佈 0.0

Abieskawa and Calamus

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語言 / Language : 繁體中文 | *English*

繁體中文

[點此下載程式 \(ZIP\)](#)

Answer Sheet Studio 讓老師可以產生可列印的答案卡，並在本機進行影像辨識（不會上傳到雲端）。

1.1 最簡單開始（推薦）

1. 下載 ZIP 並解壓縮。
2. macOS：雙擊 start_mac.command；Windows：雙擊 start_windows.vbs。
3. 若尚未安裝 Python，啟動器會提示下載/安裝官方 Python（依照畫面一路按確認即可）。
4. 安裝完成後再執行一次啟動器；瀏覽器會自動開啟 <http://127.0.0.1:8000>。
5. 在網頁裡先「下載答案卡」，再上傳掃描 PDF 做影像辨識。

1.2 系統需求

- macOS 13+ 或 Windows 11
- Python 3.10+（建議 3.11；支援 3.10–3.13）。若尚未安裝 Python，啟動器可協助下載官方安裝程式。
- Windows 安裝 Python 時請勾選「Add python.exe to PATH」（並保留 py launcher）
- 第一次安裝需要網路下載 Python 套件（FastAPI、PyMuPDF、OpenCV、NumPy 等）

1.3 功能說明 (進階)

- **下載答案卡**：輸入標題、科目、班級、題數（最多 100 題）、每題選項（ABC / ABCD / ABCDE），產生單頁 PDF。
- **上傳影像辨識**：上傳多頁 PDF（每頁一位學生）。會輸出 `results.csv`（題號為列、學生為欄）、`ambiguity.csv`（空白/模稜兩可/多選）與 `annotated.pdf`（標註辨識結果）。
- **啟動器**：雙擊啟動器 (`start_mac.command` 或 `start_windows.vbs`) 即可建立虛擬環境、安裝套件、啟動伺服器並開啟 `http://127.0.0.1:8000`。

1.4 使用注意事項

- 進行影像辨識時，題數與 **每題選項 (ABC/ABCD/ABCDE)** 必須與答案卡一致。
- 想要結果更穩定：建議用較深的筆、掃描 **300dpi**，並避免歪斜/旋轉。

1.5 輸出檔案

辨識完成後，檔案會寫入 `outputs/<job_id>/`：

- `results.csv`
- `ambiguity.csv`
- `annotated.pdf`
- `input.pdf` (原始上傳檔)

1.6 更新

- 開啟 `http://127.0.0.1:8000/update`，上傳最新 ZIP (GitHub Releases 或 `main.zip`)。更新後會自動重新啟動。

1.7 Debug Mode (回報問題用)

一般使用者不需要使用 Debug Mode。

- 開啟 `http://127.0.0.1:8000/debug`，輸入 Job ID (outputs/ 底下的資料夾名稱)。
- 下載 `results.csv`、`ambiguity.csv`、`annotated.pdf`、`input.pdf`（必要時再下載 `input.pdf`），提供給開發者協助排查。

1.8 排除問題

- **pip install failed** — 檢查 launcher log，確認有網路、Python 版本為 3.10+；若你是 Python 3.14，建議改用 3.10—3.13。
- **Port already in use / permission denied** — 啟動器會檢查 port；若 macOS 防火牆阻擋 Python，請到 System Settings > Network > Firewall 放行。
- **Server not opening** — 先看 launcher log 找出錯誤；也可以在 .venv 裡直接跑 `python run_app.py` 方便除錯。

CHAPTER 2

English

[Download \(ZIP\)](#)

Answer Sheet Studio lets teachers generate printable answer sheets and run local OMR recognition (no cloud upload).

2.1 Requirements

- macOS ≥ 13 or Windows 11
- Python **3.10+** (3.11 recommended; 3.10—3.13 supported). If Python isn’t installed yet, the launcher can help download the official installer.
- On Windows, ensure “Add python.exe to PATH” during installation (and keep the `py` launcher enabled if offered).
- Internet access the first time to download Python packages (FastAPI, PyMuPDF, OpenCV, NumPy, etc.).

2.2 Quick Start

2.2.1 macOS

1. Double-click `start_mac.command` (or run `chmod +x start_mac.command` once if prompted).
2. If Python isn’t installed, the launcher offers to download and open the installer (from python.org). After installation finishes, run `start_mac.command` again.
3. First run creates `.venv` and installs requirements; later runs reuse the existing `.venv` (unless requirements changed).
4. Your browser opens `http://127.0.0.1:8000`. Close the browser when you’re done; the server auto-exits after a period of inactivity.

2.2.2 Windows 11

1. Double-click `start_windows.vbs`. If Python isn't installed, it will offer to download/install Python 3.11 automatically (recommended).
2. If you install Python manually, check "Add python.exe to PATH" during installation (and keep the py launcher enabled if offered).
3. First run installs requirements; later runs reuse the existing `.venv` (unless requirements changed). If Windows Defender prompts for network access, allow it so the server can bind to localhost.

2.3 Features

- **Download page** —choose title, subject, class, number of questions (up to 100), and choices per question (ABC/ABCD/ABCDE). Generates a single-page PDF template.
- **Upload page** —drop a multi-page PDF scan. Recognition exports `results.csv`, `ambiguity.csv`, and `annotated.pdf`.
- **Launcher** —sets up `.venv`, installs requirements, starts the local server, and opens the browser.
- The web UI supports **English** and **Traditional Chinese**.

2.4 Important Notes

- For recognition, the **number of questions** and **choices per question** must match the generated answer sheet.
- For more stable results: use a darker pen/pencil, scan at **300dpi**, and avoid skew/rotation.

2.5 Output Files

After recognition, files are written under `outputs/<job_id>/`:

- `results.csv`
- `ambiguity.csv`
- `annotated.pdf`
- `input.pdf` (original upload)

2.6 Updating

- Open `http://127.0.0.1:8000/update` and upload the latest ZIP (from GitHub Releases or `main.zip`). The app will restart automatically.

2.7 Debug Mode

- Open `http://127.0.0.1:8000/debug` and enter the Job ID to download diagnostic files.

2.8 Troubleshooting

- **pip install failed** —Check the launcher log; ensure network access and Python 3.10+. If you're on Python 3.14, try Python 3.10—3.13.
- **Port already in use / permission denied** —The launcher checks port availability.
- **Server not opening** —Use the launcher log or run `python run_app.py` inside `.venv` for debugging.