

IMPROVE OPENSTREETMAP A RECEIPT AT A TIME

COFFEOISM

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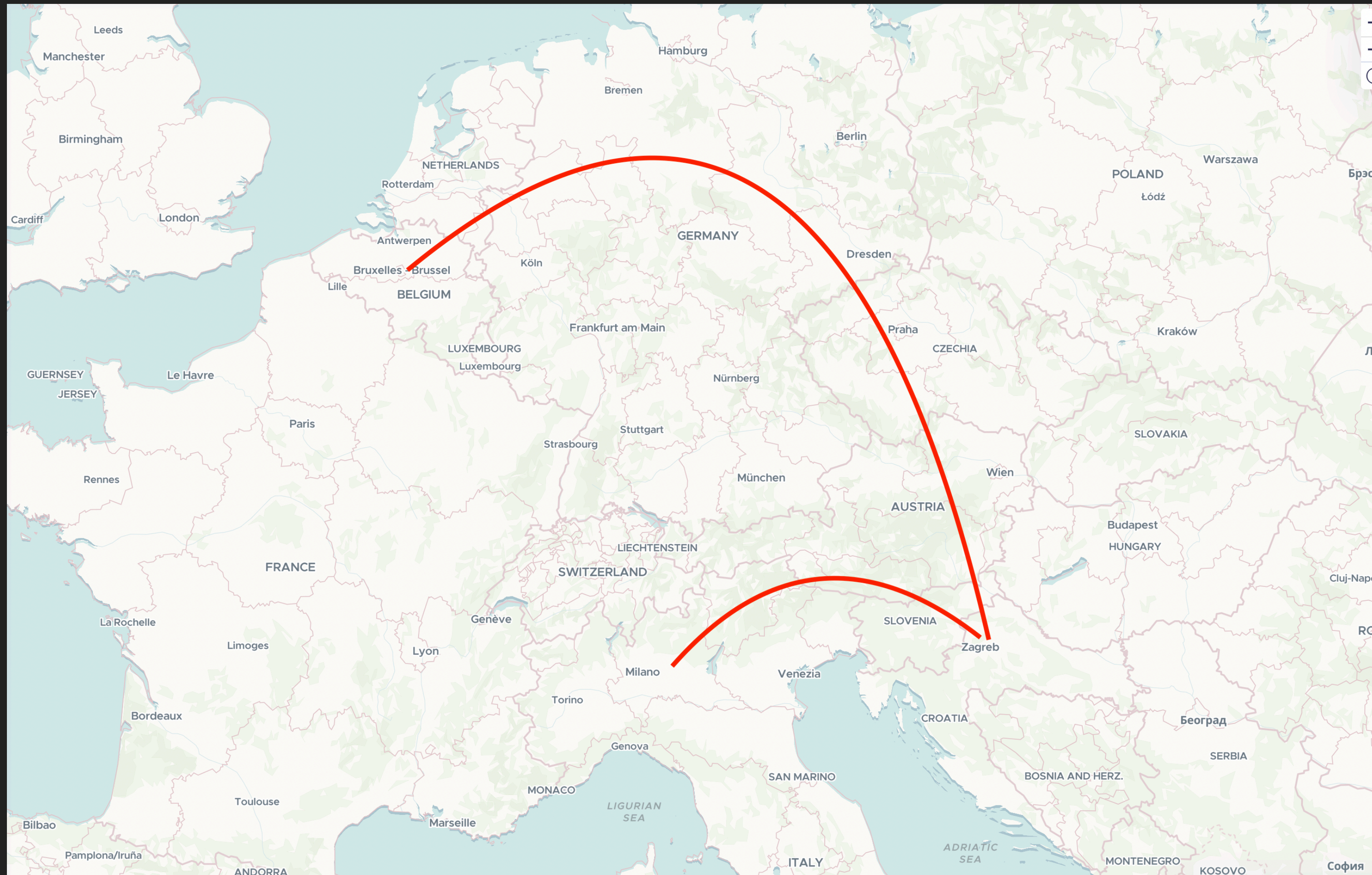


THE USUAL PROCESS

- ▶ Is the place already in OSM?
- ▶ Gather all information needed (name, position, address, phone, website)
- ▶ Open the web editor (or your preferred one)
- ▶ Insert all the relevant data
- ▶ Check it
- ▶ Save it

WHERE WE CAN FIND SOME BEER?

THE LONG WAY TO FOSDEM



WHERE WE CAN FIND SOME BEER?

THE OSM MAIN PROBLEM (IT'S A JOKE)



SOMEONE SAVE RECEIPT TO COLLECT THE NEEDED DATA...

BOB COMES TO THE RESCUE



TOPIĆ USLUGE D.O.O.
*** KONOPA DIDOV SAN ***
P.J. MLETACKA 11, ZAGREB
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KOPIJA RAČUNA
Broj računa : 740/2/3
Datum : 1.2.2023. 21:32:28
Djelatnik : Danijel Varkaš

Naziv artikla	Količina	Cijena	Iznos
JUHA GOVEDA	1,00 kom	4,51	4,51
JUHA OD GLJIVA	1,00 kom	5,04	5,04
PASTICADA S DOMAĆIM NJOKIMA	1,00 kom	17,25	17,25
PIVO ZLATNI PAN 0.50	2,00 kom	3,45	6,90
DIDOVA TAVA S PRILOGOM	1,00 kom	18,58	18,58
KAVA ESPRESSO	2,00 kom	1,86	3,72

Ukupno : 56,00 Eur
421,93 Kn
Tečaj EUR/Kn : 7.53450
Način plaćanja: Kartica

Razrada poreza:

Stopa	Osnovica	Iznos
13,00%	40,16 Eur	5,22 Eur
25,00%	8,4960 Eur	2,12 Eur
Korekcija osnovice :		0,0040 Eur

ZKI : 5b34e462283b1c869a63e02e11697215
JIR : 14b97784-f31f-4499-be2e-lbd2c10bccef

*** HVALA! ***
IBAN: HR98 2340009 1460081168

IL FORNAIO
BARONCHELLI A.
C.SO DI P.TA ROMANA 72 MILANO
TEL. 0258318535
PARTITA IVA 12999500155

DOCUMENTO COMMERCIALE
DI VENDITA O PRESTAZIONE

DESCRIZIONE	IVA	EURO
IVA 4	04%	22,20
TOTALE COMPLESSIVO		22,20
DI CUI IVA		0,85
PAGAMENTO CONTANTE		22,20
PAGAMENTO ELETTRONICO		0,00
NON RISCOSSO		0,00
RESTO		0,00
IMPORTO PAGATO		22,20

06-06-2020 09:51
DOCUMENTO N. 0107-0009
RT 3CICE132857

CONTANTE 22,20

COFFE OSM BENEFIT

- ▶ The receipt contain all the need information
- ▶ Places existences check is automated
- ▶ The app tokenise the information for you
- ▶ Just copy/paste into OSM editor (or insert directly?)

PROJECT STRUCTURE

- ▶ Backend: Python API based on FastAPI
- ▶ Frontend: VUE App

- ▶ Future: Integration with other editors, Stand Alone Mobile App? PWA?

HOW IT WORK (ACTUALLY)

- ▶ Receipt is uploaded to a server
- ▶ Exif data are removed
- ▶ Image (should) be prepared for OCR
- ▶ OCR
- ▶ Parsing and entity recognition (libpostal, spacy, custom ML model?)
- ▶ Search similar place on OSM (by name, location)

WHAT'S NEED TO BE DONE

- ▶ Improve data extraction (image preprocess, external ocr, custom ML Model)
- ▶ Frontend PWA, Flutter APP, integration
- ▶ Integration:OSM login and editing API
- ▶ More receipt to test and improve!
- ▶ Ideas? What can be done different (and better)
- ▶ Error handling

MAP MORE

MAKE BOB HAPPY

- ▶ More Pubs
- ▶ More Beer
- ▶ More Fun
- ▶ Improve OSM Together

THANK YOU

<https://gitlab.com/netvandal/coffeosm>

<http://coffeosm.tameni.it> (temp playground)

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