



Innovision – AI Quote Generator



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Introduction

Innovision is an AI quote generator that harnesses the power of modern technologies to create and display inspirational quotes. The project utilizes a combination of NextJS with React for the front-end, tRPC Express.js for API handling, Prisma as the database ORM, MySQL for data storage, and Python for the AI model powering the quote generation process. This documentation provides an overview of the project and its components.



Technologies Used

- **Next.js with React**
The project's front-end is developed using Next.js, a React framework that offers server-side rendering and other performance optimizations.
- **tRPC Express.js**
Express.js is used to create APIs for communication between the front-end and back-end. tRPC simplifies the API Creation Process by generating TypeScript types and providing a structured way to define APIs.
- **Prisma**
Prisma is an ORM (Object-Relational Mapping) tool that connects the application to the database. It allows for easy database querying and manipulation through a type-safe interface.
- **MySQL**
The MySQL database is used to store quotes, user data, and other relevant information.
- **Python for AI Model**
The AI model responsible for generating quotes is built using Python. This model processes text and generates quotes based on patterns and insights learned during training.



System Architecture

The system architecture of Innovision consists of three main components: the front-end developed using Next.js and React, the API layer using tRPC Express.js, and the back-end database using Prisma with MySQL. The AI model is a separate Python-based component responsible for generating quotes. An Ubuntu VPS has also been used for hosting all the separate components of the application.

AI Model

The AI model responsible for quote generation is developed using Python and trained on a dataset of existing quotes. The model uses techniques from natural language processing (NLP) and deep learning to understand patterns in the text and generate coherent and contextually relevant quotes.

Using Ubuntu 20.04 VPS

Innovision is designed to run on an Ubuntu 20.04 Virtual Private Server (VPS). Ubuntu is a popular and user-friendly Linux distribution known for its stability and security. By utilizing an Ubuntu VPS, you can ensure a reliable environment for hosting the Innovision project. It can also be used for Crucial Analytics like Server Load, Traffic, Withstanding Bandwidth and more to track crucial application performance...

Maintenance and Troubleshooting

Regular maintenance includes monitoring server health, database performance, and the accuracy of the AI-generated quotes. If issues arise, logs and error messages from both the front-end and back-end should be examined to identify the problem's source. Regular updates to dependencies, security patches, and improvements to the AI model can also be performed.

Conclusion

Innovision is an innovative AI quote generator that showcases the capabilities of modern technologies such as Next.js, tRPC Express.js, Prisma, MySQL, and Python-based AI models. By combining these technologies, Innovision provides users with an inspiring collection of quotes while demonstrating the potential of AI-powered applications.

