I-Min

An assistant who understands you

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In this slides

1. What is I-Min

2. How I-Min works

3. Conclusion and Future work

Have you ever been

HAVING TROUBLE FINDING RESTAURANT

FEELING DIFFICULT TO MAKE DECISION WHILE LOOKING AT APPS LIKE YELP

WAITING A LONG TIME BEFORE SEATED
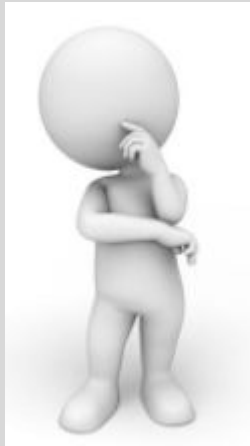
Introducing

Your new best food companion

I-Min

work with

What is I-Min

A simple restaurant recommendation program that is available on Amazon Alexa

Allows you to ask:

Easy setup

Your favorite restaurant included

Just Talk, No hands needed

BASIC FEATURE

Ask Alexa for restaurants

Tell Alexa your preferences

Get result pushed on your phone when you decide.

Ready and go to your meal!

Distance

User Rating

Pricing

Wait time

Multiple Recommendation Dimensions

One recommendation Once!
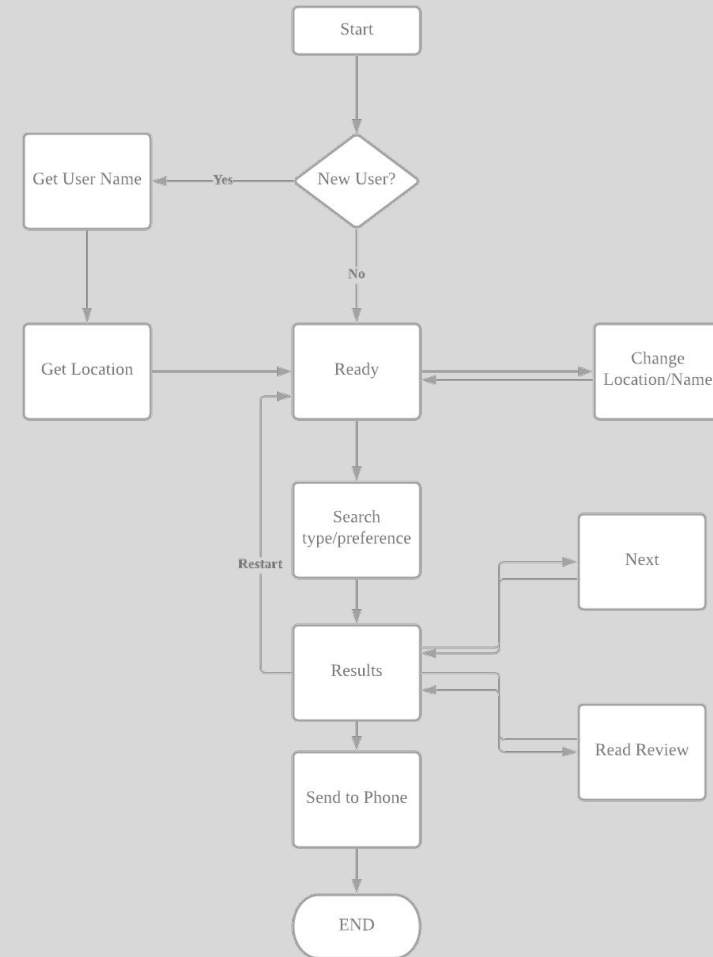
How I-Min works

Initialize the I-Min

- user name

- user location

Ask Alexa Place

- give preference

Alexa return results

User get the result

Data comes from:

We used Google Places API and crawled data from Google Maps

text search

popularity search

Get restaurants in an area based on text string

Get popular times of a restaurant by giving its ID

"Restaurants nearby GWU"

"populartimes.get_id(ID)

Place_ID	Name	Address	Rating	Type	Reviews Number	Location

Telephone	Open_hour	Close_hour	Busy_00 - Busy_23

Database

We used the psycopg2 module in Python to connect to the PostgreSQL database server

Restaurants Database   Popularity Database   User Database

id [PK] character varying (64)	name character varying (1024)	add character varying (1024)	rating numeric	type character varying (64)	user_rating_total numeric	geo point
ChIJF4K_7C3t4kRoBH7F6Rmhfw	Chick-fil-A	House, 2121 H St NW, Washington, DC 20052, United States	4.2	restaurant	308	(38.8999687,-77.0477212)
ChIJFRJOJLG3t4kREEO975QY56U	North Italia	2112 Pennsylvania Avenue NW Ste 102, Washington, DC 20037, United States	4.5	meal_takeaway	515	(38.9014337,-77.04790109999999)
ChIJORGRA7q3t4kRO6sb2H_6F2U	Beefsteak	800 22nd St NW, Washington, DC 20052, United States	4.4	restaurant	373	(38.9000875,-77.04930879999999)
ChIJTVWCErG3t4kRruUKAzYsfrI	CIRCA at Foggy Bottom	2221 I St NW, Washington, DC 20037, United States	4.4	bar	1403	(38.9009723,-77.04983519999999)
ChIJUQaFSLa3t4kRO_q7n0P53jk	The Visiteur	1221 22nd St NW, Washington, DC 20037, United States	4.7	restaurant	7	(38.9061249,-77.0484425)
ChIJV6E7A4u3t4kR_5p2Jx0dvTs	Astoria DC	1521 17th St NW, Washington, DC 20036, United States	4.5	restaurant	221	(38.9105225,-77.03827190000001)
ChIJWaq-G663t4kRWK_-0qyPE7w	&pizza - Hotel Hive	2224 F St NW, Washington, DC 20037, United States	4.6	restaurant	1020	(38.8971548,-77.0496323)
ChIJWw5sWOy3t4kRS_y4nfMHkwY	Flower Child	2112 Pennsylvania Avenue NW, Washington, DC 20037, United States	4.4	restaurant	219	(38.9014337,-77.04790109999999)

Conclusion & Future Work

- We got data from Google Maps, built few databases. and then built an Alexa skill to realize restaurant recommendations.

- In future
  - expand our database
  - add more preferences and conditions to filter the results
  - combine the navigation to the recommended places

Q&A
Thank you