

Application Mockup Design

10.13.2024

UI:

Intelligent Travel Companion

Plan your dream trip easily with our AI powered trip advisor

Select City

Choose a city

Type of Trip

Select trip type

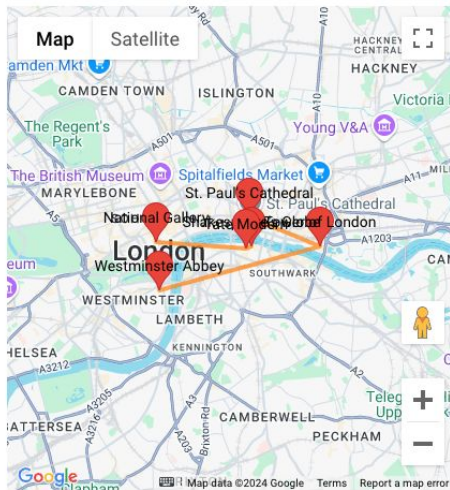
Select Travel Dates

Start date

End date

Plan My Trip

Your Trip Itinerary



Day 1: Architectural

Recommended Start Time:
10:00 AM

Westminster Abbey

Reason: Historic site with rich history

Tips: Arrive early to avoid crowds

Tower of London

Reason: Historic site with rich history

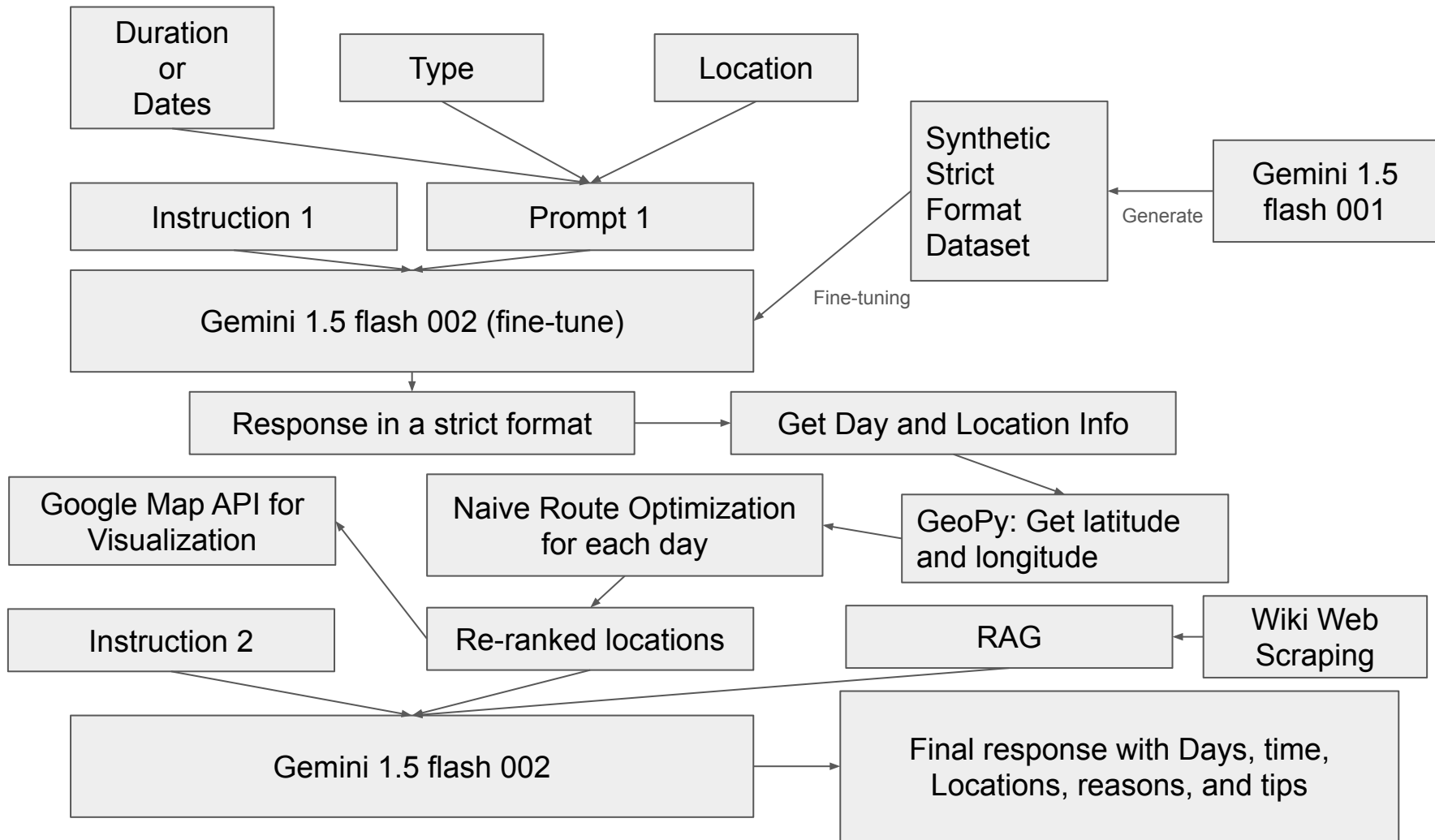
Tips: Arrive early to avoid crowds

St. Paul's Cathedral

Reason: Historic site with rich history

Tips: Arrive early to avoid crowds

Back to Home



GeoPy: Unlimited API Call

```
from geopy.geocoders import Nominatim
```

[1] ✓ 0.1s Python

```
geolocator = Nominatim(user_agent="route_opt")
location = geolocator.geocode("175 5th Avenue NYC")
print(location.address)
print((location.latitude, location.longitude))
print(location.raw)
```

[4] ✓ 0.6s Python

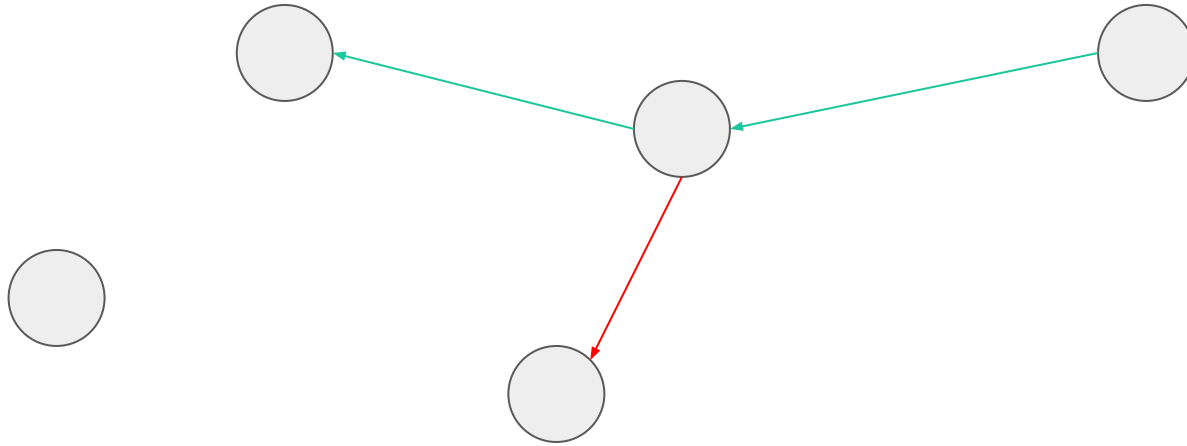
... 175, 5th Avenue, Manhattan Community Board 5, Manhattan, New York County, City of New York, New York, 10035, United States (40.7410978, -73.9897246)
{'place_id': 15402806, 'licence': 'Data © OpenStreetMap contributors, ODbL 1.0. <http://osm.org/copyright>', 'osm_type': 'way', 'osm_id': 15402806, 'boundingbox': [40.7410978, 40.7410978, -73.9897246, -73.9897246], 'display_name': '175, 5th Avenue, Manhattan Community Board 5, Manhattan, New York County, City of New York, New York, 10035, United States', 'address': {'house_number': '175', 'road': '5th Avenue', 'neighbourhood': 'Manhattan Community Board 5', 'city': 'Manhattan', 'county': 'New York County', 'state': 'New York', 'postcode': '10035', 'country': 'United States'}, 'extratags': {'addr:housenumber': '175', 'addr:street': '5th Avenue', 'addr:city': 'Manhattan', 'addr:county': 'New York County', 'addr:state': 'New York', 'addr:postcode': '10035', 'addr:country': 'United States', 'place': 'way', 'type': 'way', 'importance': 0.6, 'source': 'OpenStreetMap contributors', 'source:attribution': 'OpenStreetMap contributors', 'source:copyright': 'OpenStreetMap contributors, ODbL 1.0. <http://osm.org/copyright>'}}

```
location = geolocator.geocode("conant hall harvard")
print(location.address)
print((location.latitude, location.longitude))
print(location.raw)
```

[7] ✓ 0.4s Python

... Conant Hall, 36, Oxford Street, Baldwin, Cambridge, Middlesex County, Massachusetts, 02318, United States (42.3794867, -71.11626237164894)
{'place_id': 17838947, 'licence': 'Data © OpenStreetMap contributors, ODbL 1.0. <http://osm.org/copyright>', 'osm_type': 'way', 'osm_id': 17838947, 'boundingbox': [42.3794867, 42.3794867, -71.11626237164894, -71.11626237164894], 'display_name': 'Conant Hall, 36, Oxford Street, Baldwin, Cambridge, Middlesex County, Massachusetts, 02318, United States', 'address': {'house_number': '36', 'road': 'Oxford Street', 'neighbourhood': 'Baldwin', 'city': 'Cambridge', 'county': 'Middlesex County', 'state': 'Massachusetts', 'postcode': '02318', 'country': 'United States'}, 'extratags': {'addr:housenumber': '36', 'addr:street': 'Oxford Street', 'addr:city': 'Cambridge', 'addr:county': 'Middlesex County', 'addr:state': 'Massachusetts', 'addr:postcode': '02318', 'addr:country': 'United States', 'place': 'way', 'type': 'way', 'importance': 0.6, 'source': 'OpenStreetMap contributors', 'source:attribution': 'OpenStreetMap contributors', 'source:copyright': 'OpenStreetMap contributors, ODbL 1.0. <http://osm.org/copyright>'}}

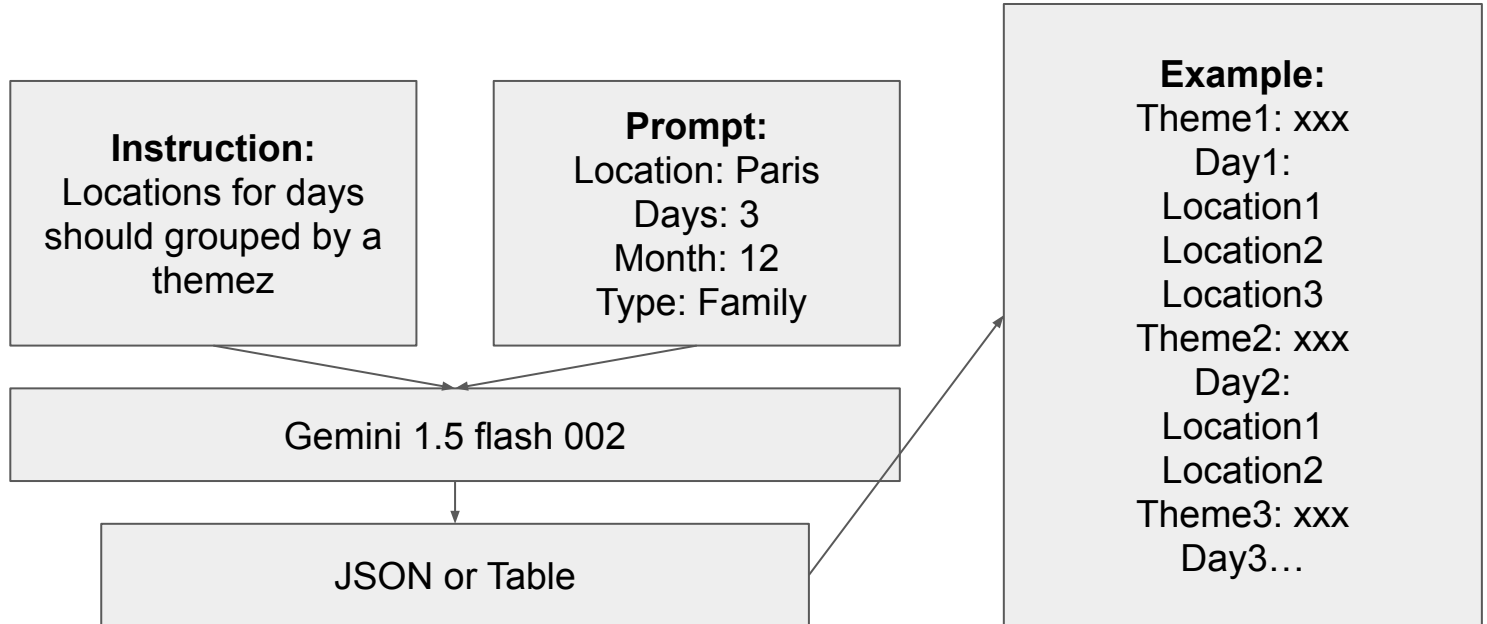
Native Route Optimization



- Randomly select the base location
- Find the shortest next location

Instruction 1

Challenge: limit the LLM response in certain format so that we could extract location names



Instruction 2

