

# SRI LANKA





**HOW  
BEAUTIFUL ?**





travel  
**EXPERIENCE**  
in Sri Lanka





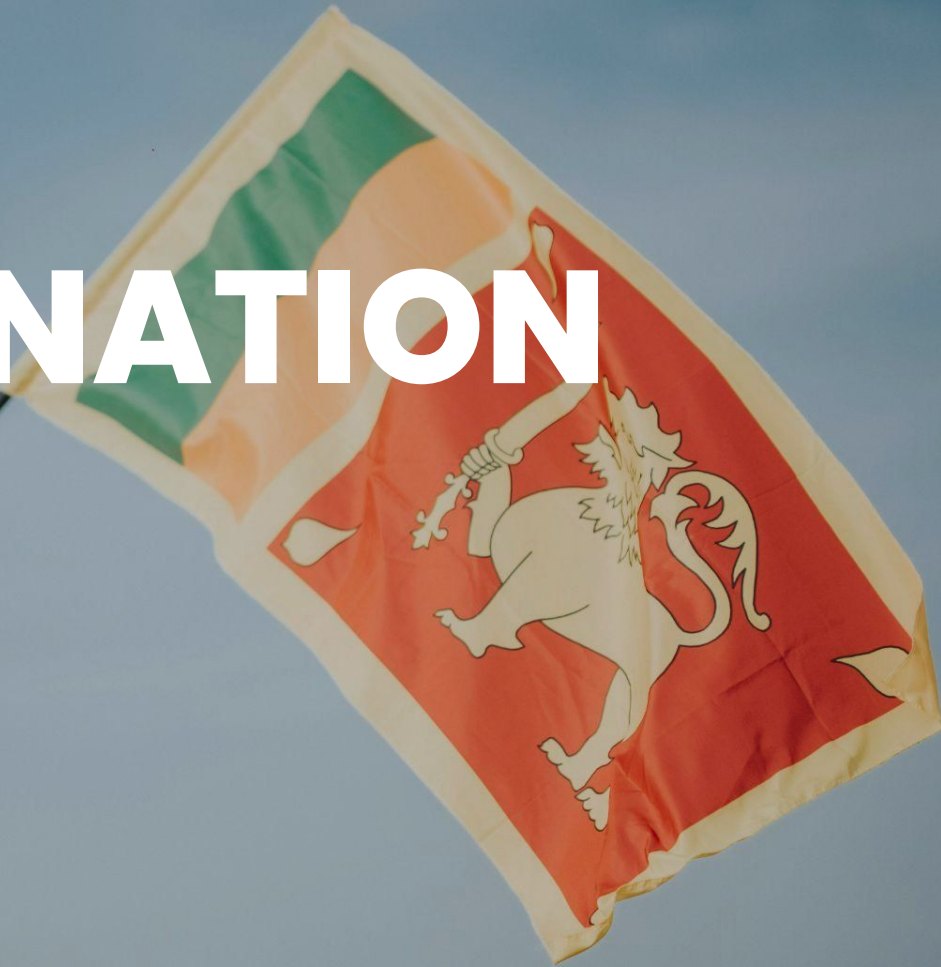
# IN THE RECENT PAST





**NOW AS**

**RAISING NATION**





**BUT NEED**

**TECHNICAL SOLUTION**

**TO IMPROVE TOURISM INDUSTRY**

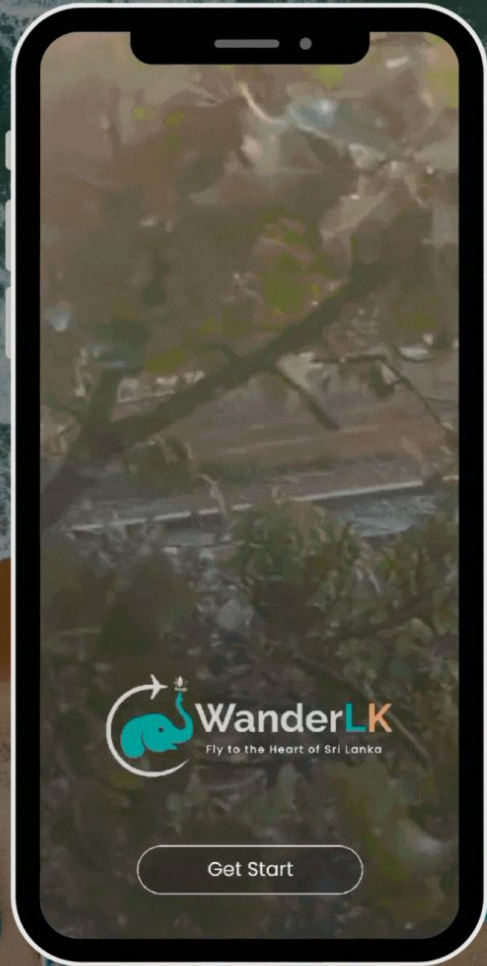




# WANDERLK

Powered by CodeRecon

Discover Sri Lanka effortlessly with WanderLK. Plan your trip, find hidden gems, and immerse yourself in the island's culture and beauty. From accommodations to ancient places, WanderLK has everything you need at your fingertips.

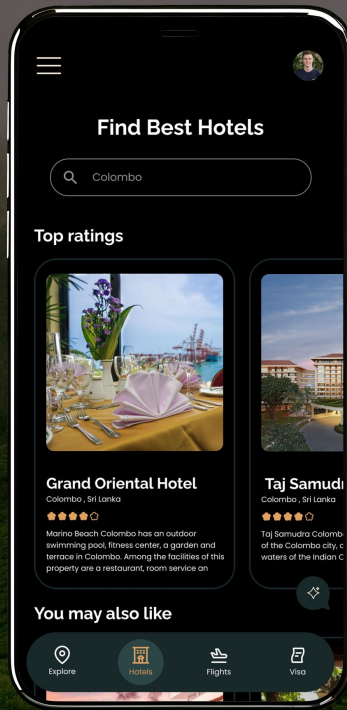




# FEATURES



Explore Sri Lanka

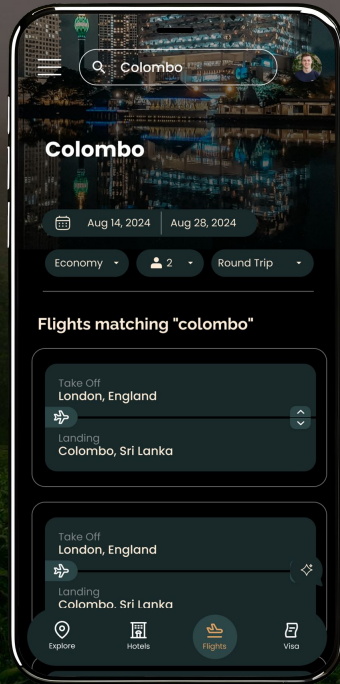


Explore Hotels

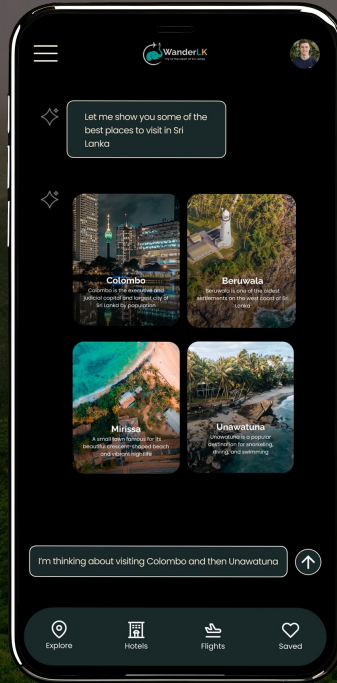


Personalized  
Recommendations

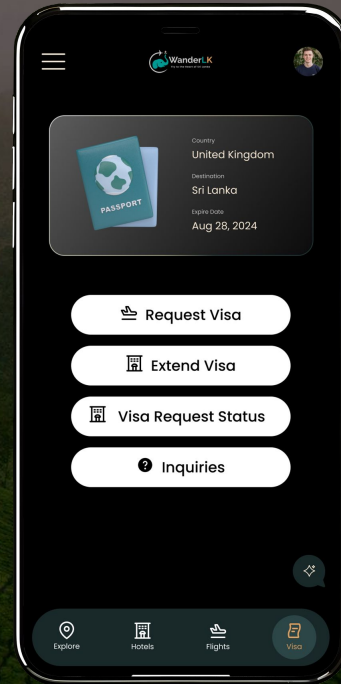
# FEATURES



Flight Bookings



Wander Chat &  
Tour Planning



Online Visa  
Requests

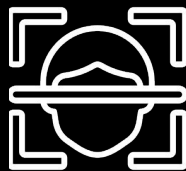


# CHALLENGES

## WE HAVE TO OVERCOME



**Research  
About Visa  
Process**

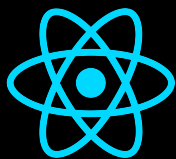


**Face  
Identification**



**Data Security**

# We decided to go with...



**React**



**Typescript**



**Spring Boot**



**MongoDB**



# **FUTURE IMPROVEMENTS**

- **Personalized voice assistant and Real Time virtual tour guide.**
- **Handle payments for hotels and other services via platform.**
- **Ensuring Security, Availability and Fault Tolerance through cloud services.**
- **Letting travel guides advertise their travel packages.**
- **Giving the ability to have virtual tours with AR.**



A person with a backpack is walking away from the camera on a railway track that curves through a dense, green forest. The scene is dimly lit, suggesting dusk or dawn. In the background, a small wooden building is visible on a hillside. The text is overlaid on the left side of the image.

**Recommends Best  
Destinations  
For You  
With**

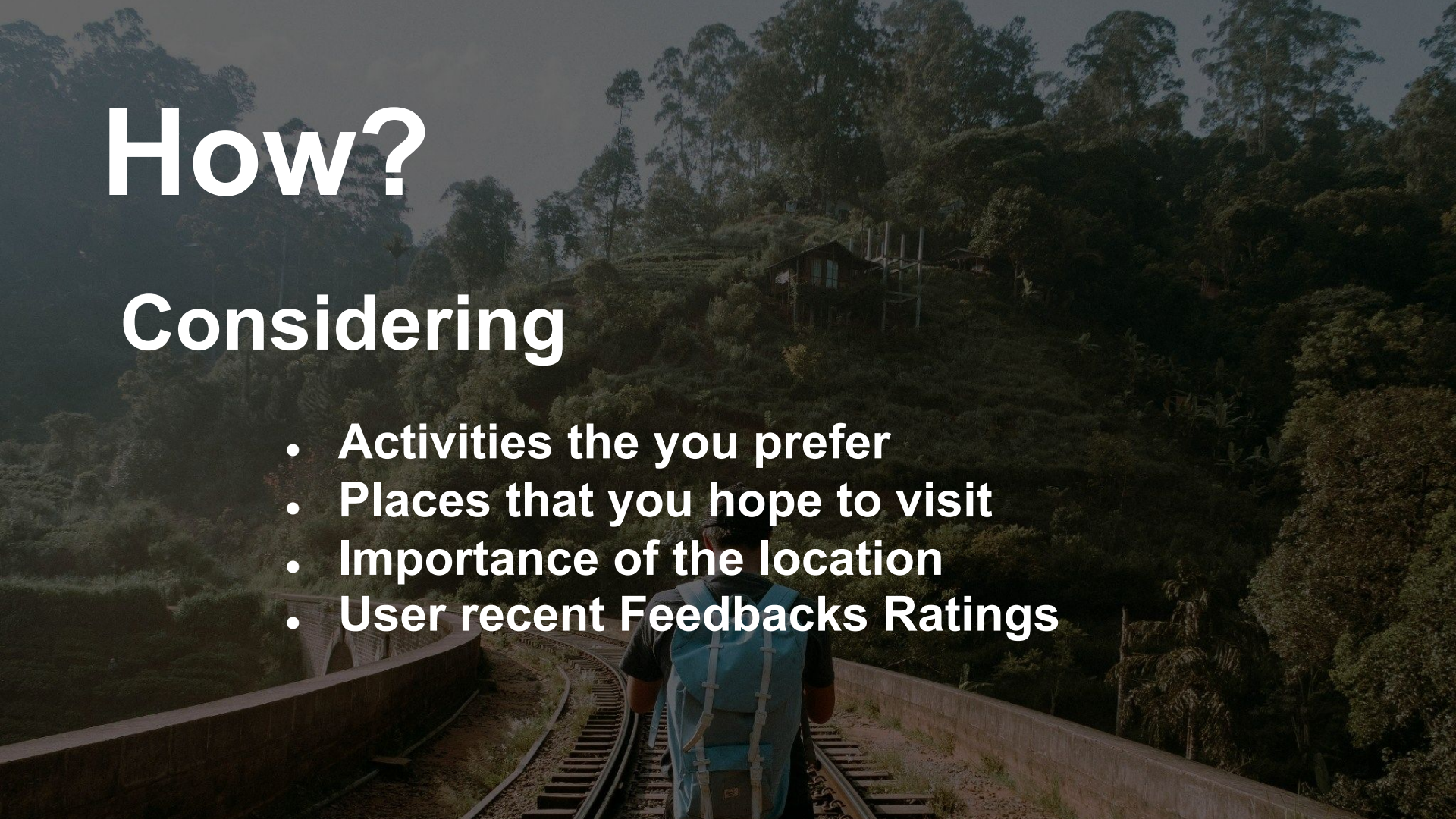
**Best Relativity  
High Diversity**



# How?

## Considering

- Activities the you prefer
- Places that you hope to visit
- Importance of the location
- User recent Feedbacks Ratings





# Data Enrichment with GenAI

Places should more contextual

Enrich with Activities, Geographical, Historical, Religious, etc

Be Careful with Prompt Engineering

*“You are an **expert in Sri Lanka tourism**. Your goal is to provide **neutral and unbiased** information about locations in Sri Lanka, focusing on geographical, historical, cultural, and natural aspects. **Do not promote or demote** any businesses, hotels, or restaurants. **Don't mention location name** or any information to identify the situated location in outputs. make the content **short and generalized keywords**”*



# Model Development

**1.Vectorization**

**2.Compute similarity between TF-IDF**

**3.Except Places with High negative feedback rate**

**4.Except the Places already Included**

**5.Sort By Similarity Score then Ratings**





# Evaluation

```
from geopy.distance import great_circle

coordinates_of_similar_places = similar_records[['lat', 'lng']]
coordinates_of_input_places = input_places[['lat', 'lng']]

all_coordinates = pd.concat([coordinates_of_similar_places, coordinates_of_input_places],
                             ignore_index=True)

def geospatial_diversity(locations):
    if len(locations) < 2:
        return 0.0

    distances = []
    for i in range(len(locations)):
        for j in range(i + 1, len(locations)):
            distance = great_circle(locations[i], locations[j]).kilometers
            distances.append(distance)

    return np.mean(distances) if distances else 0.0

all_coordinates_list = all_coordinates.values.tolist()
diversity = geospatial_diversity(all_coordinates_list)
print(f"Geospatial Diversity (Average Distance): {diversity:.2f}")
```

**90% - 60% Relevance**  
**80+ Km Average Diversity**

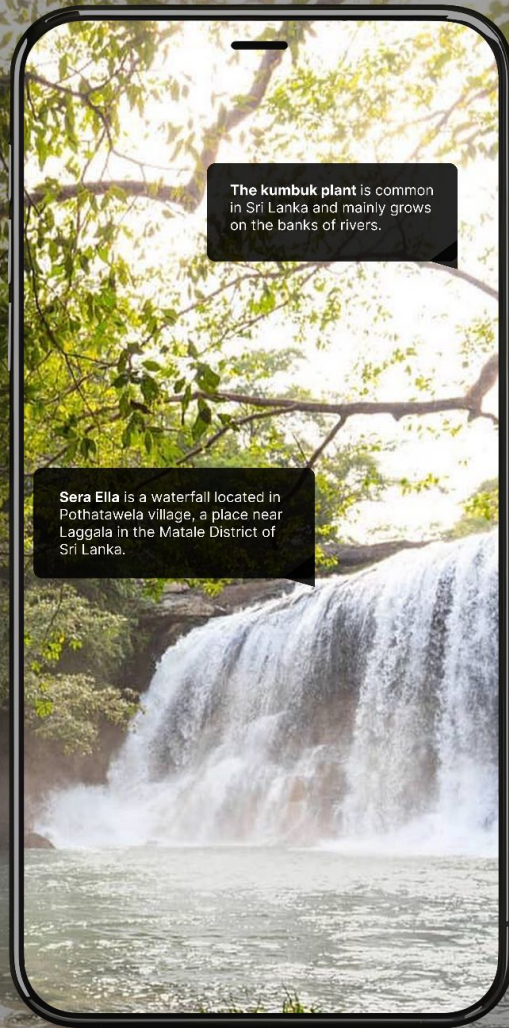
```
similar_records_infos = ''.join(similar_records_infos)
combined_infos = ''.join(combined_infos)

def cosine_similarity_score(str1, str2):
    if not str1 or not str2:
        return 0.0
    vectorizer = TfidfVectorizer()
    vectors = vectorizer.fit_transform([str1, str2])
    return cosine_similarity(vectors[0], vectors[1])[0][0]

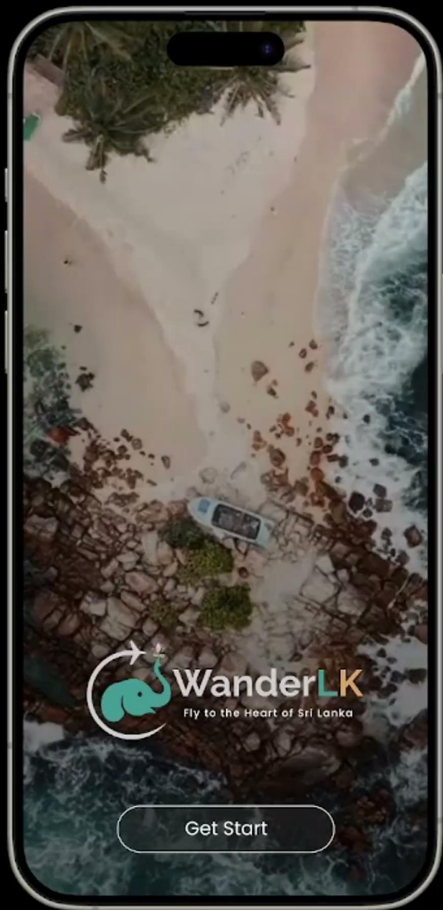
similarity = cosine_similarity_score(similar_records_infos,
```



# VR for WanderLK







# THANK YOU

Open for Questions

