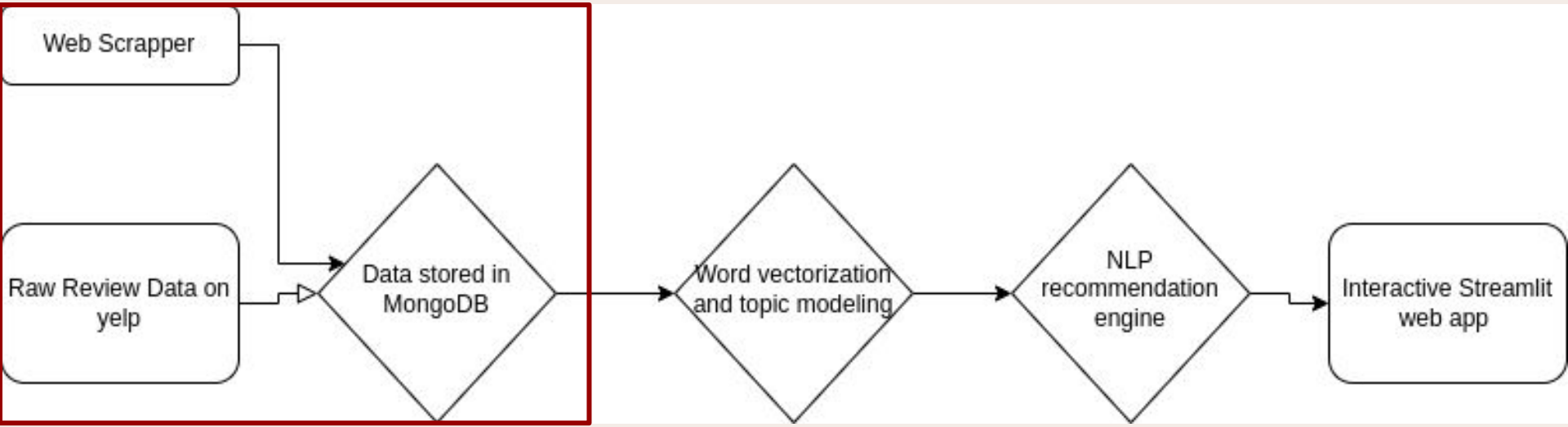
We Suggest Coffee (a Second Shot)!

Using data engineering to bring a coffee recommender to production

Motivation

- Acquire data specific to Seattle
- Deployment of model to the web
- Still drinking coffee every morning!

Data pipeline



Data

1. Storyville Coffee Company

1944

Coffee & Tea · Bakeries · $$ • Downtown

Closed until 9:00 AM tomorrow

" of the building just FYI. **Coffee** was great and so was the food and friendly service. Definitely recommend coming here." more

✕ Outdoor dining ✕ Delivery ✓ Takeout

2. Moore Coffee Shop

1138

Coffee & Tea · Sandwiches · Waffles · $ • Belltown

Closed until 7:30 AM tomorrow

"I wish I could this **coffee shop** a billion stars! What a great experience! First time there and I" more

✓ Takeout

3. Anchorhead Coffee

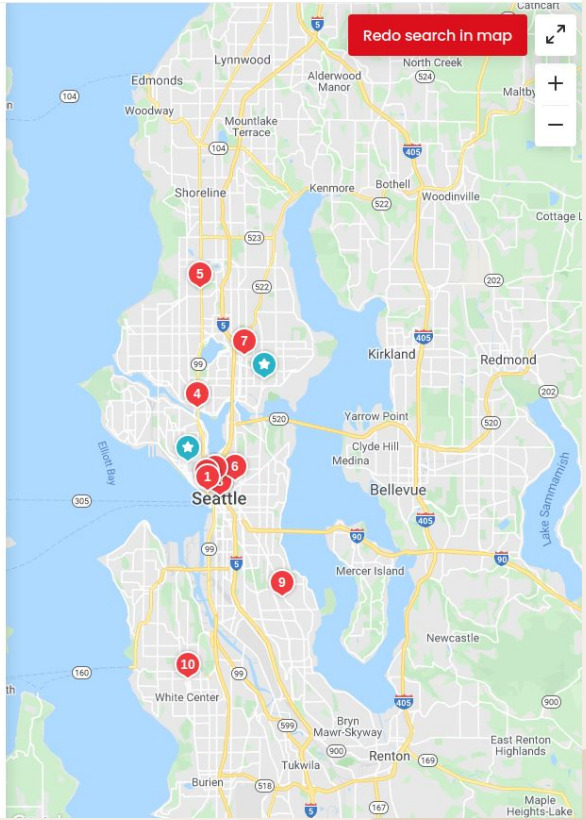
604

Coffee & Tea · Bakeries · $$ • Downtown

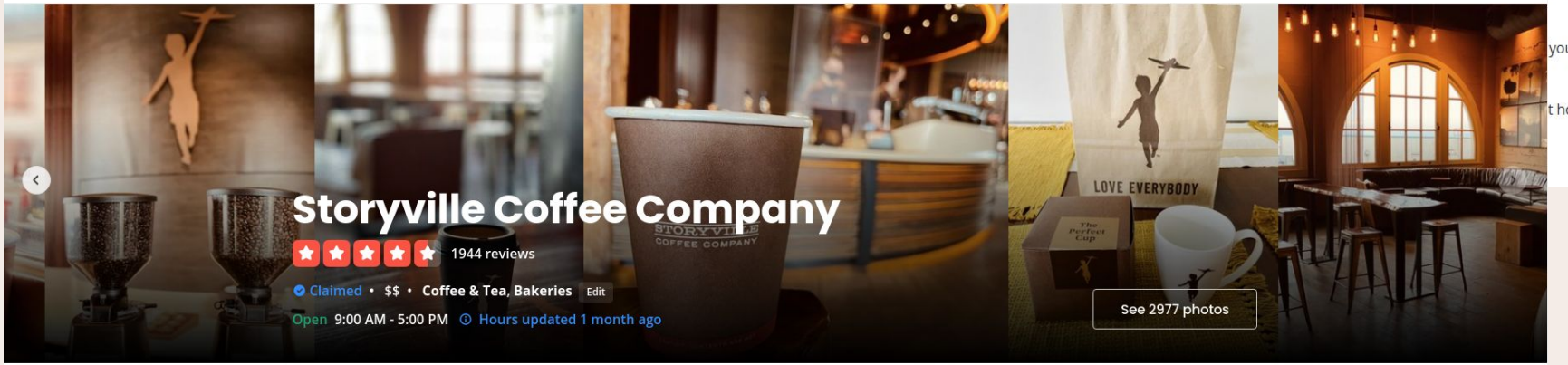
Closed until 7:00 AM tomorrow

" the **coffee** not so much. **Coffee** that is sour is under-extracted, and **coffee** that is bitter" more

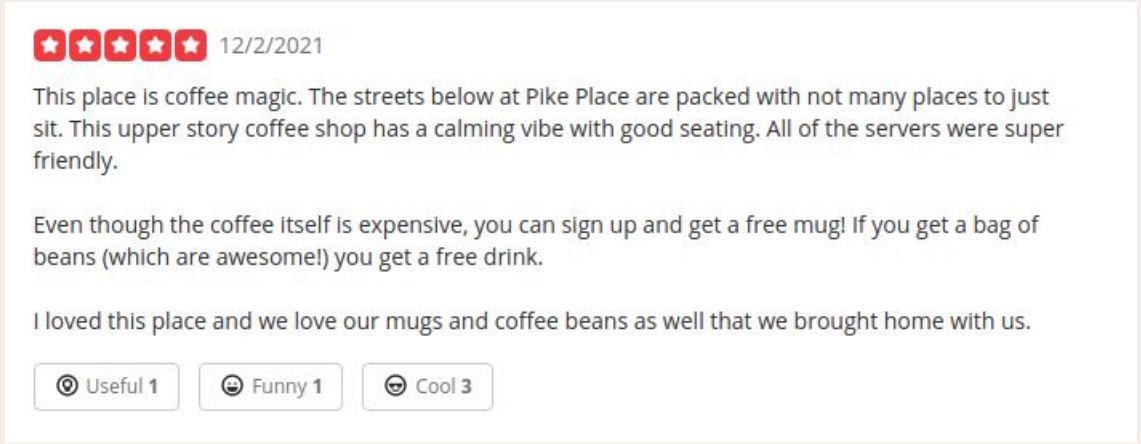
✓ Outdoor dining ✕ Delivery ✓ Takeout



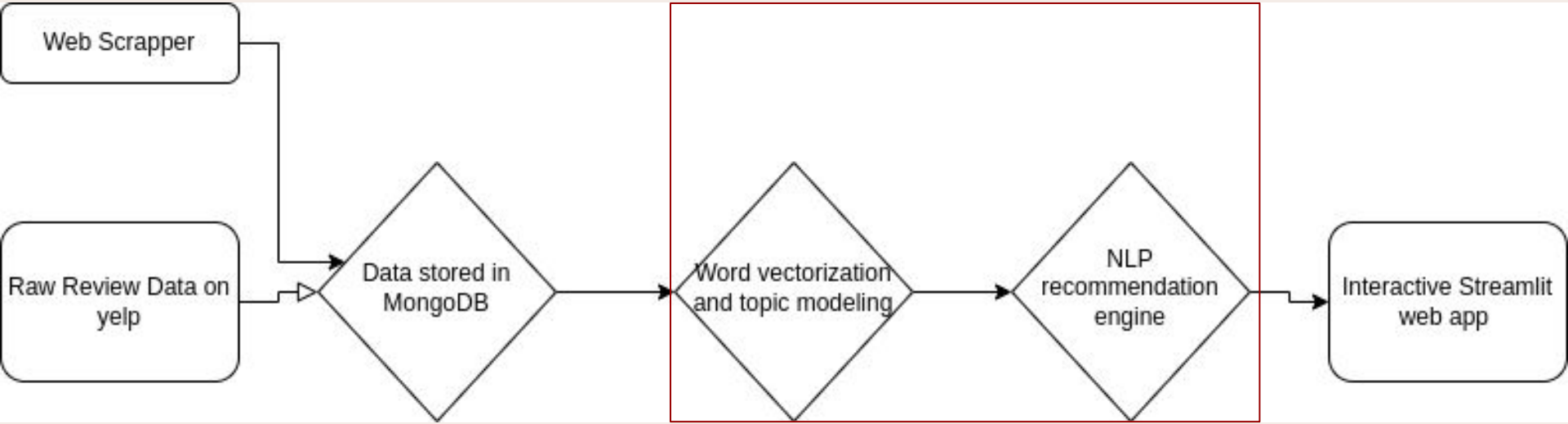
Data


yelp
tacos, cheap dinner, Max's
Seattle, WA
For Businesses
Write a Review
Log In
Sign Up
Restaurants
Home Services
Auto Services
More
Storyville Coffee Company
1944 reviews
Claimed • $$ • Coffee & Tea, Bakeries Edit
Open 9:00 AM - 5:00 PM Hours updated 1 month ago
LOVE EVERYBODY
See 2977 photos
Write a Review
Add Photo
Share
Save
Review Highlights
"It has a great view above Pike Place Public Market and also comfy couches and long wooden tables." in 427 reviews
"Since it was my first visit I got a free mug and every time I see it, it reminds me of such a wonderful trip to Seattle." in 174 reviews
"I ordered one of the best cold brew lattes I've had and snagged a seat at one of the long counter tables." in 36 reviews
http://www.storyville.com
(206) 780-5777
Get Directions
94 Pike St Ste 34 Seattle, WA 98101
Message the Business

Example Data point



Data pipeline



Recommendation Workflow

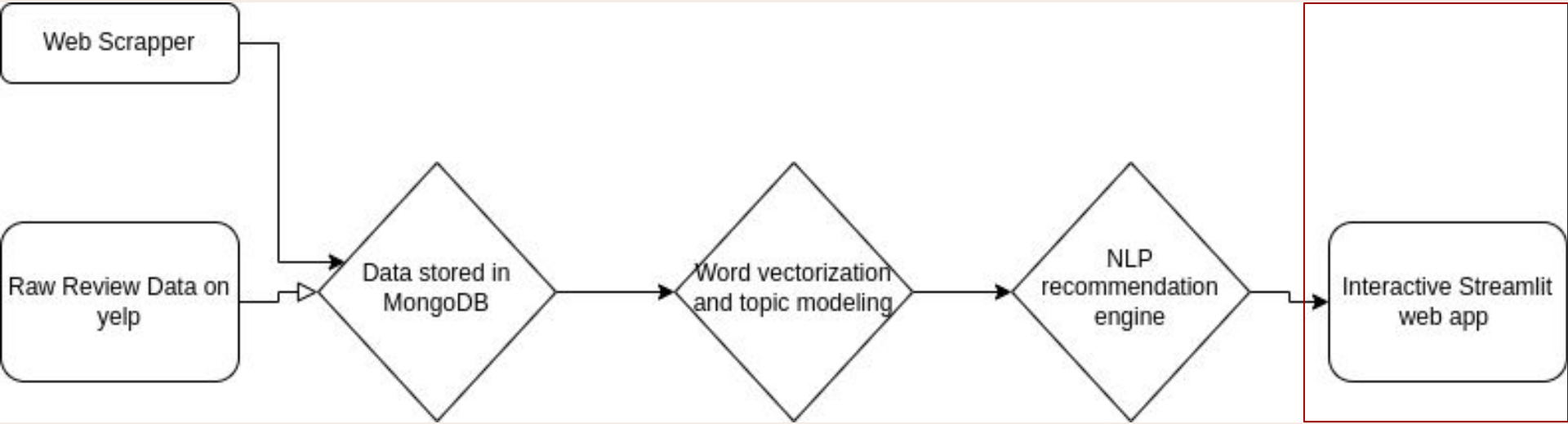
-Tokenization

-Vectorization

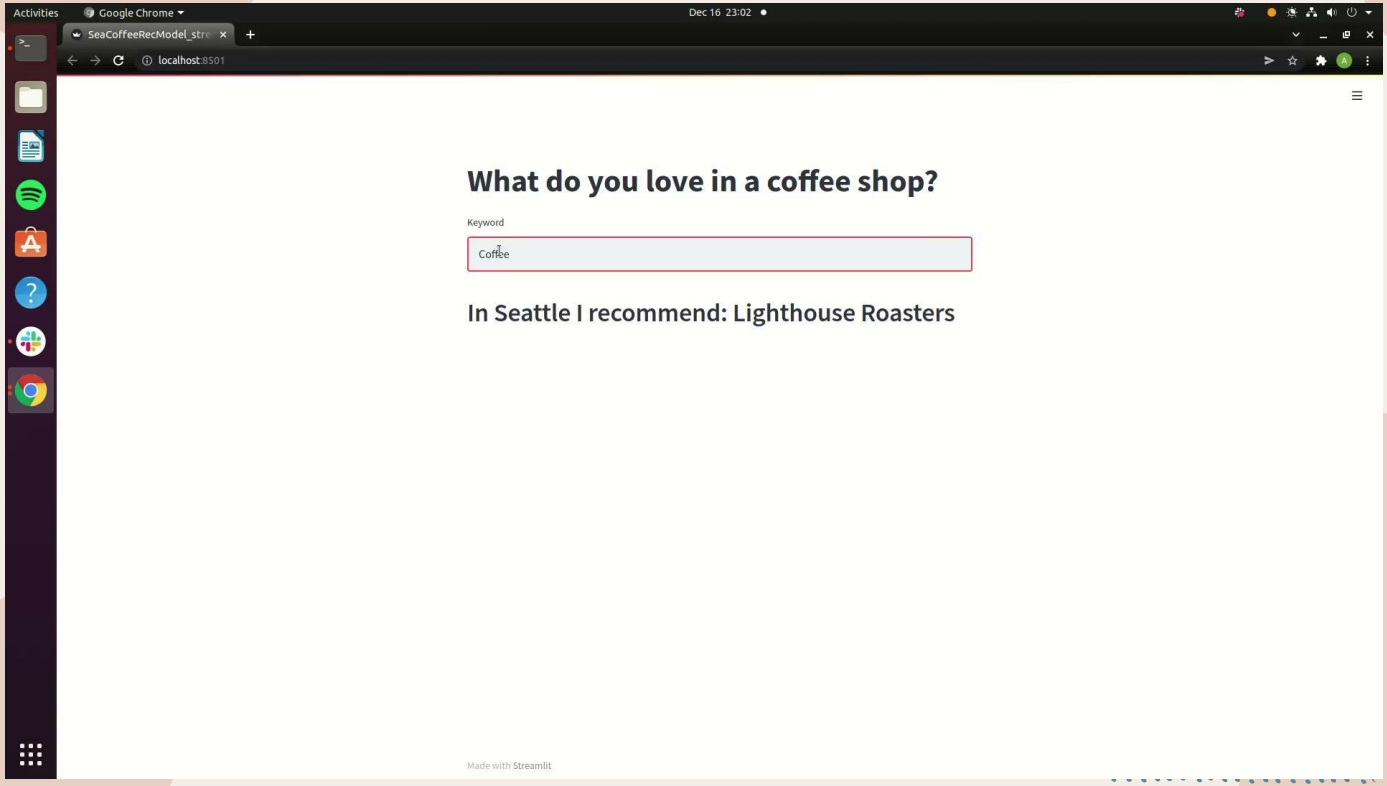
-Topic Modeling

-Recommender

Data pipeline



Recommender in Action



So where should you go?

That depends on what you want in a coffee shop!

Conclusions

- Data contributed to making a recommender unique to the city I live in
- key-words or phrases can make custom coffee shop recommendations

Future Work

1. More sophisticated web app with hyperlinks to recommended shops
2. Aggregate data from other business review sites
3. Live updates

Thank you!

Appendix

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Topic  0
espresso, time, barista, ve, drink, cup, work, bean, come, seattle

Topic  1
latte, art, latte art, cute, waffle, nutella, mocha, moore, shop, come

Topic  2
ube, coffeeholic, drink, dream, coffeeholic dream, vietnamese, sweet, order, try, drizzle

Topic  3
pike, market, pike place, place market, pike place market, view, storyville, floor, pike market, away

Topic  4
brew, cold, cold brew, quaffle, nitro, honey, brew latte, cold brew latte, biscuit, pour

Topic  5
love, friendly, staff, shop, service, amazing, seattle, atmosphere, recommend, favorite

Topic  6
free, cake, chocolate, mug, free mug, chocolate cake, email, slice, sign, mocha

Topic  7
milk, latte, almond, almond milk, matcha, pistachio, croissant, milk latte, cinnamon, taste
```

name	topic_0	topic_1	topic_2	topic_3	topic_4	topic_5	topic_6	topic_7
Anchorhead Coffee	0.021478	0.011447	0.006148	0.003323	0.038475	0.029756	0.006121	0.039415
Coffeeholic House	0.015423	0.007661	0.111339	0.001149	0.002082	0.024691	0.002943	0.009170
Espresso Vivace Roasteria	0.042371	0.011452	0.005088	0.001700	0.002634	0.019173	0.005391	0.010957
Lighthouse Roasters	0.042727	0.007023	0.003370	0.001586	0.004203	0.022793	0.003491	0.005139
Milstead	0.034366	0.009314	0.003101	0.003191	0.010293	0.033714	0.008532	0.010907

This café's been around for quite some time and you can literally feel the love that goes into their coffee. Lighthouse understands the craft. I've gotten their lattes (both iced and hot) and both were amazing with well-rounded espresso. If you can, bring your dog! They have dog biscuits at the ready :)

```
'café s time literally feel love go coffee   lighthouse understand craft   ve get latte   iced hot   amazing round
espresso     bring dog   dog biscuit ready   '
```

Thanks

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