

發展很陽春的網頁程式

- 最初源於要測試 upload files 這功能
 - <https://flask.palletsprojects.com/en/1.1.x/patterns/fileuploads/>
- 先在 windows 10 下發展程式 (將手機錄下的 gpx 檔轉成互動式軌跡圖 html 檔)
 - 安裝 (pip install) 第三方 library (flask, gpxpy, folium)
 - 命令提示字元下執行 `python flask_convert_file.py`
 - <http://127.0.0.1:5000> (透過瀏覽器連線到自己的電腦來測試)
 - 若無法執行，試著恢復舊版的 numpy 再跑 (`pip install numpy==1.19.3`)
- 移植到 PythonAnywhere 上執行
 - <http://wtgroup.pythonanywhere.com/>
 - 每個人都可以註冊帳號，將程式上載到 pythonanywhere.com 上跑，只是免費版本限制多多

以這個程式範例為基礎來發展網頁程式，但前提是得修正它的 bug(臭蟲)

Uploading Files

Ah yes, the good old problem of file uploads. The basic idea of file uploads is actually quite simple. It basically works like this:

1. A `<form>` tag is marked with `enctype=multipart/form-data` and an `<input type=file>` is placed in that form.
2. The application accesses the file from the `files` dictionary on the request object.
3. use the `save()` method of the file to save the file permanently somewhere on the filesystem.

A Gentle Introduction

描述工作步驟

Let's start with a very basic application that uploads a file to a specific upload folder and displays a file to the user. Let's look at the bootstrapping code for our application:

```
import os
from flask import Flask, flash, request, redirect, url_for
from werkzeug.utils import secure_filename

UPLOAD_FOLDER = '/path/to/the/uploads'
ALLOWED_EXTENSIONS = {'txt', 'pdf', 'png', 'jpg', 'jpeg', 'gif'}

app = Flask(__name__)
app.config['UPLOAD_FOLDER'] = UPLOAD_FOLDER
```

魔鬼藏在細節裡 (防止駭客)

So first we need a couple of imports. Most should be straightforward, the `werkzeug.secure_filename()` is explained a little bit later. The `UPLOAD_FOLDER` is where we will store the uploaded files and the `ALLOWED_EXTENSIONS` is the set of allowed file extensions.

Why do we limit the extensions that are allowed? You probably don't want your users to be able to upload everything there if the server is directly sending out the data to the client. That way you can make sure that users are not able to upload HTML files that would cause XSS problems (see [Cross-Site Scripting \(XSS\)](#)). Also make sure to disallow `.php` files if the server executes them, but who has PHP installed on their server, right? :)

Next the functions that check if an extension is valid and that uploads the file and redirects the user to the URL for the uploaded file:

```
Uploading Files — Flask Docu X Upload new File X +
https://flask.palletsprojects.com/en/1.1.x/patterns/fileuploads/

def allowed_file(filename):
    return '.' in filename and \
        filename.rsplit('.', 1)[1].lower() in ALLOWED_EXTENSIONS

@app.route('/', methods=['GET', 'POST'])
def upload_file():
    if request.method == 'POST':
        # check if the post request has the file part
        if 'file' not in request.files:
            flash('No file part')
            return redirect(request.url)
        file = request.files['file']
        # if user does not select file, browser also
        # submit an empty part without filename
        if file.filename == '':
            flash('No selected file')
            return redirect(request.url)
        if file and allowed_file(file.filename):
            filename = secure_filename(file.filename)
            file.save(os.path.join(app.config['UPLOAD_FOLDER'], filename))
            return redirect(url_for('uploaded_file',
                                    filename=filename))

    return '''
<!doctype html>
<title>Upload new File</title>
<h1>Upload new File</h1>
<form method=post enctype=multipart/form-data>
  <input type=file name=file>
  <input type=submit value=Upload>
</form>
...'''
```

改成 `upload_file` (除錯)

改成 `file.filename` (支援中文檔名)

在 windows 10 下開發程式

server 端

```
C:\Windows\system32\cmd.exe - python flask_convert_file.py

(venv_flask) D:\Slides_2021\UploadFiles_PythonAnywhere\code>python flask_convert_file.py
* Serving Flask app "flask_convert_file" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [05/Jan/2021 13:54:16] " [37mGET / HTTP/1.1 [0m" 200 -
127.0.0.1 - - [05/Jan/2021 13:56:22] " [32mPOST / HTTP/1.1 [0m" 302 -
127.0.0.1 - - [05/Jan/2021 13:56:22] " [37mGET /?filename=20201223_民宿走至國之北疆.gpx HTTP/1.1 [0m" 200 -
下午4:26拍完自動關機 -> 16:26
下午4:23廁所指標 -> 16:23
下午4:22折返到正確階梯上的岔路口 -> 16:22
下午4:19階梯底 -> 16:19
下午4:17下錯階梯 -> 16:17
下午4:15困擾人的地標 -> 16:15
下午4:12下方海灣 -> 16:12
下午4:11海角民宿 -> 16:11
下午4:09馬路高處 -> 16:09
下午4:00上坡馬路往下看橋 -> 16:00
下午3:58峭壁上的國旗 -> 15:58
下午3:55消波塊 -> 15:55
下午3:51橋另一端 -> 15:51
下午3:50中社島 -> 15:50
下午3:48橋入口 -> 15:48
下午3:47橋前路旁牌子 -> 15:47
下午3:46梅壩 -> 15:46
下午3:44忠武門 -> 15:44
下午3:40下階梯中 -> 15:40
下午3:35超市門口 -> 15:35
下午3:32往綜合超市階梯 -> 15:32
下午3:31麵包店 -> 15:31
下午3:30香記小吃店路口 -> 15:30
下午3:27郵局門口 -> 15:27
下午3:26出門左轉階梯望海 -> 15:26
下午3:25基興客棧門口 -> 15:25
127.0.0.1 - - [05/Jan/2021 13:56:31] " [37mGET /run HTTP/1.1 [0m" 200 -
```

client 端

1 瀏覽... 未選擇檔案。 2 Upload

3 轉換並下載

名稱	修改日期	類型	大小
__pycache__	2021/1/5 上午 10:26	檔案資料夾	
output	2021/1/5 上午 10:33	檔案資料夾	
uploads	2021/1/5 上午 10:33	檔案資料夾	
20201223_民宿走至國之北疆.gpx	2021/1/5 上午 09:35	GPX 檔案	41
flask_convert_file.py	2021/1/5 上午 10:32	Python File	3
gpxpy_folium_0_web.py	2021/1/5 上午 10:04	Python File	3

檔案名稱(N): 20201223_民宿走至國之北疆.gpx 所有檔案 (*.*)

開啟(O) 取消

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Plans and pricing: PythonAny × +

https://www.pythonanywhere.com/pricing/ 80%

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A limited account with one web app at `your-username.pythonanywhere.com`, restricted outbound Internet access from your apps, low CPU/bandwidth, no IPython/Jupyter notebook support.
It works and it's a great way to get started!

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Hacker \$5/month	Web dev \$12/month	Startup \$99/month	Custom \$5 to \$500/month
Run your Python code in the cloud from one web app and the console	If you want to host small Python-based websites for you or for your clients	Start a business and don't worry about having to scale to handle traffic spikes	Want a combination that's not on the list? Create your own! All custom plans have:
A Python IDE in your browser with unlimited Python/bash consoles	A Python IDE in your browser with unlimited Python/bash consoles	A Python IDE in your browser with unlimited Python/bash consoles	A Python IDE in your browser with unlimited Python/bash consoles
One web app on a custom domain or <code>your-username.pythonanywhere.com</code>	Up to 2 web apps on custom domains or <code>your-username.pythonanywhere.com</code>	Up to 3 web apps on custom domains or <code>your-username.pythonanywhere.com</code>	Up to 20 web apps, on custom domains or <code>your-username.pythonanywhere.com</code>
Enough power to run a typical 100,000 hit/day website. (more info)	Enough power to run a typical 150,000 hit/day website on each web app. (more info)	Enough power to run a typical 1,000,000 hit/day website on each web app. (more info)	As many web workers as you need to scale your site's capacity. (more info)
2,000 CPU-seconds per day for consoles, scheduled tasks and always-on tasks (more info)	4,000 CPU-seconds per day for consoles, scheduled tasks and always-on tasks (more info)	10,000 CPU-seconds per day for consoles, scheduled tasks and always-on tasks (more info)	Up to 100,000 CPU-seconds per day for consoles, scheduled tasks and always-on tasks (more info)
IPython/Jupyter notebook support	IPython/Jupyter notebook support	IPython/Jupyter notebook support	IPython/Jupyter notebook support
1GB disk space	5GB disk space	50GB disk space	As much disk space as you choose

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PythonAnywhere Sign-up × +

https://www.pythonanywhere.com/registration/register/beginner/



Create your account

Username:

Email:

Password:

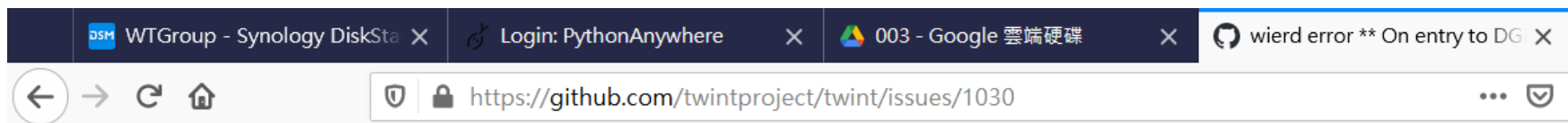
Password (again):

I agree to the [Terms and Conditions](#) and the [Privacy and Cookies Policy](#), and confirm that I am at least 13 years old.

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We promise not to spam or pass your details on to anyone else.

恢復舊版的 numpy



Closed

wierd error ** On entry to DGEBAL parameter number 3 had an illegal value ** On entry to DGEHRD parameter number 2 had an illegal value
pierrevallette opened this issue on 14 Nov 2020 · 27 comments



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當出現以上的錯誤時，請試著恢復舊版的 numpy



himanshudabas commented on 14 Nov 2020

Contributor



this isn't actually a twint issue, it's related to numpy.
numpy1.19.4 has this bug on windows.
first uninstall the current numpy installation using:

```
pip uninstall numpy
```

Then install the previous version using:

```
pip install numpy==1.19.3
```