



PRD: Notion Restaurant List

Table of Contents

[Context](#)

[Goal](#)

[Use Cases](#)

[How it works](#)

[User Flow](#)

[Tech stack](#)

[Design Decisions](#)

[Database](#)

[Places Detail Query](#)

[Product Roadmap](#)

Author: [Michelle Chen](#)

Status: *WIP*

Last Updated: April 2020

[Github link](#)

[Demo site](#)

Context

People on the internet are constantly inundated with information from different sources. Our lives are increasingly cross-platform — an instagram account here, a reddit account there, and everything in between. With a large spread of sources, it's hard to consolidate and unify information in one place, which is a **pain point** that is relevant for all internet citizens. Like many others, I have turned to Notion as a reliable way to document and collect information across all these platforms. As a die-hard foodie, I've been using the Notion web clipper to note down restaurants I want to try, but it's hard for me to visualize the location of restaurants through a table or list. Although I could manually add

restaurants to a Google Maps collection and view it that way, it takes way too many clicks to do that. Consistency is achieved through simplicity. To solve this, I created this application that allows users to clip restaurants through Notion and have it automatically be plotted on a Google Map for simple data collection, access, and visualization.

This app can be easily extrapolated to fit other purposes as well. I'm definitely gonna use this when I'm manically planning last-minute trips and vacations.

Goal

The goal of the app is to automate and simplify an otherwise complicated user flow. It bridges the gap between applications such as data sources (Instagram, Reddit, blogs, etc), data collection tools (Notion database), and data visualization tools (Google Maps). It allows users to see their data from different sources in one unified layout.

Use Cases

1. User is able to visualize the location of their saved restaurants
2. User is on the go and wants to easily see what restaurants are near them
3. User's friend/family wants to see personally recommended restaurants

How it works

User Flow

1. User uses the Notion Web Clipper to add a restaurant to the database
 - Entry must not be blank and must have the correct title (ie *"Masa New York"*)
 - Notion database must already be initialized and have these properties (case-sensitive):
 - name, address, lat, lng, place_id, marker_icon
2. When the user visits the app, the backend:
 - Performs a "Places" Search on newly-added restaurants to get information such as address, coordinates, link, place_id, etc
 - Writes the returned data onto Notion database
3. On the web page, the user is prompted to enter a city.

4. After submission, the app retrieves restaurant data from Notion within that given city, does an extra Places detailed query and plots the restaurants on the map if the location is within the current map viewport
 - The Places detailed query returns some information that needs to be dynamic. See note.
5. When the user clicks on a marker, an info window pops up that has
 - Restaurant name, rating, price
 - "Open on Google Maps" link
 - FUTURE: "open now" tag
6. User can zoom in/out and move around the map and markers will automatically update/replot
7. FUTURE: User clicks on the search button to perform a search in a different city

Tech stack

- Python backend with Flask microframework + JS front end
- Forked version of notion-py library + Google Places API + Google Maps JS API
- Hosted on heroku with gunicorn

Design Decisions

Database

I originally wanted to have a postgres db that holds the returned google search data. This basically meant that I would have 2 dbs: a Notion one with clean 'pretty' data, and a postgres one with the response data from the Google Places API (messy and long). I thought it'd be bad design to trash my beautiful Notion db with messy data. But my friend Pezz told me that it's probably even worse design to have 2 dbs with almost identical data. So Pezz wins.

This means your Notion db must have the following properties (case-sensitive):

- name
- lat
- lng
- marker_icon

- address
- place_id

I wanted to write a function that would initialize the database for users with these properties instantiated, but it doesn't seem like the notion-py library can do that right now. Will revisit.

Places Detail Query

The Google Places "detailed" query has to be done per page load rather than stored statically in the Notion db. The returned values return things like a flag if the place is open now, which needs to be dynamic.

Product Roadmap

NRL Tasks

Project	Name	Priority	Type	Status	Notes
NRL	<u>Set up boilerplate</u>	Critical	Backend	Done	abstract old proj code, set up flask boilerplate, virtual env
NRL	<u>Connect to Google Maps/Notion APIs</u>	Critical	Backend	Done	
NRL	<u>Set up deployment pipeline</u>	Critical	Backend	Done	
NRL	<u>Pass Notion data to Google Places Search API</u>	Critical	Backend	Done	

Project	Name	Priority	Type	Status	Notes
NRL	<u>Update Notion db based on Google Search return</u>	Critical	Backend	Done	
NRL	<u>Get data from Notion db and pass to front end</u>	Critical	Feature	Done	
NRL	<u>Plot marker on Google Map</u>	Critical	Feature	Done	
NRL	<u>Pass info to be displayed in marker pop up</u>	High Impact	Feature	Done	
NRL	<u>Add marker info window with data</u>	High Impact	Feature	Done	
NRL	<u>Style infowindow</u>	Medium Impact	Design	Done	
NRL	<u>Make it faster</u>	High Impact	Optimization	Done	
NRL	<u>Allow users to specify a city to search in</u>	High Impact	Feature	Done	
NRL	<u>Set up backend to return only data for given city</u>	High Impact	Feature	Done	
NRL	<u>Only plot markers for given map area</u>	Medium Impact	Optimization	Done	

Project	Name	Priority	Type	Status	Notes
NRL	<u>Make it mobile friendly</u>	Medium Impact	Design	Done	
NRL	<u>Fix location ipbias</u>	Medium Impact	Bug	Done	Workaround: have title include the city ie "Masa NYC"
NRL	<u>Set up URL subdomain for easy access</u>	Nice to have	Backend	Done	
NRL	<u>Add "back to search" button on map</u>	Medium Impact	Feature	Done	
Documentation NRL Scrapbook	<u>Add Google Analytics to all websites</u>	High Impact	Tech Debt	Done	
NRL	<u>Restyle elements</u>	Medium Impact	Design	Done	
NRL	<u>Lint code</u>	Medium Impact	Tech Debt	To Do	
NRL	<u>Redo Search button</u>	Low Impact	Feature	To Do	
NRL	<u>Get info window to close when clicking elsewhere</u>	Medium Impact	Bug	To Do	
NRL	<u>Add current geolocation onto map</u>	High Impact	Feature	Inbox	
NRL	<u>More speed optimizations</u>	Medium Impact	Optimization	Inbox	

Project	Name	Priority	Type	Status	Notes
NRL	<u>Sometimes the properties don't all get saved in Notion</u>	Medium Impact	Bug	Inbox	
NRL	<u>Scrape websites for menu</u>	Nice to have	Feature	Inbox	
NRL	<u>Add tag to see if restaurant is "open now"</u>	Nice to have	Feature	Inbox	
NRL	<u>Update location tag based on city</u>	Nice to have	Feature	Blocked	notion-py library doesn't let you create new tags