



TripQ - A Decentralized Hotel Booking Platform

TEAM NAME: ks

Team members:

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“TripQ is a decentralized hotel booking platform that leverages blockchain technology and artificial intelligence to provide users with a seamless, secure, and personalized travel experience. By eliminating intermediaries, TripQ aims to reduce costs for both travelers and hotel owners while ensuring transparency and trust in transactions.”

Introduction & Problem Statement

Data needs:

1	<ul style="list-style-type: none">Growing hotel and booking data requires efficient management.
2	<ul style="list-style-type: none">Current issues:<ul style="list-style-type: none">High intermediary fees.Lack of personalization.Trust issues with payments.

Solutions:

1	<ul style="list-style-type: none">Implement The Graph and subgraphs for streamlined data handling.
2	<ul style="list-style-type: none">Eliminate intermediaries and ensure secure transactions through blockchain.

Role of The Graph in TripQ

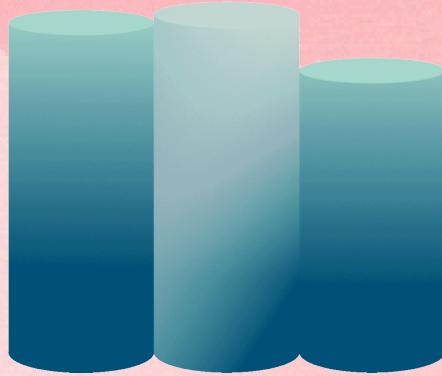
Data Indexing:

- | | |
|---|---|
| 1 | <ul style="list-style-type: none">• Efficiently indexes real-time data from smart contracts (hotel listings, bookings). |
| 2 | <ul style="list-style-type: none">• Simplifies data queries for quick access to essential information. |

Query Optimization:

- | | |
|---|--|
| 1 | <ul style="list-style-type: none">• Quick retrieval of hotel info, availability, and pricing. |
| 2 | <ul style="list-style-type: none">• Enables dynamic updates to the frontend as bookings occur. |

Core Features & Subgraph Functionality



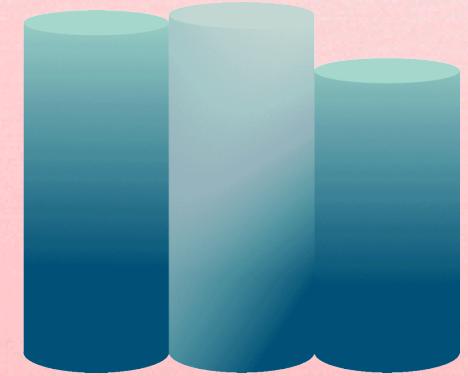
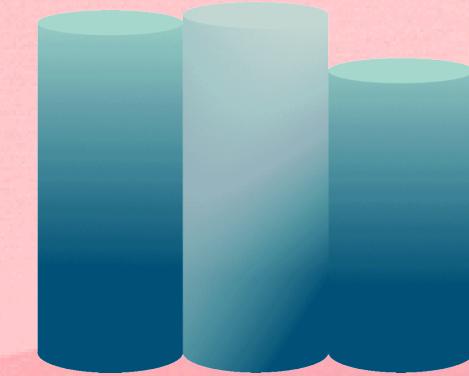
Core Features:

- AI-powered personalized suggestions.
- Web3 authentication for secure login.
- Cryptocurrency support and TPQ token rewards.

Subgraph Functionality:

Entities:

- Hotel: Tracks details, availability, pricing.
- Booking: Monitors user bookings and payment status.
- User: Gathers preferences and loyalty status.



Real-Time Handling:

- Listens for smart contract events to maintain accurate data.

Monetization & Competitive Advantage

Monetization Opportunities:

- Enhanced user experience drives higher bookings.
- Data analytics for trend analysis and targeted marketing.

Competitive Advantage:

- Decentralized trust through transparent transactions.
- Scalability for efficient growth with performance maintenance.

Conclusion & Future vision

Value Proposition:

The integration of The Graph enhances user experience, drives revenue, and positions TripQ as a leader in decentralized travel.

Future Enhancements:

- Hotelier dashboard for analytics.
- Decentralized review system for genuine feedback.
- Multi-currency support for broader payment options.