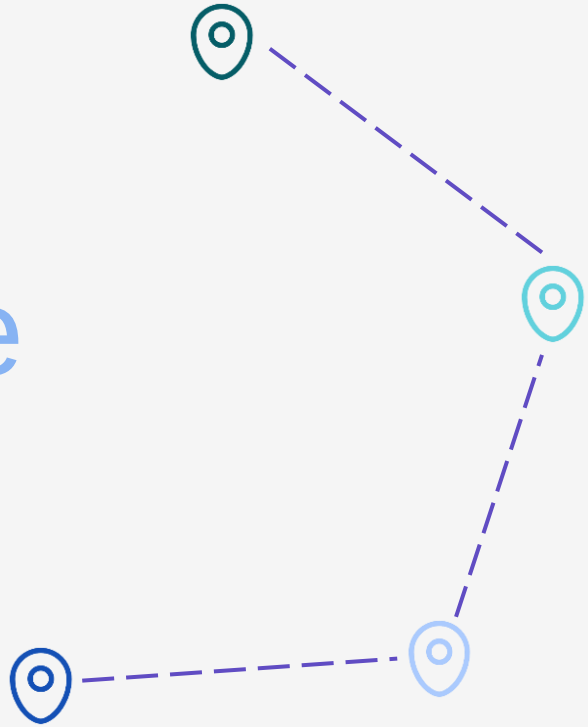
TRANSIT HACK 1-3 NOV 2024

MilliRide



Presented by **Urban Rangers**

During rush hours, heavy traffic overwhelms city infrastructure and slows down urban mobility in Baku

MilliRide transforms urban transport into a faster, affordable, and eco-friendly experience

- Car pooling
- An algorithmic approach for optimal destination clustering

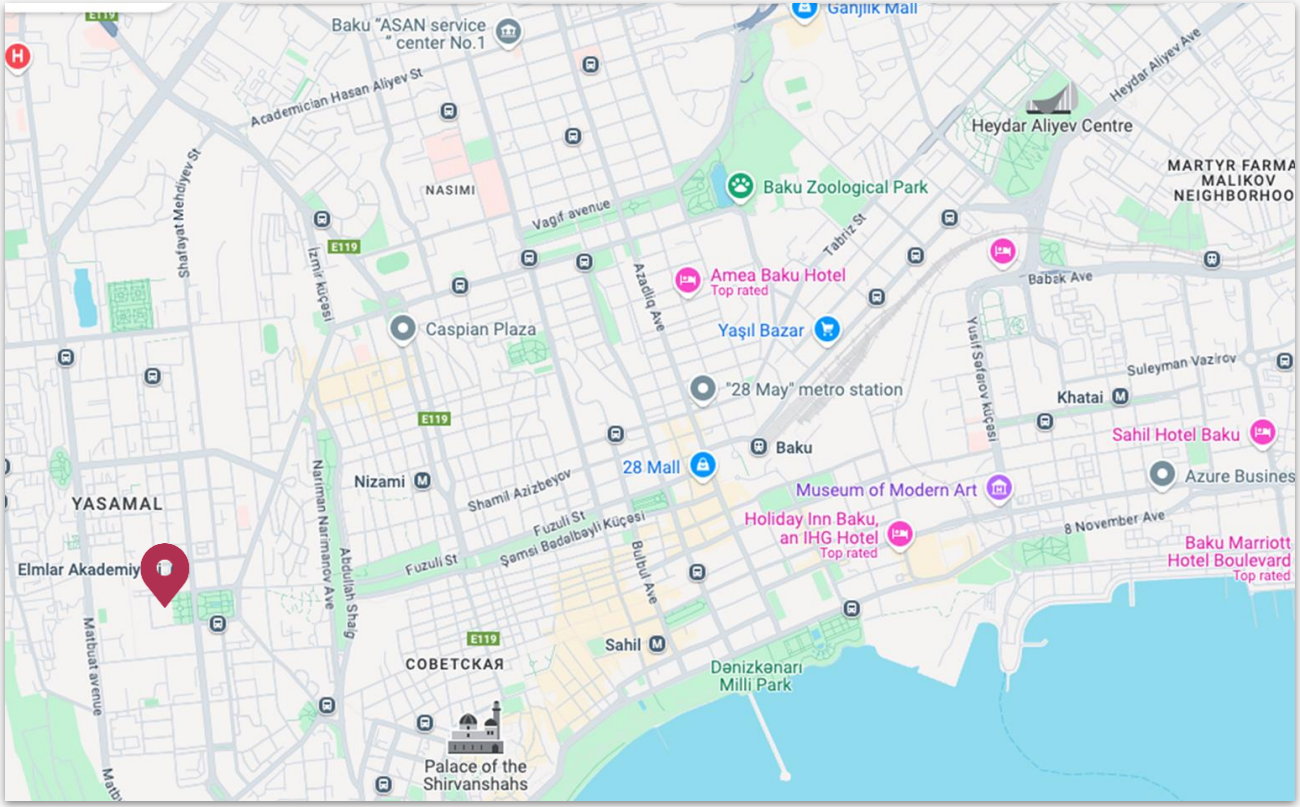
The main question for an effective solution is:

Given a set of passengers with their destinations and drivers,

How can we group passengers for each driver so that:

- ➔ Every passenger reaches their destination promptly ?
- ➔ Each driver follows the most optimal route to serve their group of passengers ?

Graph Theory Approach



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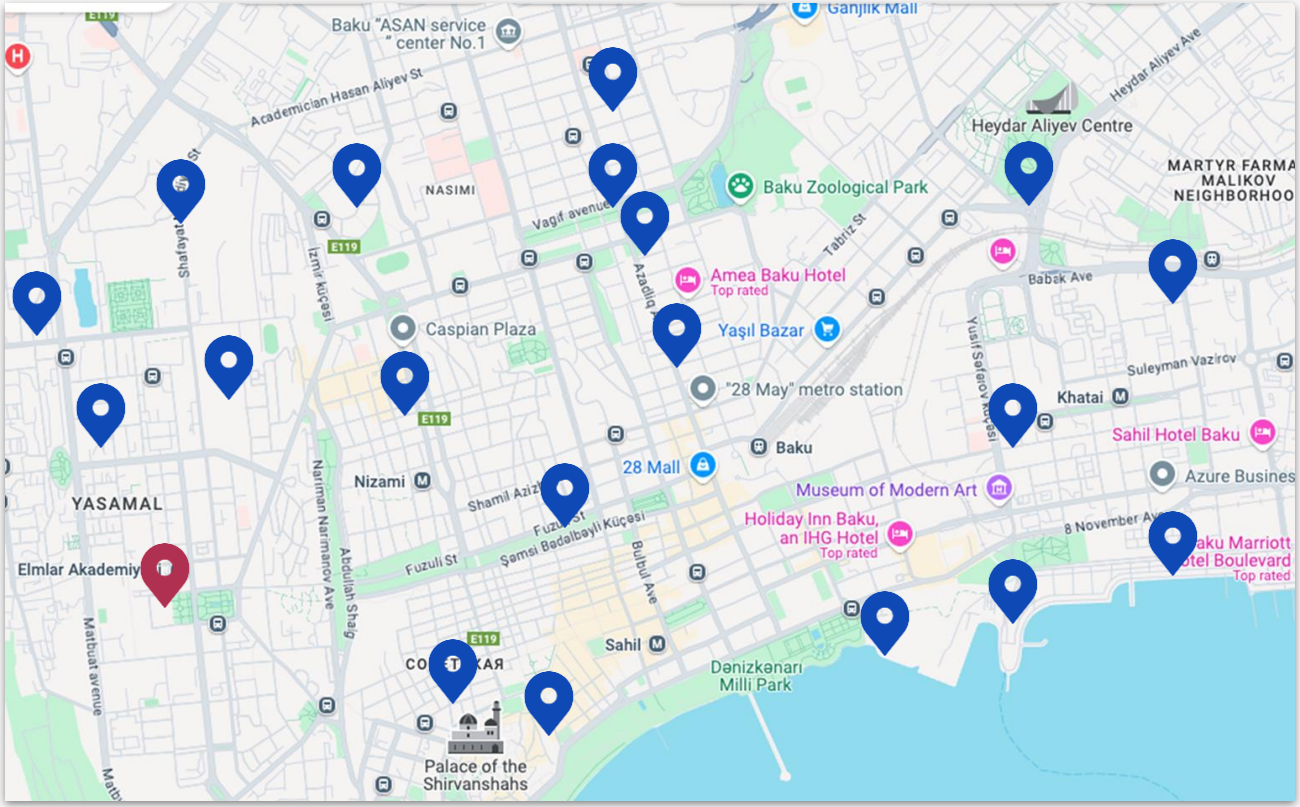

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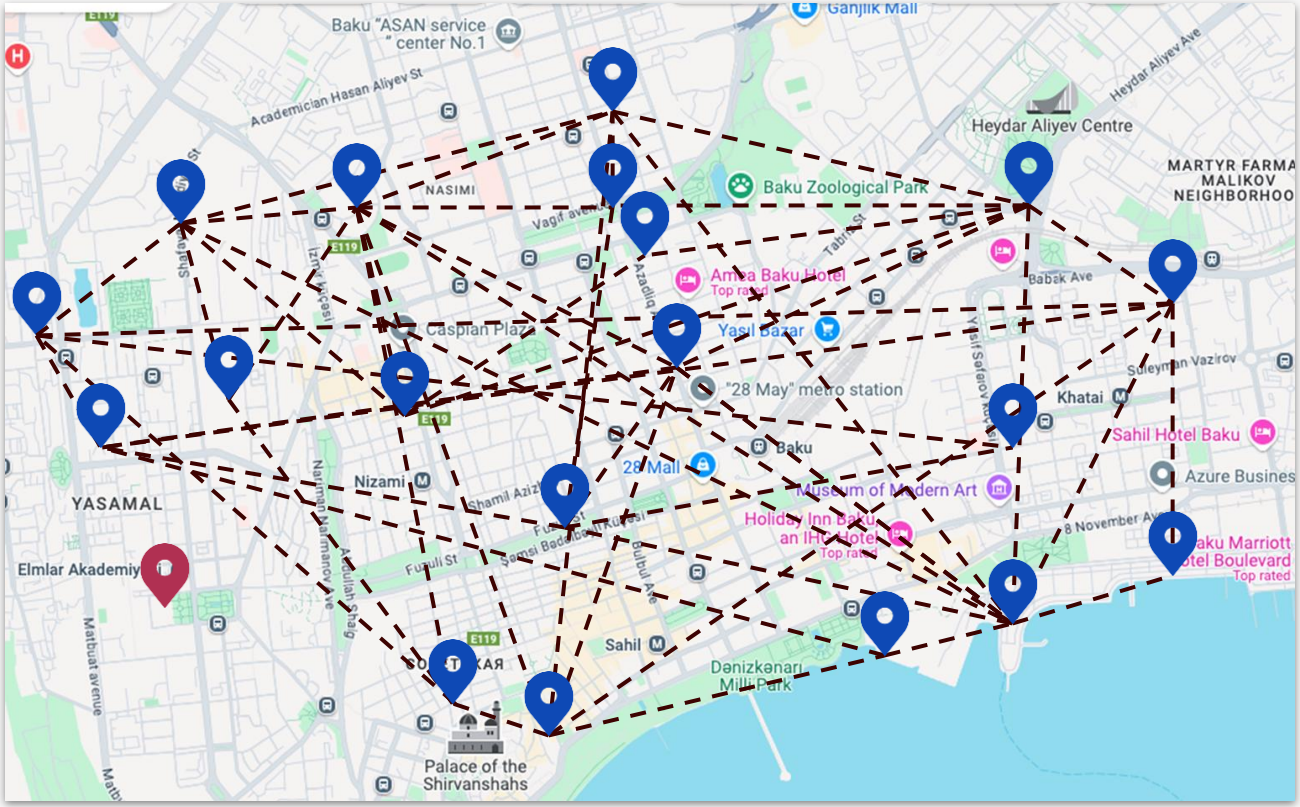

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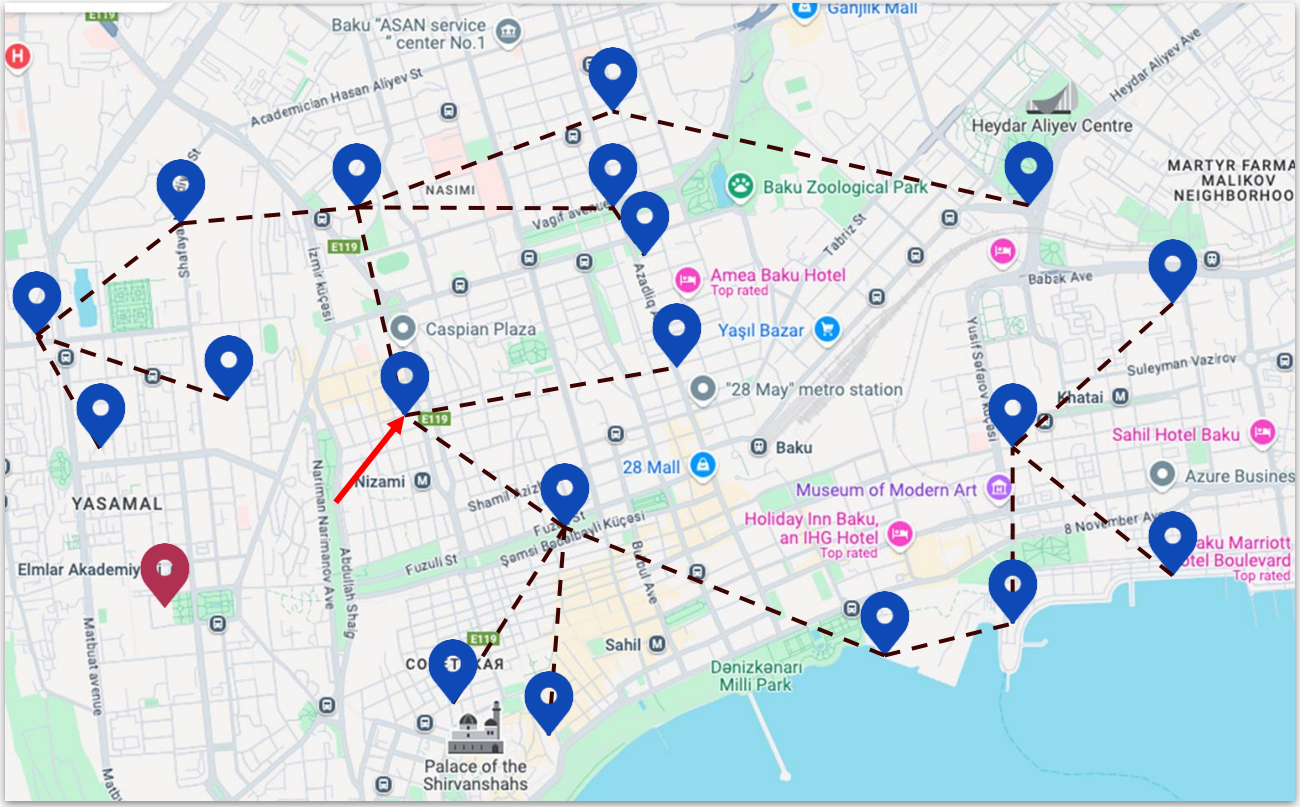

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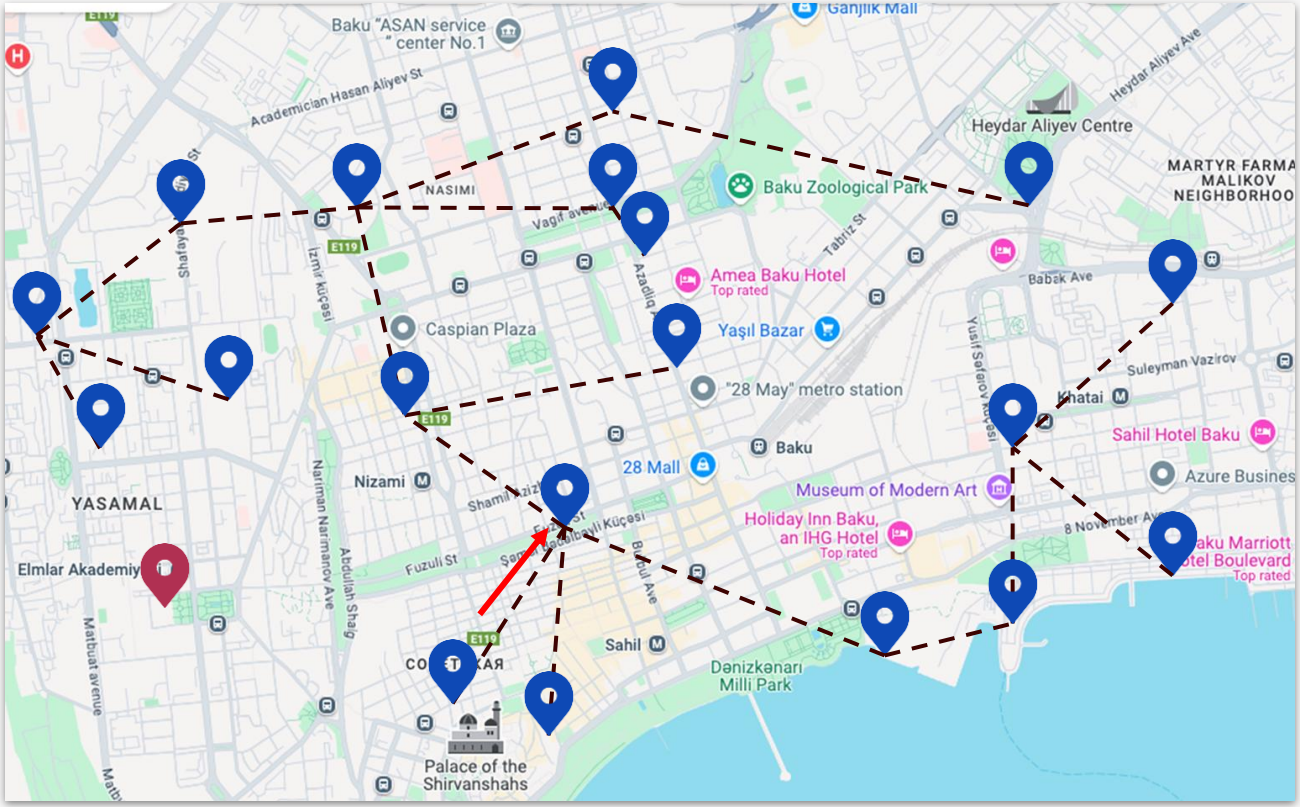

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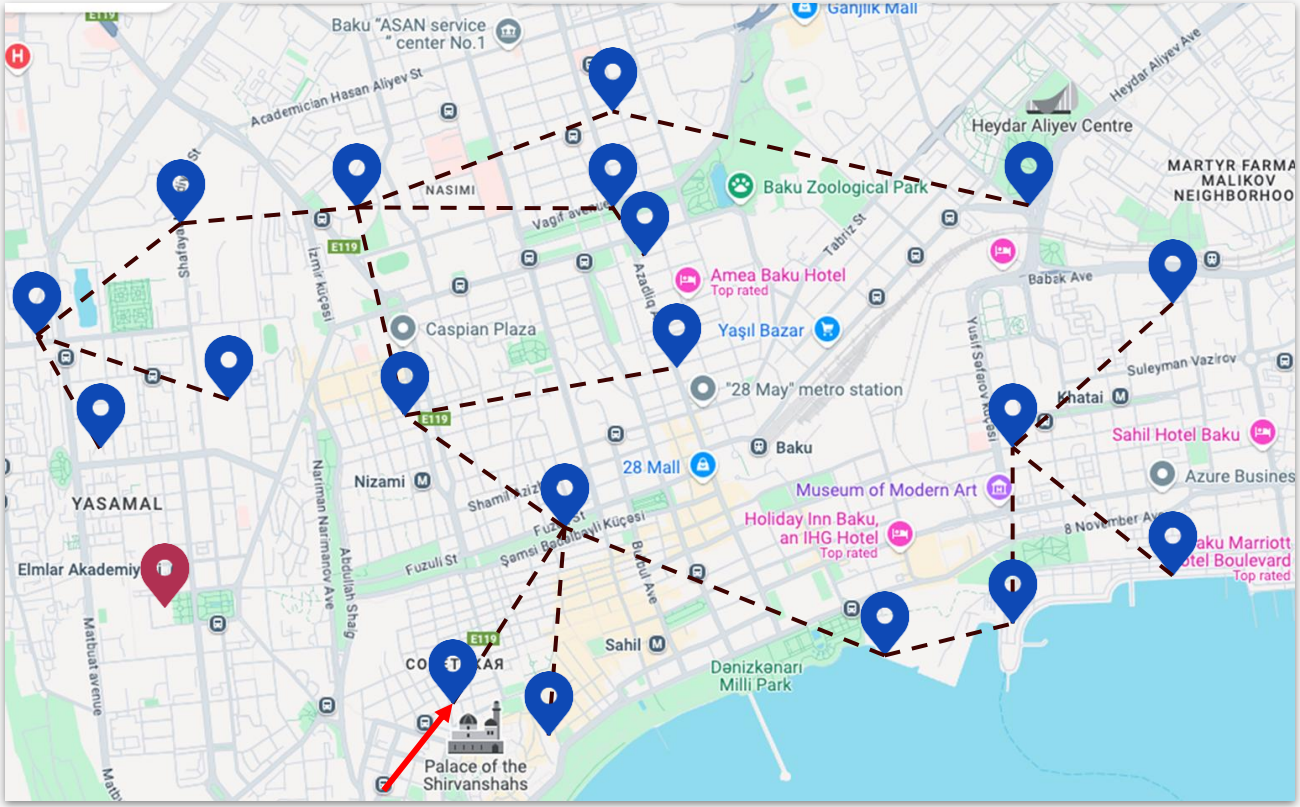

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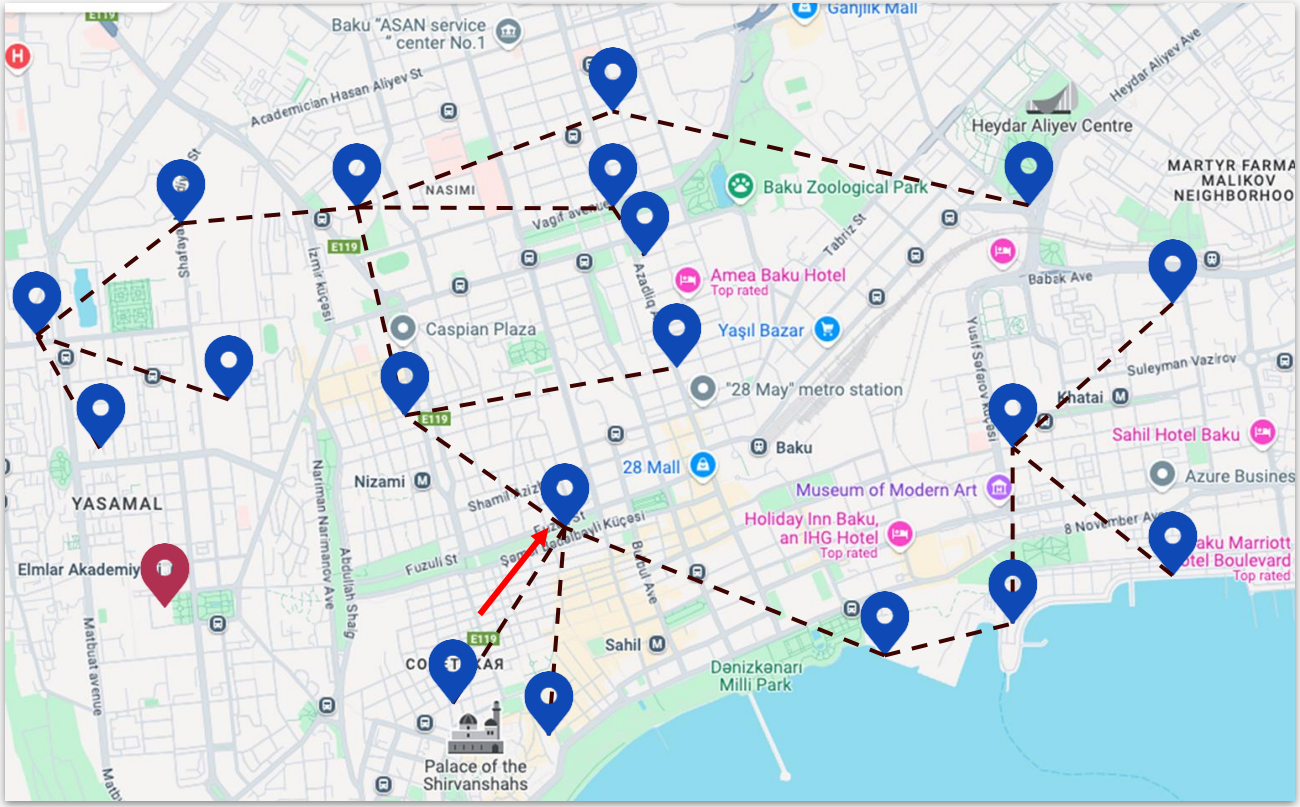

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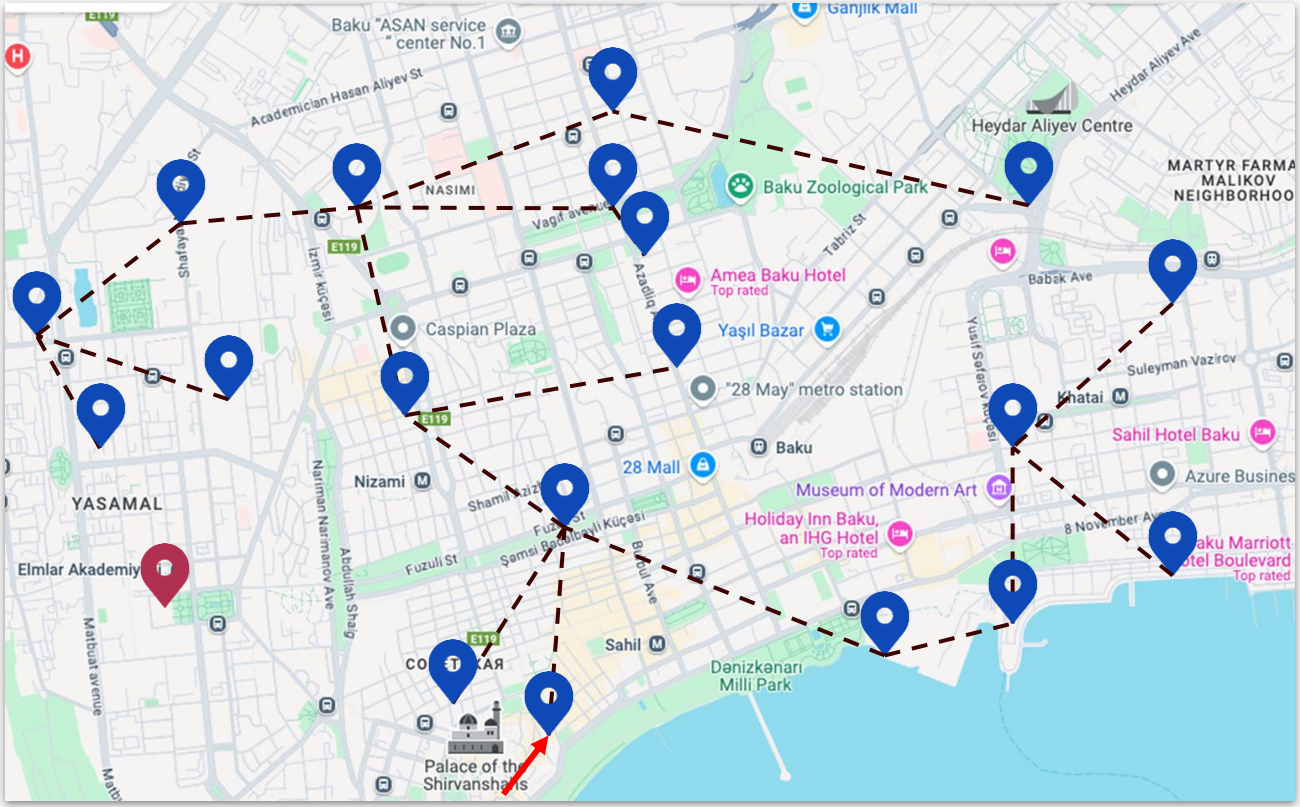

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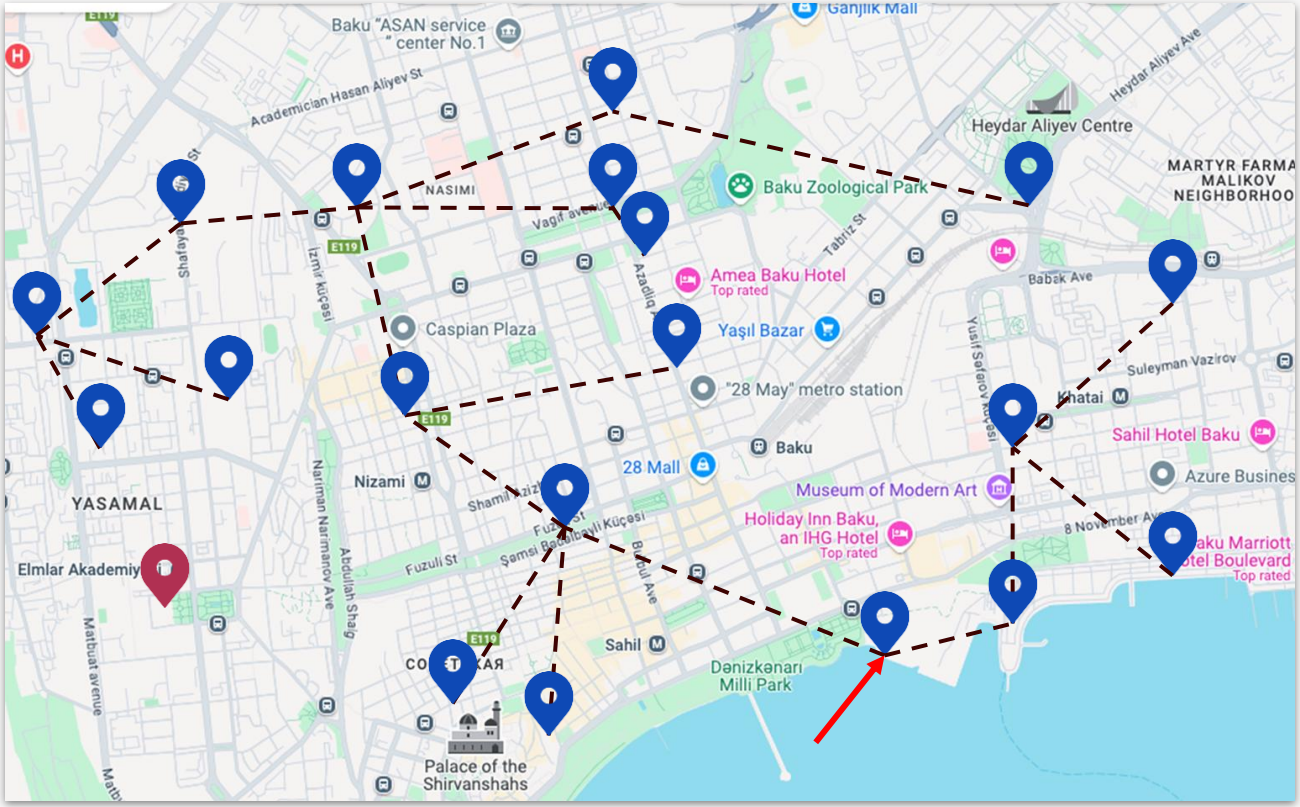

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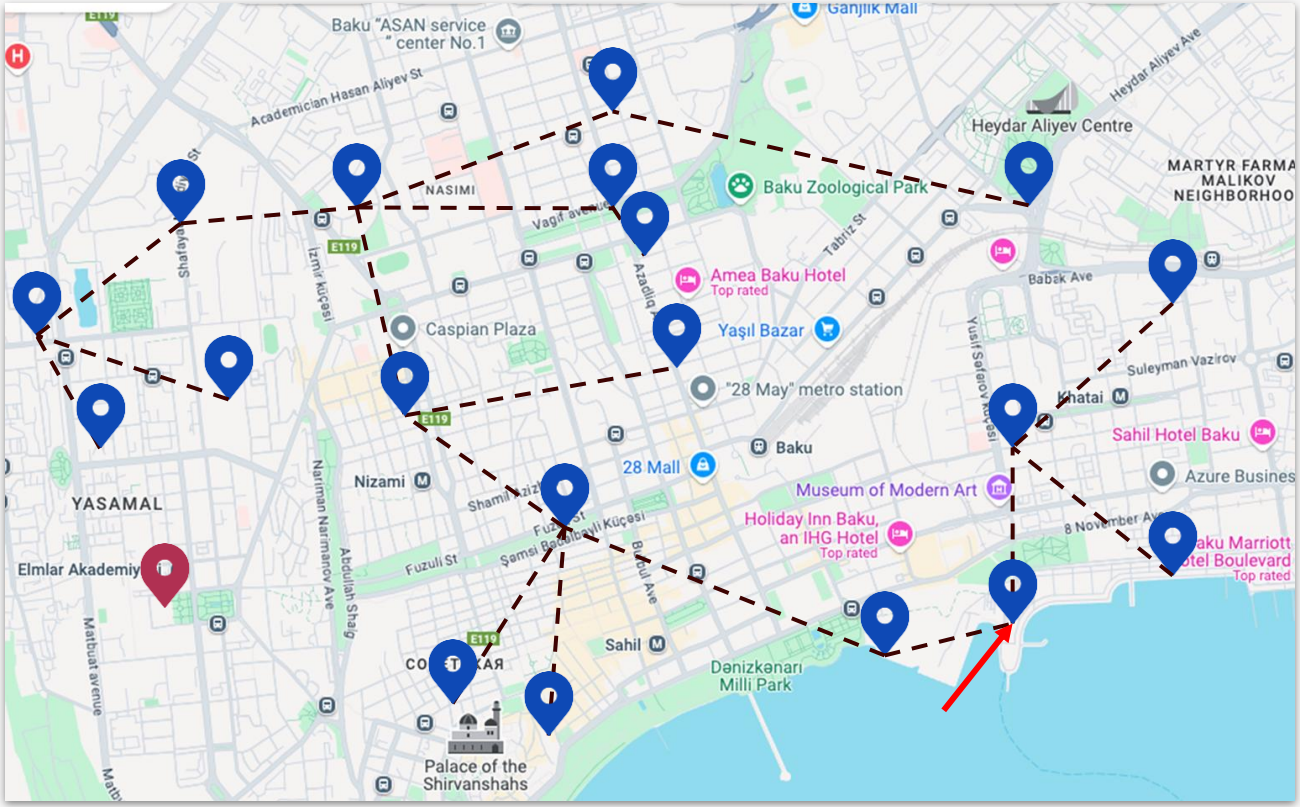

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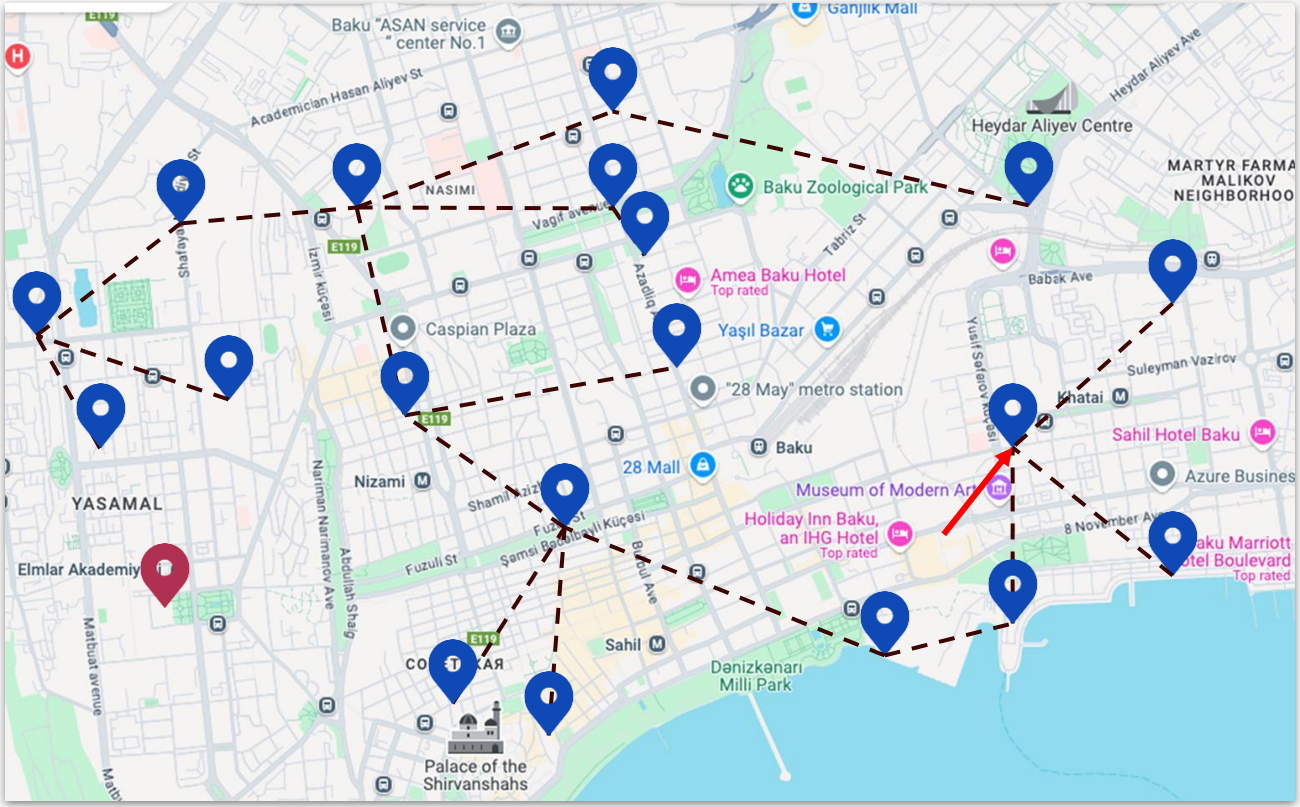

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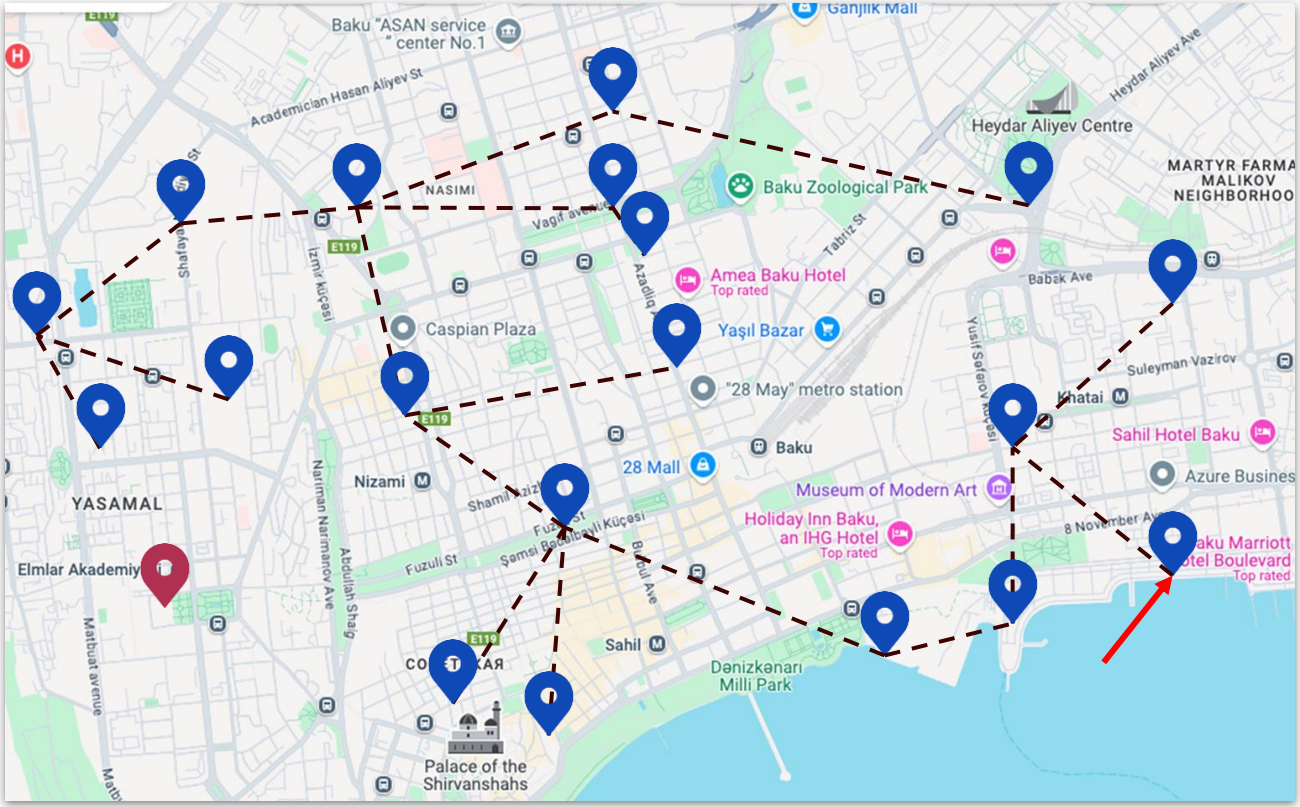

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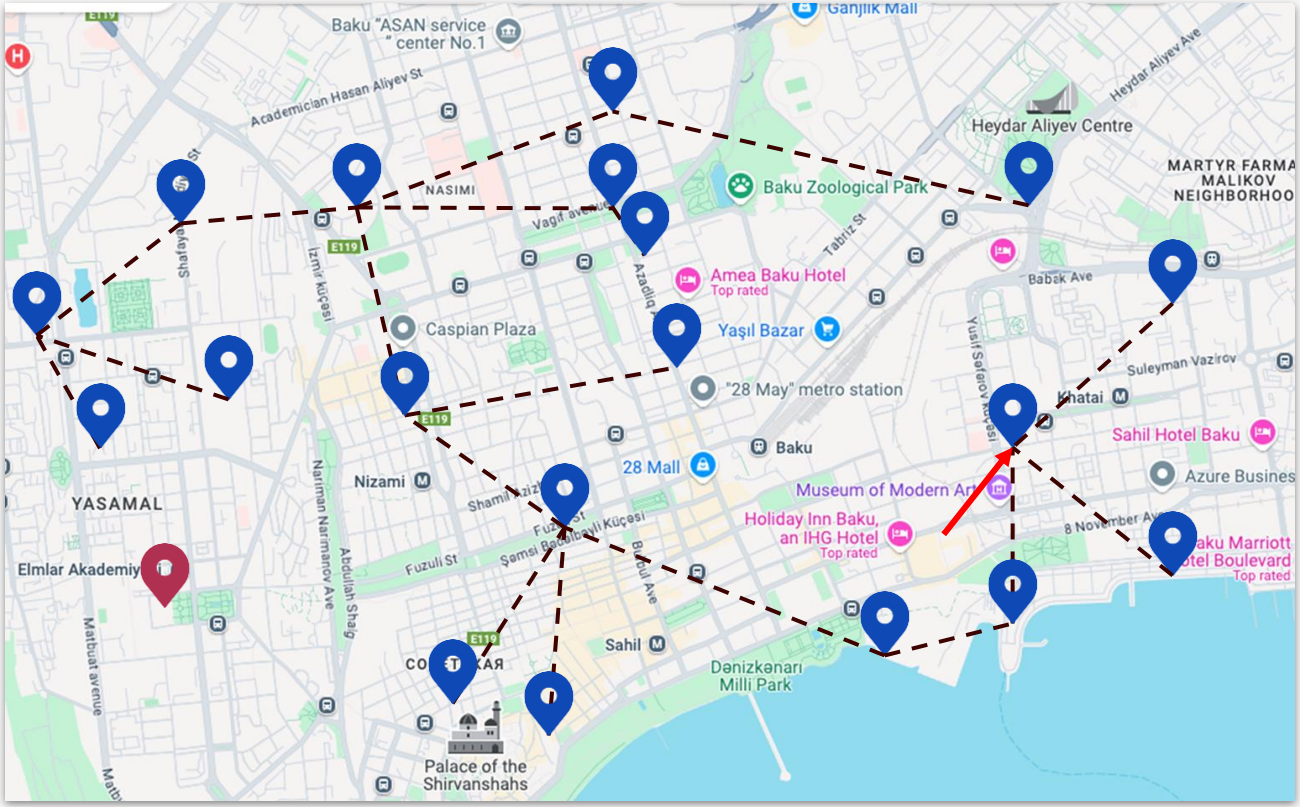

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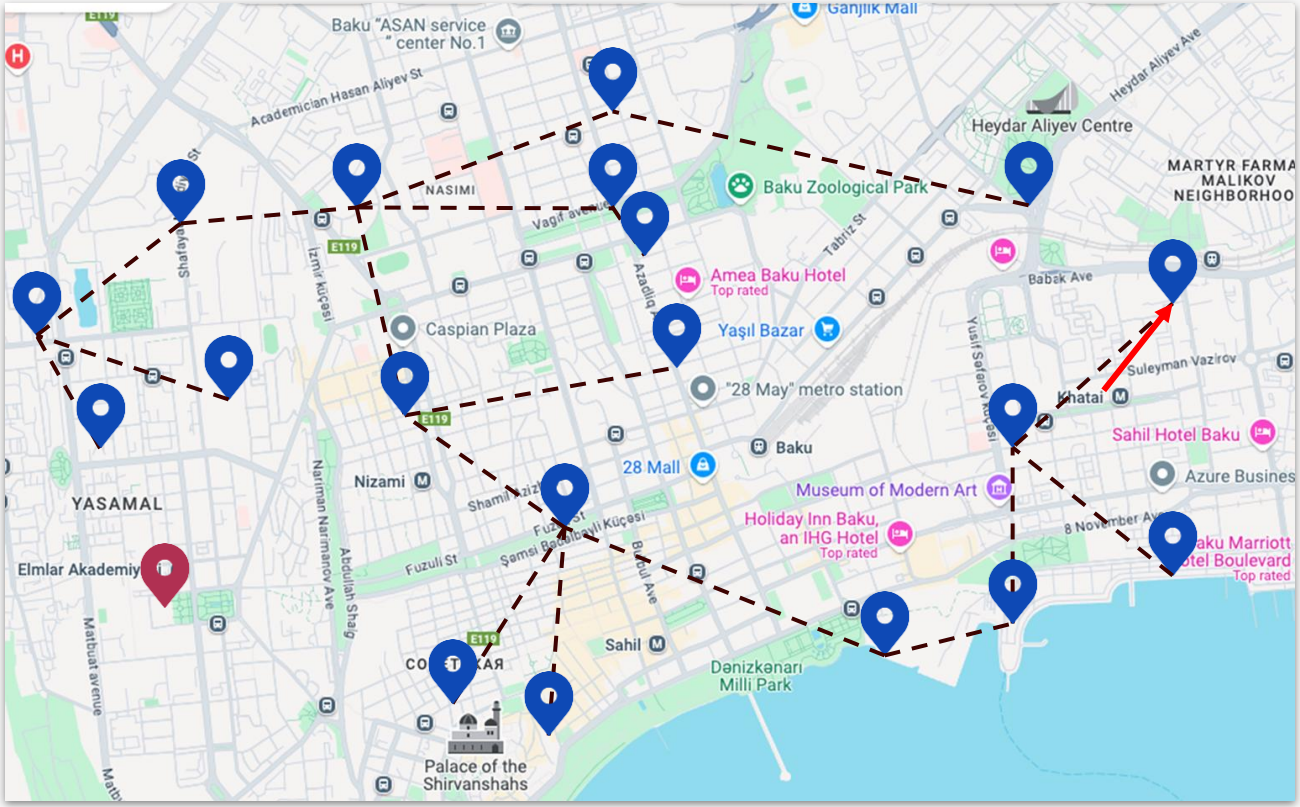

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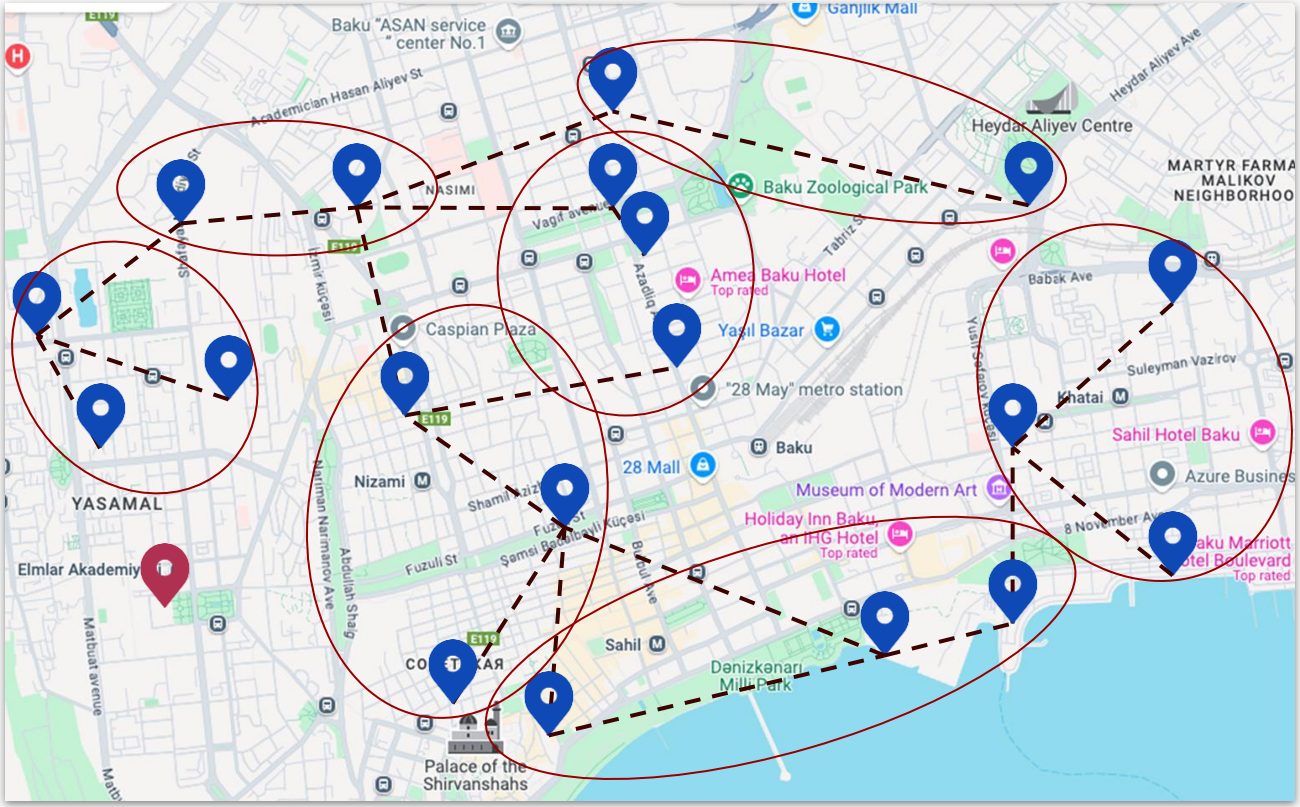

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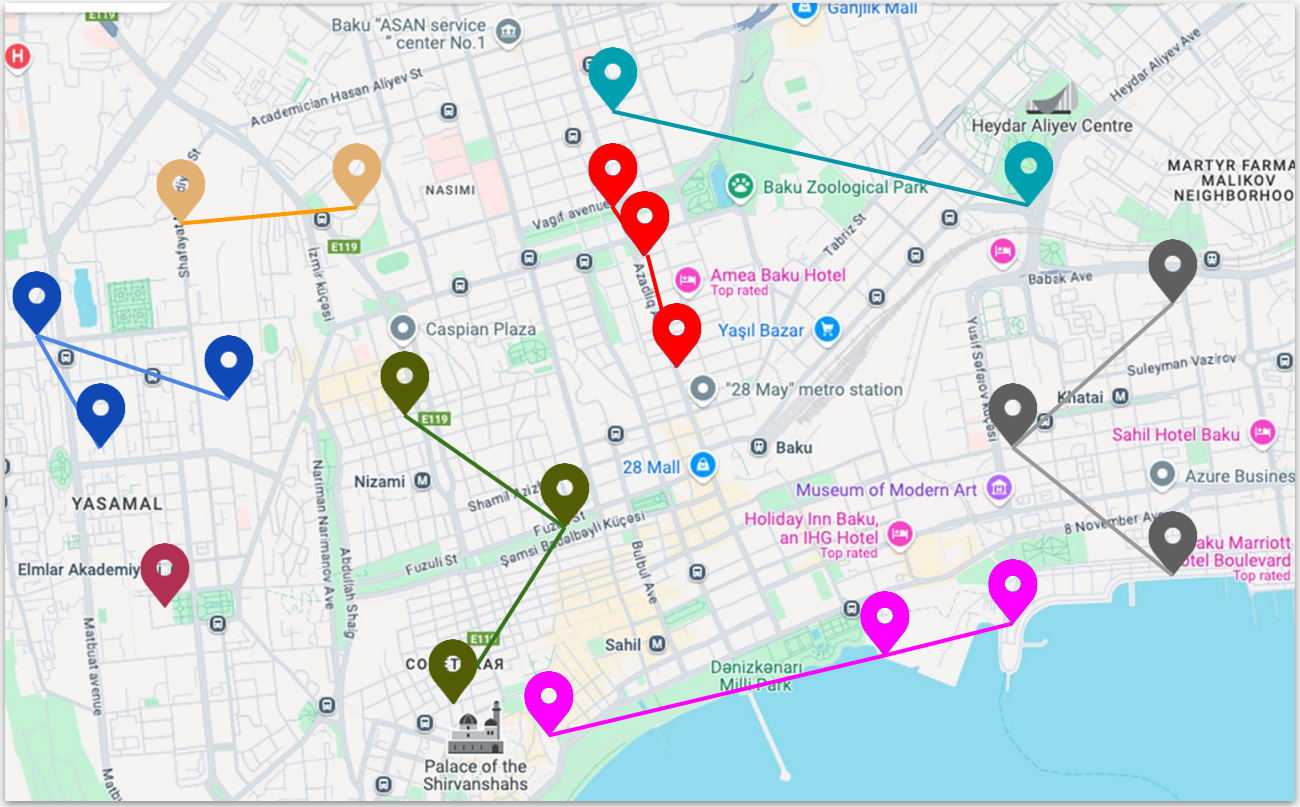

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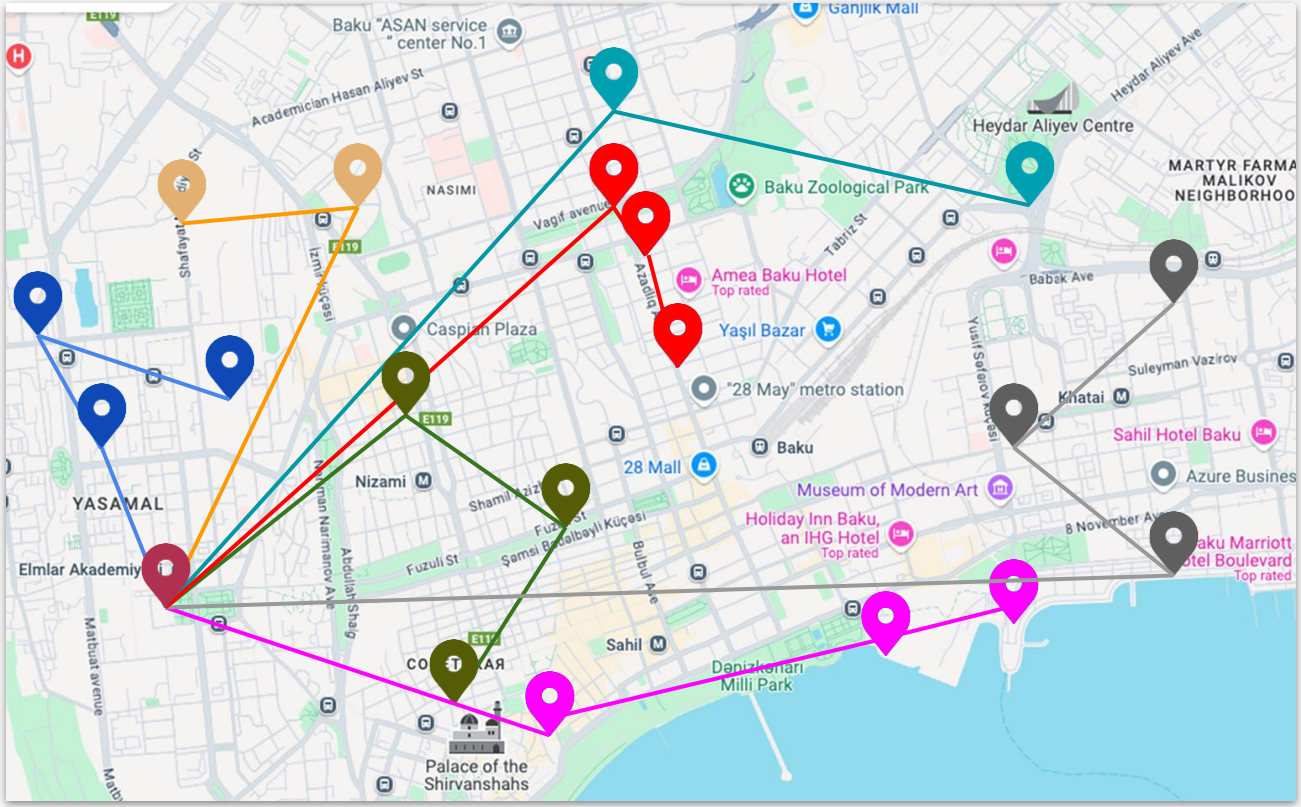
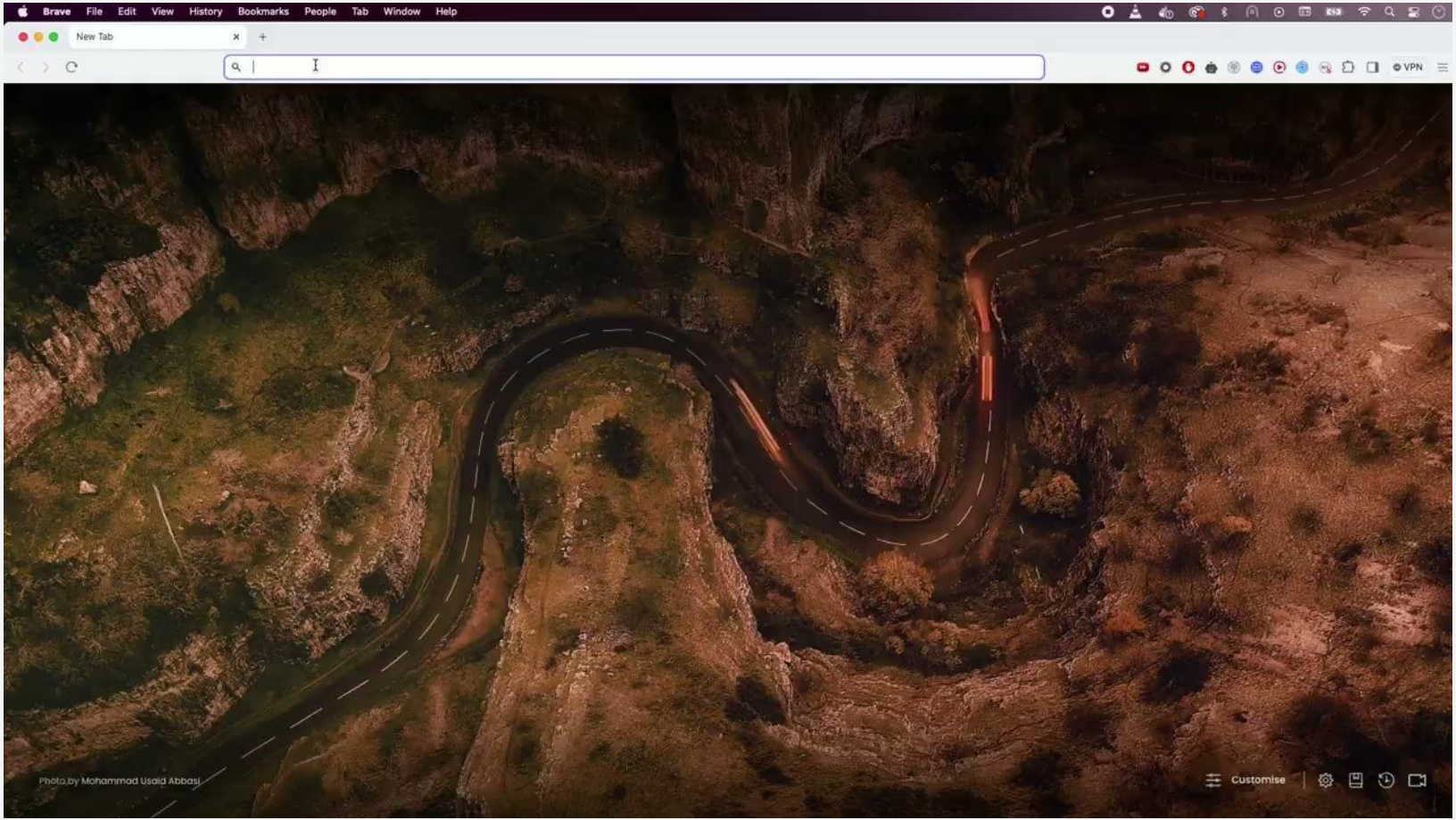


Routes:

- 1 Group
- 2 Group
- 3 Group
- 4 Group
- 5 Group
- 6 Group
- 7 Group

Implementation Demo

Live: https://urbanhack-production.up.railway.app
(For the full experience it is advisable to access from Desktop/Laptop devices)



MilliRide allows passengers enjoy faster, affordable rides home while drivers get more customers per hour

Before	After
- 2-3 customers/hour - restricted earnings potential - higher time and fuel costs	➔ more than 8 customers per hour ➔ higher earnings ➔ optimized routes & consistent demand

Before	After
- 20-30 min waiting - higher fares	➔ shorter waiting time ➔ lower fares than regular

MilliRide transforms transport system in Baku and makes it more…

Efficient

- ➔ reduced traffic flow
- ➔ optimized route usage
- ➔ increased transport capacity

Sustainable

- ➔ reduced fuel consumption
- ➔ reduced emissions from fewer cars
- ➔ extended lifespan of city's transport infrastructure

Accessible

- ➔ lowered transport costs citywide
- ➔ decreased wait times for everyone
- ➔ expanded mobility options in all areas

MilliRide offers scalable solutions for diverse transport use cases across the city

Enables on-demand use case for AYNA

Utilizes minibuses to navigate bus lanes, bypassing traffic congestion

Scalable model adaptable to other cities

Specialized routes can improve access in underserved areas

Meet our Urban Rangers team

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