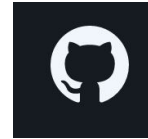
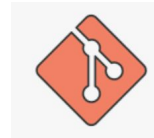


Display Your Map on a Website Using Geopandas , Folium , Django , and Heroku ... with Git & Github

Gregory Wallace - GeoPython 2022



Whoami

I work in an energy distribution company in Paris

(admin rights & internet access issues)

Data Scientist with many use cases in geomarketing

(use this for for proof of concepts - not production)

Switched from finance to data science & GIS 5 years ago

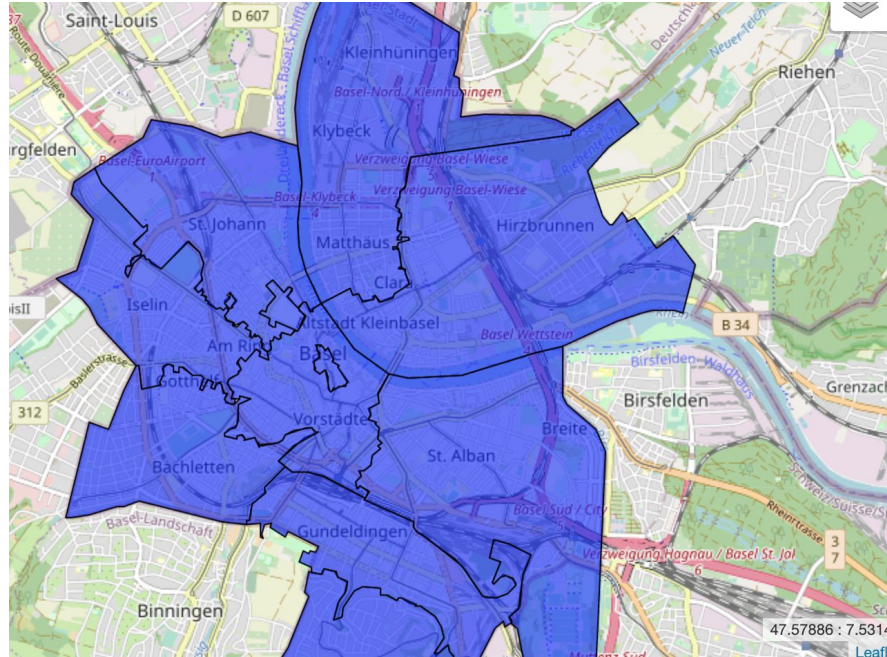
(no expert in web dev)

Live in la Rochelle , western coast of France & like swimming

(there seems to be a good open air swimming pool in Basel)



Demo



Url like : <https://anyunique.name.herokuapp.com/> + extension



Agenda

1. We describe the ingredients needed
2. We use Geopandas to prepare a Folium map
3. We prepare a Django application to render the map
4. We see how to deploy to Heroku
5. We look at some pros and cons

Current presentation and detailed steps are in a public github repo so no need to take notes <https://github.com/gregwalla/geopythonBasel>

Ingredients and purpose



An OS, with python >3.6 & internet access	Install libraries & push code to Heroku
IDE of your choice	data & html file preparation
Build-in python venv	manage dependencies
Command line	navigate, start venv , push codes
Geopandas & Folium libraries	data & html file preparation
Django library	prepare the website
Git	deploy the app to Heroku
Gunicorn library - WSGI & a procfile	deploy the app to Heroku
option1 - Heroku Client (if admin rights)	manage & deploy the app on Heroku
option2 (preferred) - Github	deploy on Heroku & backup the documentation

Geopandas to prepare a Folium map

From data to html file

DIE POST Daten Karte Diagramme API Dokumentation Kontakt [Registrierung](#) [Anmelden](#)

41 Dateneinträge

Aktive Filter [Alle löschen](#)

Filter

Suche nach Einträgen ...

POSTLEITZAHL

4000 1

4001 1

4002 1

4003 1

4004 1

4005 1

1. März

PLZ_ZZ

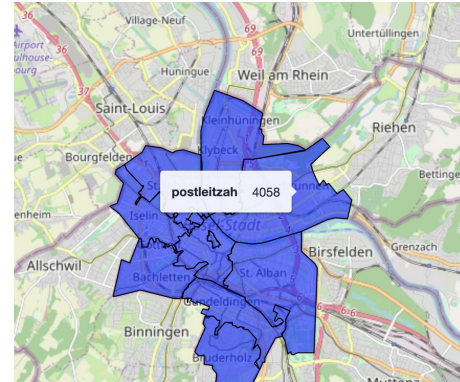
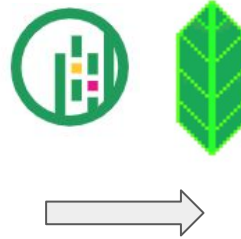
00 39

02 2

ORTBEZ18

1. März

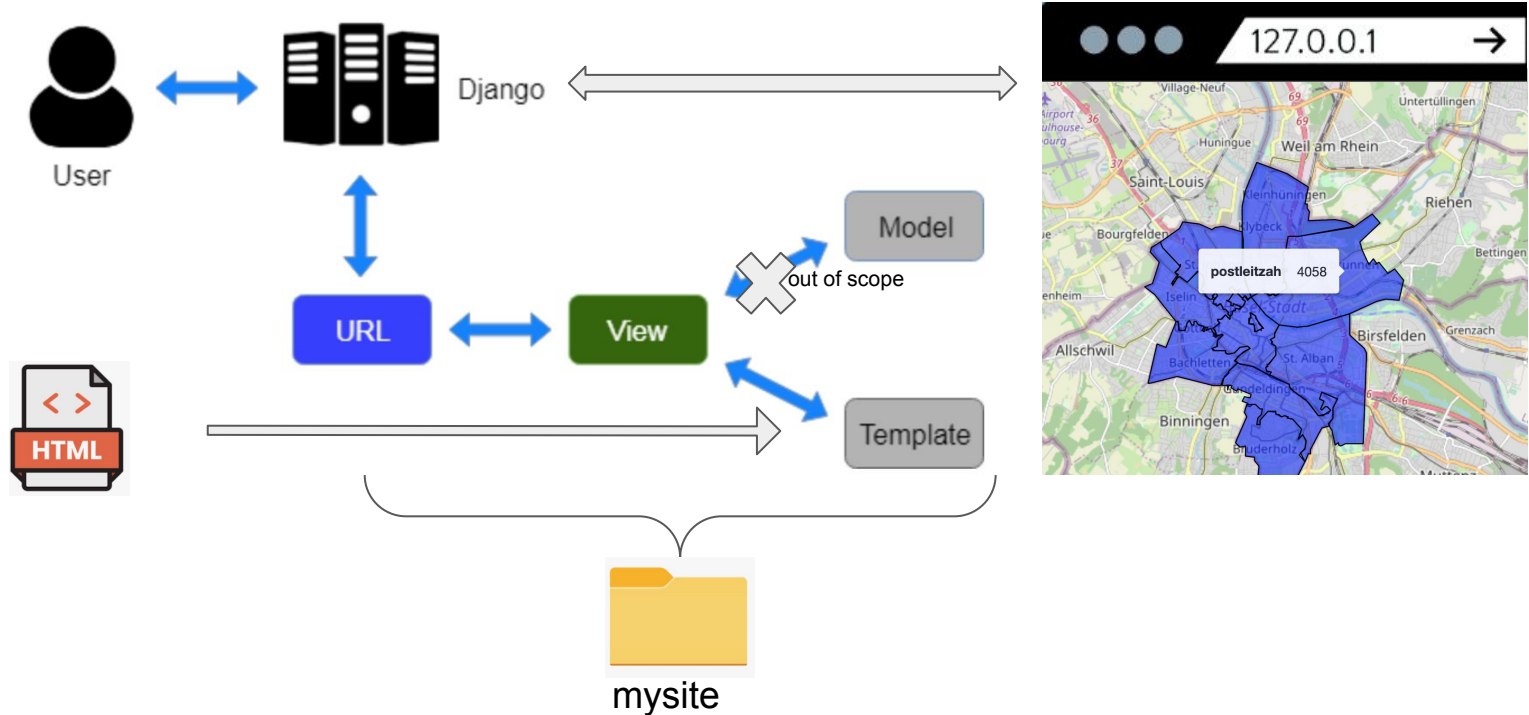
K_ABEW	CHWP	BPMW	PLZ_TYP	BREITENGRAD	GEH_ABL_201	PLZ_BREITENGRAD	PLZ_LÄNGE	Geo-Shape	Geo-Koordinate
2.452	2.701	30	2.452	6. März 1986	400.202				
2.452	2.701	30	2.452	11. November 1993	400.202				
2.473	2.701	30	2.473	29. März 1995	412.360				
2.475	2.701	30	2.475	21. Mai 1986	412.360				
2.477	2.701	30	2.477	1. September 1993	400.202				
2.481	2.701	30	2.481	10. November 1993	401.900				
2.482	2.701	30	2.482	21. Mai 1986	402.000				
2.484	2.701	30	2.484	1. Oktober 1987	400.202	/	["coordinates": [[[10.80808022, 47.47...]]]]	47.554545350	
2.487	2.701	30	2.487	1. Oktober 1987	412.360	/	["coordinates": [[[10.8081112, 47.47...]]]]	47.546718801	
2.489	2.701	30	2.489	1. Oktober 1987	412.360	/	["coordinates": [[[10.8081112, 47.47...]]]]	47.546718801	
4.006	2.701	30	4.006	1. Januar 2019	400.202				
8.105	2.701	40	2.452	1. April 2004	400.202				
2.472	2.701	30	2.472	21. Mai 1986	401.000				
2.476	2.701	30	2.476	21. Mai 1986	412.360				
2.480	2.701	30	2.480	21. Mai 1986	401.800				
2.485	2.701	30	2.485	10. September 1993	400.202				
2.488	2.701	30	2.488	10. September 1993	412.360				
2.489	2.701	30	2.489	21. Mai 1986	400.000				
2.491	2.701	30	2.491	21. Mai 1986	401.100	/	["coordinates": [[[10.80827005, 47.47...]]]]	47.561988027	
2.493	2.701	30	2.493	1. Oktober 1987	400.202	/	["coordinates": [[[10.80817005, 47.47...]]]]	47.546718801	



Serve our map in a Django app

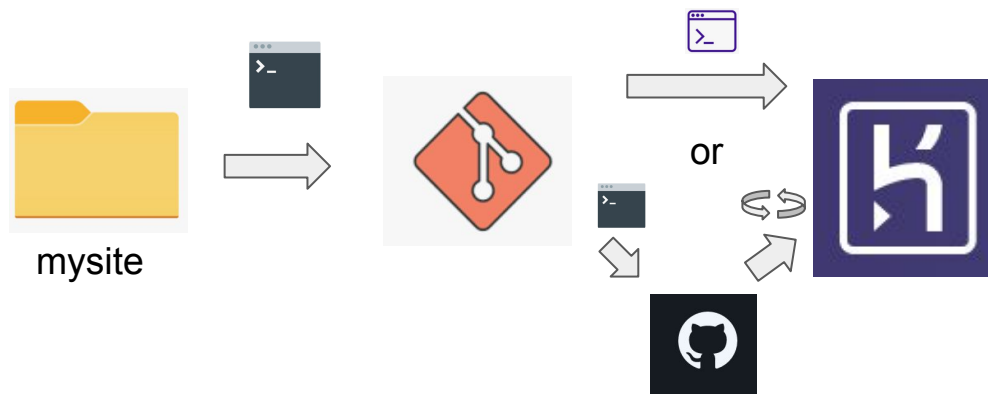
From html file to local web site

venv

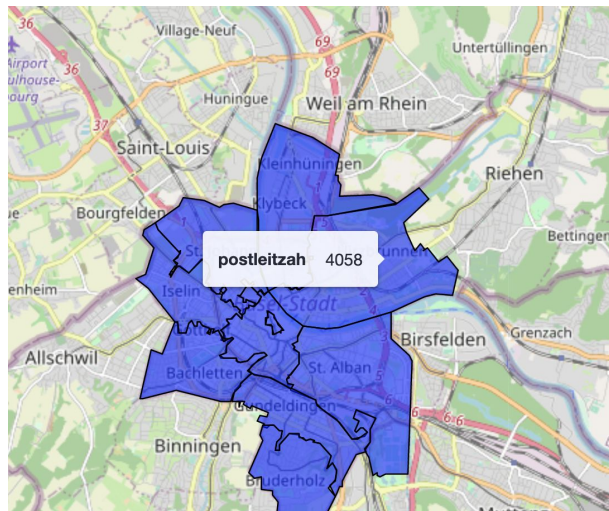


Deploy the app to Heroku

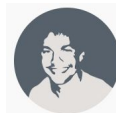
From local website to web app



<https://anyunique.name.herokuapp.com/> + ext



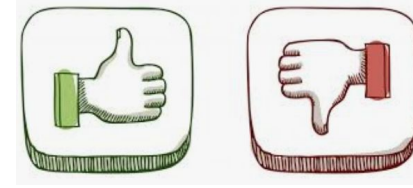
With thanks to



Corey Schafer

925 k abonnés

Pros & Cons



Free & no admin rights	No governance
Web app can be embedded in a conversation as a link	An html file stored in a shared folder or sent via email could be fine
Once set up it is easy to iterate	Except if it breaks

