

# **CODE WALKTHROUGH**

**Presented By : Puzzles**

- **Geocoding Function:** Converts addresses to coordinates.
- **Route Calculation:** Retrieves route data from the GraphHopper API.
- **User Input:** How the program takes input and displays results.

# MEET THE GROUP



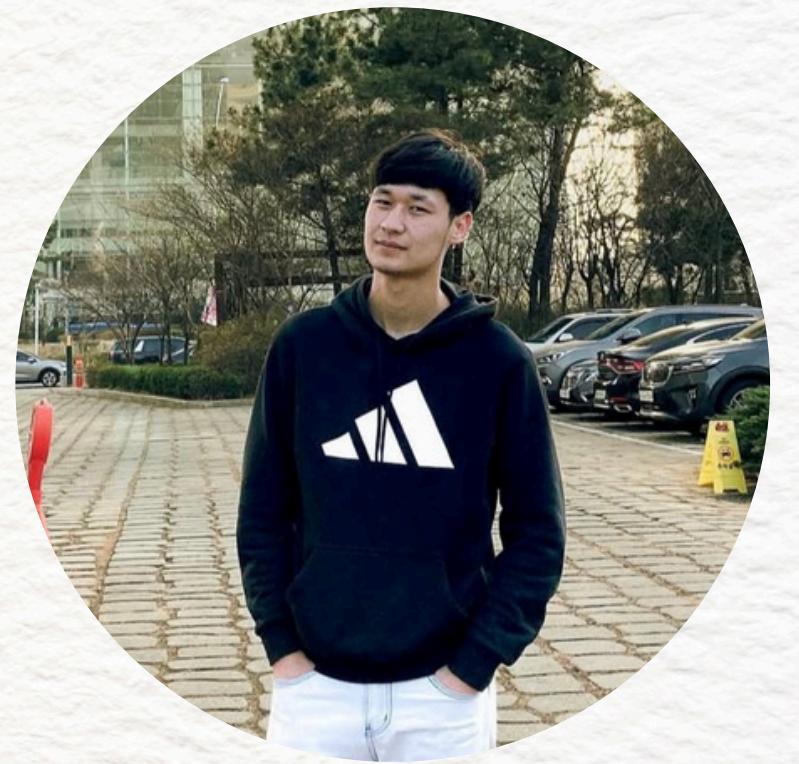
**Adkham**



**Bekmurod**



**Jasurbek**



**Nozimjon**

# SAMPLE OUTPUT

```
Last login: Fri May  9 06:09:21 on ttys000
apple@APPLEs-MacBook-Pro ~ % cd ~/labs/devnet-src/graphhopper

[apple@APPLEs-MacBook-Pro graphhopper % python3 graphhopper_parse-json_7.py

Starting Location: Washington, d.c
Geocoding API URL for Washington, District of Columbia, United States (Location Type: city)
https://graphhopper.com/api/1/geocode?q=Washington%2C+d.c&limit=1&key=bfccea8a-5217-4539-a2e0-679412c9dd86
Destination: baltimore, maryland
Geocoding API URL for Baltimore, Maryland, United States (Location Type: city)
https://graphhopper.com/api/1/geocode?q=baltimore%2Cmaryland&limit=1&key=bfccea8a-5217-4539-a2e0-679412c9dd86
=====
Routing API Status: 200
Routing API URL:
https://graphhopper.com/api/1/route?key=bfccea8a-5217-4539-a2e0-679412c9dd86&point=38.8950368%2C-77.0365427&point=39.2908816%2C-76.610759
=====
Directions from 38.8950368,-77.0365427 to 39.2908816,-76.610759
=====
Distance Traveled: 39.2 miles / 63.1 km
Trip Duration: 00:51:52
=====
Continue (0.07 km / 0.04 miles)
Turn sharp left onto South Drive (0.05 km / 0.03 miles)
Turn left onto West Executive Avenue Northwest (0.01 km / 0.01 miles)
Turn right onto State Place Northwest (0.12 km / 0.08 miles)
Turn right onto 17th Street Northwest (0.68 km / 0.42 miles)
Turn right onto K Street Northwest (1.07 km / 0.67 miles)
Turn left onto 11th Street Northwest (0.14 km / 0.08 miles)
Turn right onto L Street Northwest (0.06 km / 0.03 miles)
Turn slight right onto Massachusetts Avenue Northwest (5.23 km / 3.25 miles)
Continue onto New York Avenue Northeast (2.82 km / 1.75 miles)
Keep left onto Baltimore-Washington Parkway and drive toward Baltimore (51.63 km / 32.07 miles)
Turn right onto West Baltimore Street (0.62 km / 0.38 miles)
Turn left onto North Charles Street (0.18 km / 0.11 miles)
Turn right onto East Lexington Street (0.36 km / 0.22 miles)
Turn right onto Guilford Avenue (0.04 km / 0.03 miles)
Arrive at destination (0.00 km / 0.00 miles)
=====
Starting Location: █
```

# **BENEFITS OF USING GRAPHHOPPER API:**

- Provides accurate and efficient routing solutions.
- Supports multiple transport types (driving, walking, biking).
- Reliable and scalable API with real-time data.

# FUTURE WORK

- Integrate additional features like traffic data.
- Add support for more transport types or transportation modes.
- Improve user interface (GUI) for easier interaction.

# CONTRIBUTIONS:

**ADKHAM**

**12214746**

**TEAM LEADER**

**JASURBEK**

**NOZIMJON**

**BEKMUROD**

- Led the project and coordinated the development process.
- Designed the architecture and implemented the entire codebase.
- Created the presentation and PPT file.

- Participated in early team meetings and contributed ideas during initial planning stages.
- Provided feedback on presentation structure.

- Assisted in brainstorming transport mode features.
- Reviewed output samples and suggested small improvements.

- Supported with basic layout suggestions for the slides.
- Helped in checking the grammar and flow of the final PPT.