

Code, Craft, Community







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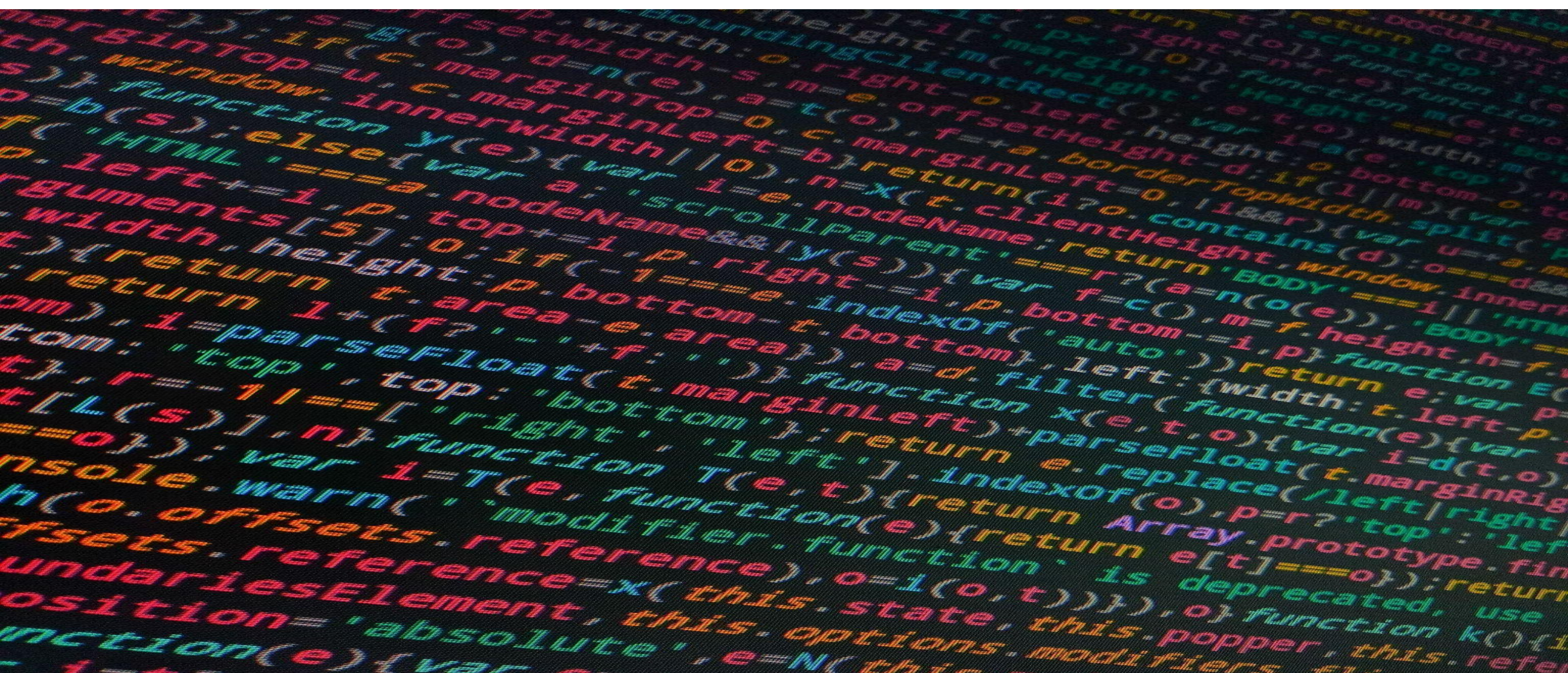




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November Hackathon

Tikkun Farms delivers approximately 150 – 175 meals per week using a team of approximately 40 – 50 volunteer drivers. All deliveries originate from the farm located at 7945 Elizabeth St., Cincinnati, OH 45231, 39.2381772, -84.5459664.

Every week the list of families that receive a meal delivery can change as a family may choose to receive a delivery this week but not the next.

Every week the list of volunteer drivers can change as a volunteer may have availability to participate this week but not the next.

The ideal scenario is to:

1. Upload a formatted spreadsheet of delivery addresses. (Assume spreadsheet is generated outside these requirements)
2. Upload a formatted spreadsheet of delivery drivers. (Assume spreadsheet is generated outside these requirements)
3. Each delivery driver will then be assigned a group of approximately 10 – 12 meal delivery addresses for delivery.
4. Originating from Farm and using their home address as a general direction of travel.
5. This means that their home address would technically be the last address of their travel to optimize the delivery route.
6. The number of delivery addresses may vary based on the number of volunteer drivers.

Challenge 1

The most challenging part of this should be taking a geocoded list of drivers and a geocoded list of deliveries and creating the delivery list for each driver based on the information above. Take each geocoded csv file provided in the root of this repo and create a list/array of the data and use an API or library to determine the next geographically nearest location based on origin of the farm, and the driver's end home address. May also be worth investigating a reverse delivery route, so start with their home address and find nearest delivery address, then move back towards the farm to find the next one.

Challenge 2

We will also need to geocode the addresses. If your team feels overwhelmed with the Challenge 1, create a list/array of the data from the non-geocoded data and get the Latitude and Longitude for the address provided. Bonus points for using the driver-partial-geocoded.csv sample file and only making calls to geocode an address if the latitude and longitude are not already known. No need to actually generate a CSV file, if you are able to take an input of a list/array of addresses and fill in any missing Lat/Long combos there are many tools for each language that can serialize it into a file.

Collaboration

Please clone this repo, branch for either of the challenges, and push your solutions back to the repo so that we may share the results of this hackathon with the developers who will work on the final solution for Tikkun Farms.

APIs and Services that may be explored

- Google Maps/GCP
- AWS Amazon Location API
- Azure Maps
- Mapquest (yes apparently they are still around)

I have provided a link in the repo README file to the documentation each of these services offers. Since I have an Azure account I have also provided a Shared Key Authentication key.

This list is NOT comprehensive and if you have used any other service/library that accomplishes the goals, please feel free to use them and share your solution.

Wifi Password: ComeJoinUs2!



<https://github.com/Ingage-Meetup/2023-11-15-hackathon>

Handy QR Codes



Raffle

A JetBrains license, good for any of their IDEs (IntelliJ, WebStorm, etc.) for one year. It is a “perpetual fallback license”, meaning you can continue to use the version of the IDE that was activated, even after the year has passed and the license is expired.

Winners, talk to Jim Kriz, who will send you a PDF with details to redeem your license.

As developers we are:

- ...deliberately trying to get better
- ...not focused on any particular stack, vendor, or language
- ...better as a group
- ...here to write code, think about code, discuss the craft
- ...dreaming of eating pizza together