

Readme file

Personalized Travel Planning App

Our mobile application offers a **personalized travel planning experience**, allowing users to plan tours, book hotels and activities, and explore local attractions through **3D models**. It provides **real-time navigation** with detailed maps, route planning, traffic updates, and turn-by-turn directions. Additionally, it integrates **context-aware emergency services** for proactive assistance, ensuring a seamless and secure travel experience from planning to real-time navigation.

Features of TripMate 🚀

- **Personalized Travel Planning:**
Plan trips based on preferences like budget, activities, and trip duration.
- **3D Models of Attractions:**
Explore destinations through immersive, interactive 3D models.
- **Travel Managing & Emergency Services:**
Users adapt to changing travel plans & Access emergency help directly from the app during trips.
- **Social Connectivity:**
Share experiences, connect with fellow travelers, and receive community recommendations.

Dependencies 📦

Here are the key libraries and tools used in the TripMate project:

Frontend (React Native)

- **React Native:** ^0.71.0 – Cross-platform mobile development.

npm install react-native

- **@react-navigation/native:** ^6.0.13 – Navigation library for routing.

npm install @react-navigation/native

- **React Native Maps:** ^1.3.2 – For map integration.

npm install react-native-maps

- **Axios:** ^1.6.2 – For making HTTP requests.

npm install axios

Backend (Node.js)

- **Express:** ^4.18.2 – Web framework for building APIs.

npm install express

- **Firebase Admin SDK:** ^11.5.0 – For interacting with Firebase services.

npm install firebase-admin

Machine Learning (Python)

- **scikit-learn:** ^1.3.0 – For machine learning models.

pip install scikit-learn

- **Flask:** ^2.1.2 – For serving ML models via an API.

pip install Flask

Technologies Used

- **React Native:** Cross-platform mobile app development for iOS and Android.
- **Node.js:** Backend server for efficient performance and scalability.
- **Python:** Machine learning model for personalized recommendations.
- **Firebase:**
 - **Authentication**
 - **Firestore Database**
- **Google Maps / Mapbox:** For mapping and navigation.
- **3D Modeling:** Immersive exploration of attractions.

How It Works

1. **Planning:**
Enter travel details (budget, duration, activities). TripMate suggests personalized tours and activities.
 2. **Travel Managing:**
Suggest the best places user can visit within the remaining time by analyzing user profile or new plans they can achieve
 3. **Sharing:**
Share your experiences with the TripMate community and get inspired by others.
 4. **3D Models View:**
Local attractions are displayed on interactive maps through 3D models, offering an immersive experience
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Installation and Setup 🛠️

1. Clone the repository:

git clone <https://github.com/piyumal2105/TripMate.git>

2. Navigate to the project directory:

cd TripMate

3. Install frontend dependencies:

npm install

4. Install backend dependencies:

5. cd backend

npm install

6. Start the frontend:

npm start

7. Start the backend:

node server.js

Ms planner

Task ID	Task Name	Bucket Name
TCssgzbVKkmtsno-7dd3MkANWsw	Build a system to suggest alter	Travel Managing and Ei
oU2lVI0wE0SQu4GmlyhbPMkADBf-	Gather Dataset	Travel Managing and Ei
7K-jfWFHrUy_prnWpwy54skALJ8L	Implement machine learning a	Travel Managing and Ei
bvEY9BLuokyVONQ6_HusYmKAnj8E	Proposal report create	Travel Managing and Ei
1653p5VQRkiXPwRsnEukkMkAFaKS	Accurate the ML model	Travel Managing and Ei
SztluqrRdU69oJOuHjXi0MkABQuG	Test predictive analytics with u	Travel Managing and Ei
4aP9hhwoEUSsaOgXMuhrckAFjVe	Design UI Interfaces	Travel Managing and Ei
VR2IMur-_0CchqF2b2p48ckABVQt	Connect ml model with react n	Travel Managing and Ei
_wk_H_HyREullBAU9LMOz8kACnny	Test ml model working with ap	Travel Managing and Ei
5ftw-6hLIEKNXKz0YWofiskAOm2E	Completed the project	Travel Managing and Ei
0iL0L9rHlKSI-JlrXNHAGMkAC7tl	Completed the project	Travel Experience Shari
FYPm-4BUHUSsXilrnFGW7MkAEUd4	Test ml model working with ap	Travel Experience Shari
SOGqkSjODkyj8OA-HPtd0ckAF8Bj	TAF Document	Documentation
uBf081qgm0GyKS0FRvds7skAOHIm	Research Paper	Documentation
ntpAt_zw9kmJJMpXirl1k8kAMHTF	Final Repots	Documentation
ri3e7Psrkqqf7ji81B3XMkAPBrA	Proposal report create	3D Models and Interact
TNnex0ID0E-vlqNOyeXufskACkoe	Design UI Interfaces	3D Models and Interact
G-kOurwIV0mCSmRlqdpRpMkAFcwK	Accurate the ML model	3D Models and Interact
H6XHXOFFaUy_fRA8LxkVwMkAMMsy	Connect ml model with react n	3D Models and Interact
W1rXwiKZ4UWcFUOrEQi4_ckAL4r3	Test ml model working with ap	3D Models and Interact
WJCpxoOVDUuGZKaC9pSpuskAM5v0	Completed the project	3D Models and Interact
mBi_w8PuokiJGZ7GeHpRJskAB2yJ	Completed the project	Personalized Travel Pla
Umo7aat6ik-v5qUrEFQYO8kABsV5	Test ml model working with ap	Personalized Travel Pla
G3eKTpu9qEy0HoLr9FGCuMkAH08C	Accurate the ML model	Personalized Travel Pla
LFHhE5Rp1kqHR-D_bFBEEskAlkJf	Connect ml model with react n	Personalized Travel Pla
4gEaL6QHgEegEiSQhTNJGckABCoy	add leaderboard and goals for	Travel Experience Shari
zRyNY8oTdkKQWjpUgjhOvsKAESjr	Enable users to share itinerari	Travel Experience Shari
5C5vZkrCPEKu47JMM1vlzckAHNP2	Test predictive analytics with u	Travel Experience Shari
xzWme0L9m0aYJntwONSoOckAI0aE	Gather Dataset	Travel Experience Shari
lvI0u_wd9Uu5nFXE5Zz1KMkAF_KR	Implement machine learning a	Travel Experience Shari
PQdf9zQ870-wl-iU84ePCckADGGa	Proposal report create	Travel Experience Shari
1ed_jABAcUKRgevlI6KRjckAKwhb	Design UI Interfaces	Travel Experience Shari
wZeYLVt-zUC-ZIHGHtBYuckAC43J	Accurate the ML model	Travel Experience Shari
1ZFwnbExWUCcKKZYcXQDKMkABhwq	Connect ml model with react n	Travel Experience Shari
xiWQUhbEN0ehRsidez15IMkAH7hZ	Proposal report create	Personalized Travel Pla
8PMA3Mu350OoDmgSjgQIXMkAEbLC	Design UI Interfaces	Personalized Travel Pla
q5THInsgn0m9efxrACVlkskAPplz	Gather and document data on	Documentation
B8Wvqt2090-iSGneF-FZUMkAOvcd	Gather Dataset	Documentation
kHpPjFkB3U2_gXDnxKRDOckAMOfh	Implement machine learning a	Documentation
F9Qo942ScECO2niruzT618kAM10c	Test predictive analytics with u	Documentation
CRh9IUQcVUaduGAnL5Wo28kAH7fv	Develop interactive maps with	3D Models and Interact
ff_QrsUupUeqwYq4UFH4GMkAG8f1	Gather Dataset	3D Models and Interact

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Implement machine learning a 3D Models and Interact
Test predictive analytics with u3D Models and Interact
Develop a system to plan tours Personalized Travel Pla
Implement machine learning a Personalized Travel Pla
Gather Dataset Personalized Travel Pla
Test predictive analytics with u Personalized Travel Pla

[illegible]

Completed	Medium	Madhuwantha W.A.S.P it2105	Bandara U.M.W it2107
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Completed	Medium	Bandara U.M.W it21073182	Bandara U.M.W it2107
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Completed	Medium	Bandara U.M.W it21073182	Bandara U.M.W it2107

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Pathirana A.P.C.E. it210

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Pathirana A.P.C.E. it210

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Labels

Description

