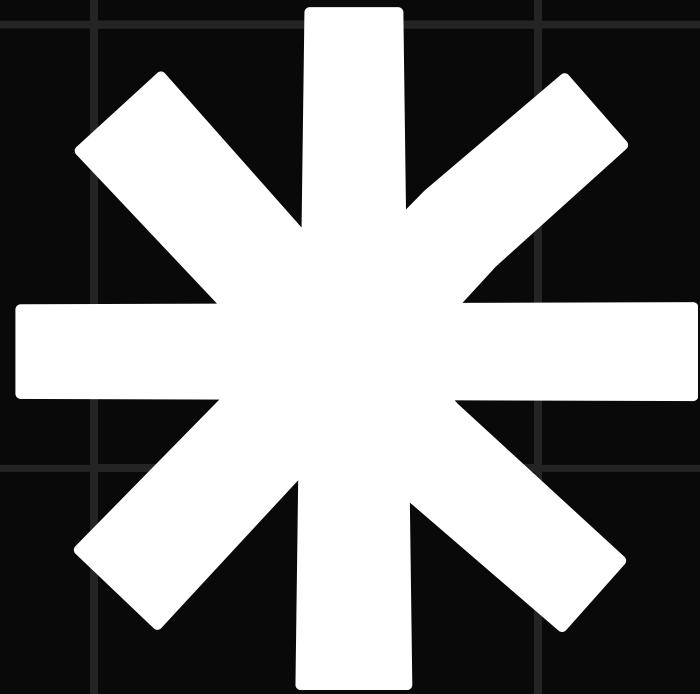


What is....

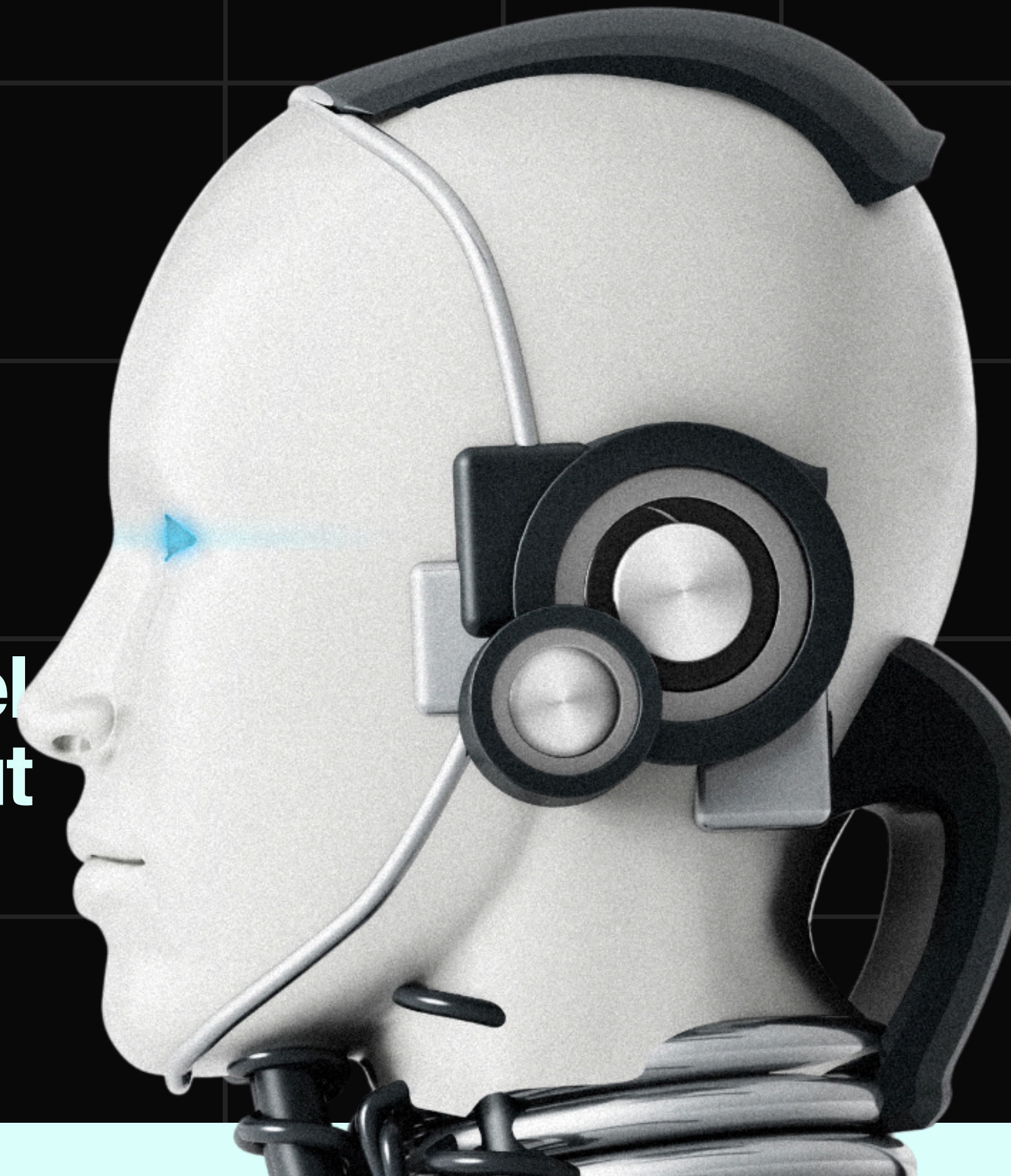
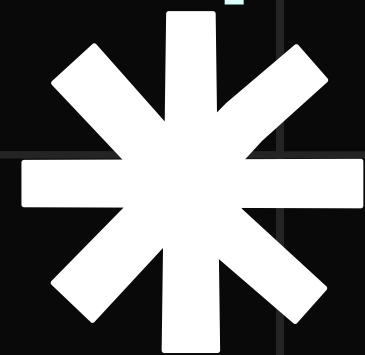
In-House Multilingual Support Prototype

Presented by Aryan Manchanda

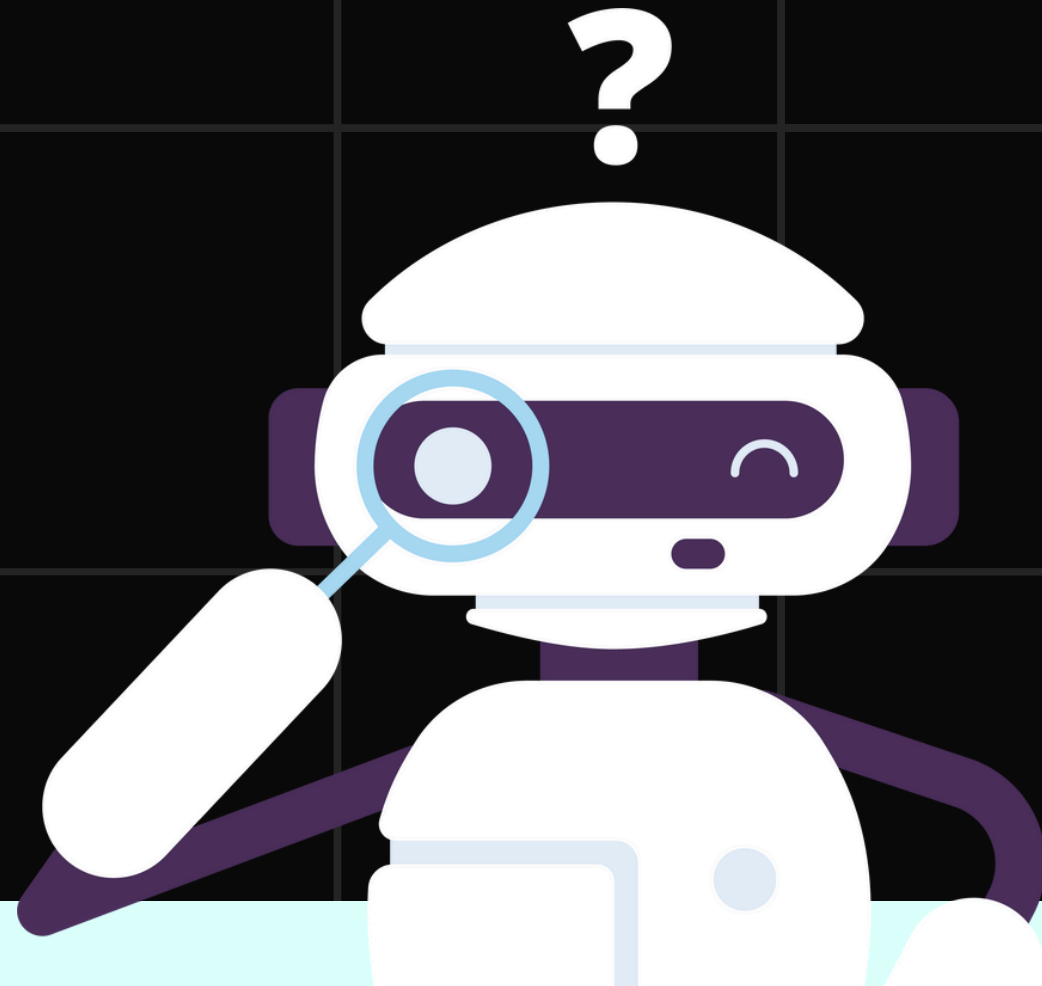


In today's global culture, cross-linguistic communication is crucial. The Multilingual Support System offers accurate text translation using pre-trained machine models for businesses, educational institutions, and individuals.

The project aims to integrate an advanced machine translation model into a web interface for users to input text in one language and get translated output in another.



Problem Statement



I identified language barriers as a communication challenge, limiting information and service access.

Seeking to improve traditional translation methods by creating an accurate and efficient multilingual support solution.

In our interconnected world, overcoming language barriers is essential for inclusivity and effective communication.

In addressing this, I strive to improve efficiency, productivity, and accessibility for diverse linguistic communities.

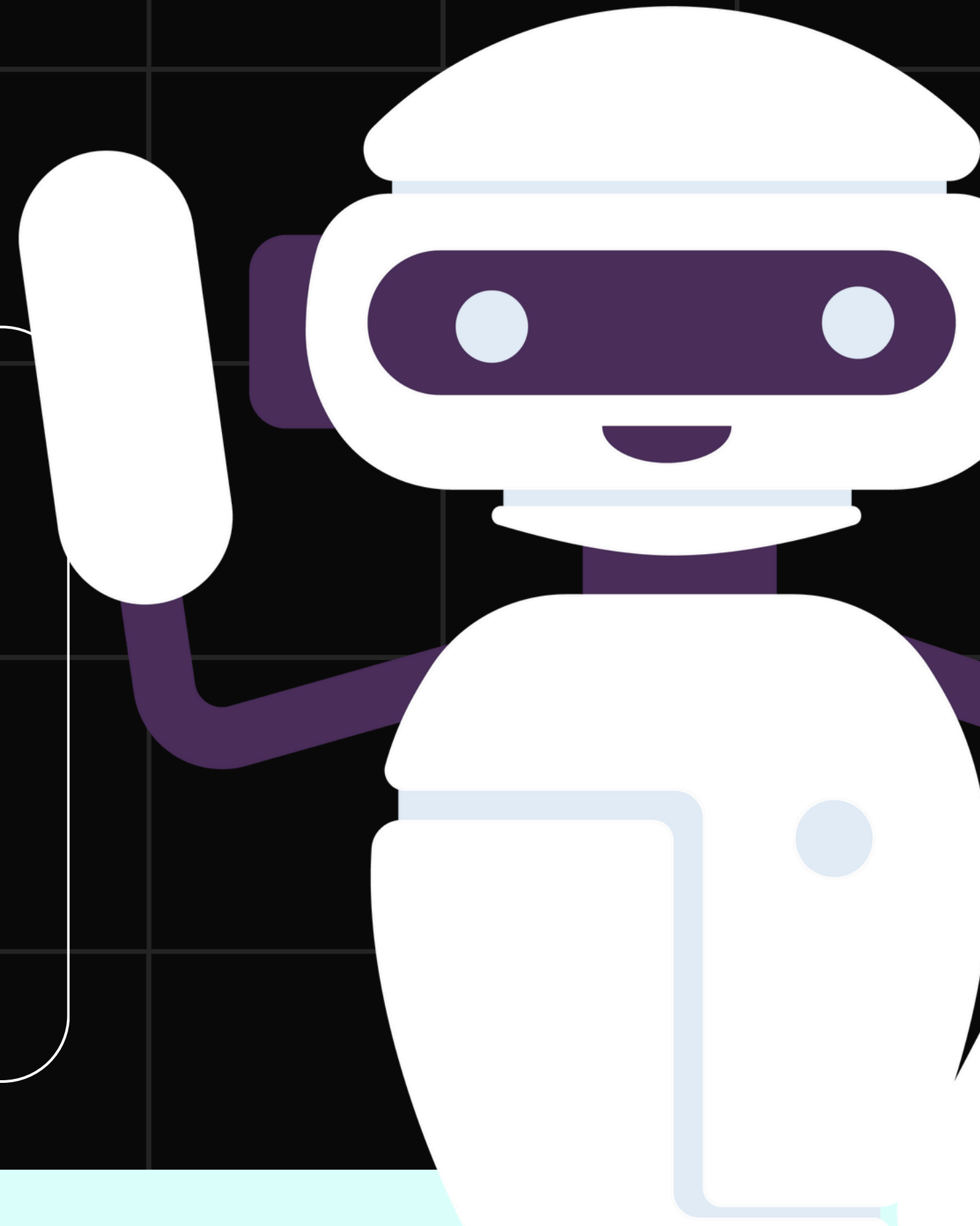
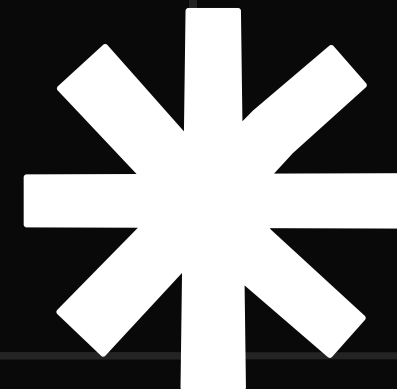
Methodologies Used:

Utilization of Pre-trained Machine Translation Models

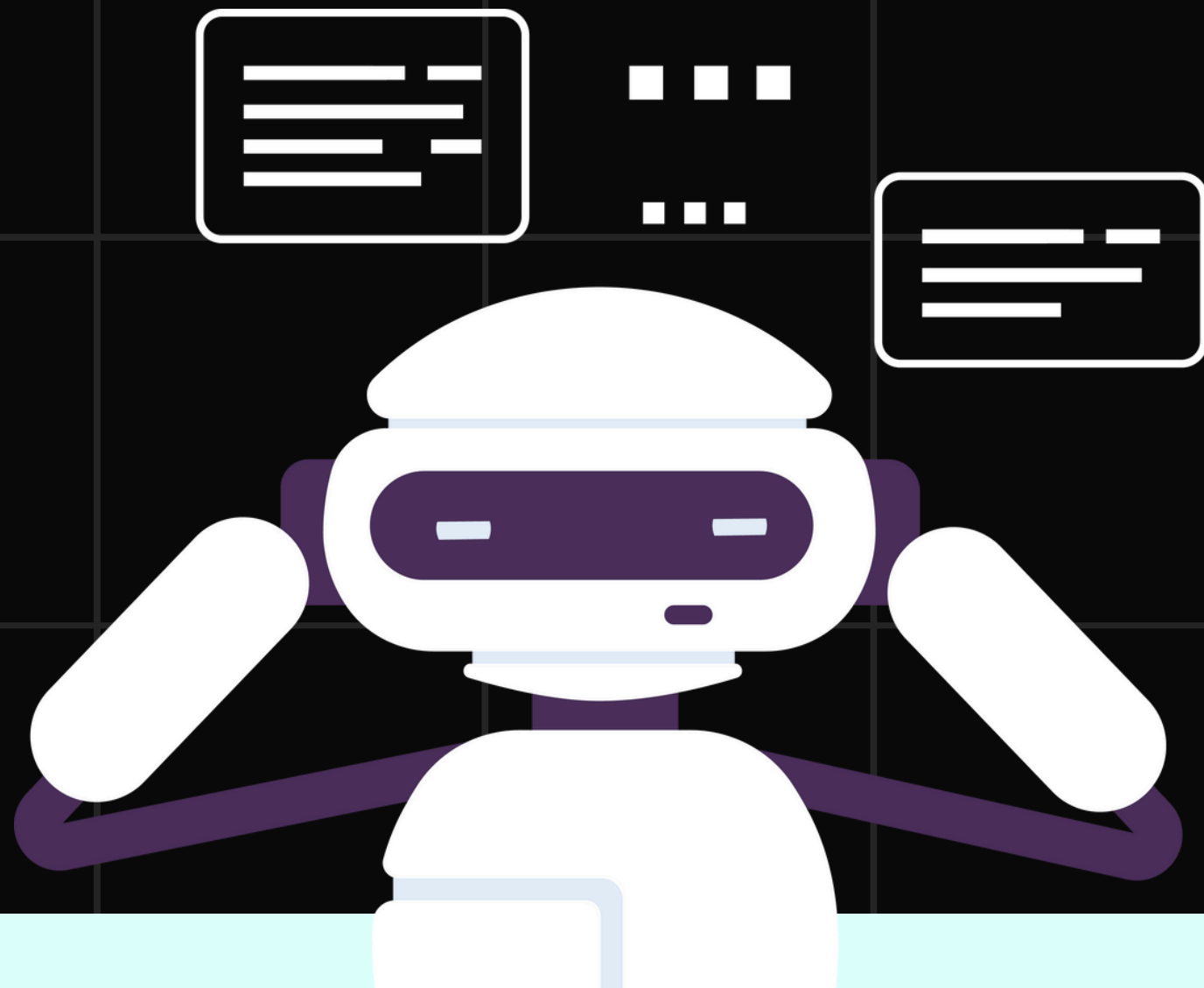
- Leveraged pre-trained models from libraries like Hugging Face Transformers.
- Chose state-of-the-art models to ensure accurate translations between languages.

Iterative Development Process:

- Adopted an iterative approach to software development, allowing for continuous improvement and adaptation.



Tools and Technologies



Python and Flask/Django:

Employed Python for backend logic, utilizing Flask or Django for web application development.

Hugging Face Transformers:

Utilized pre-trained NLP models for precise translations, accessing cutting-edge technology.

HTML, CSS, JavaScript:

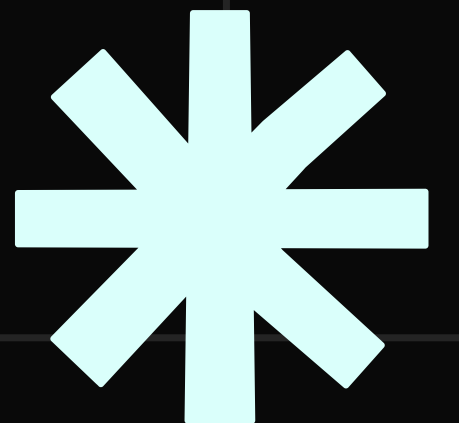
- Utilized basic web technologies to create user-friendly interfaces for input and display.

Git and GitHub:

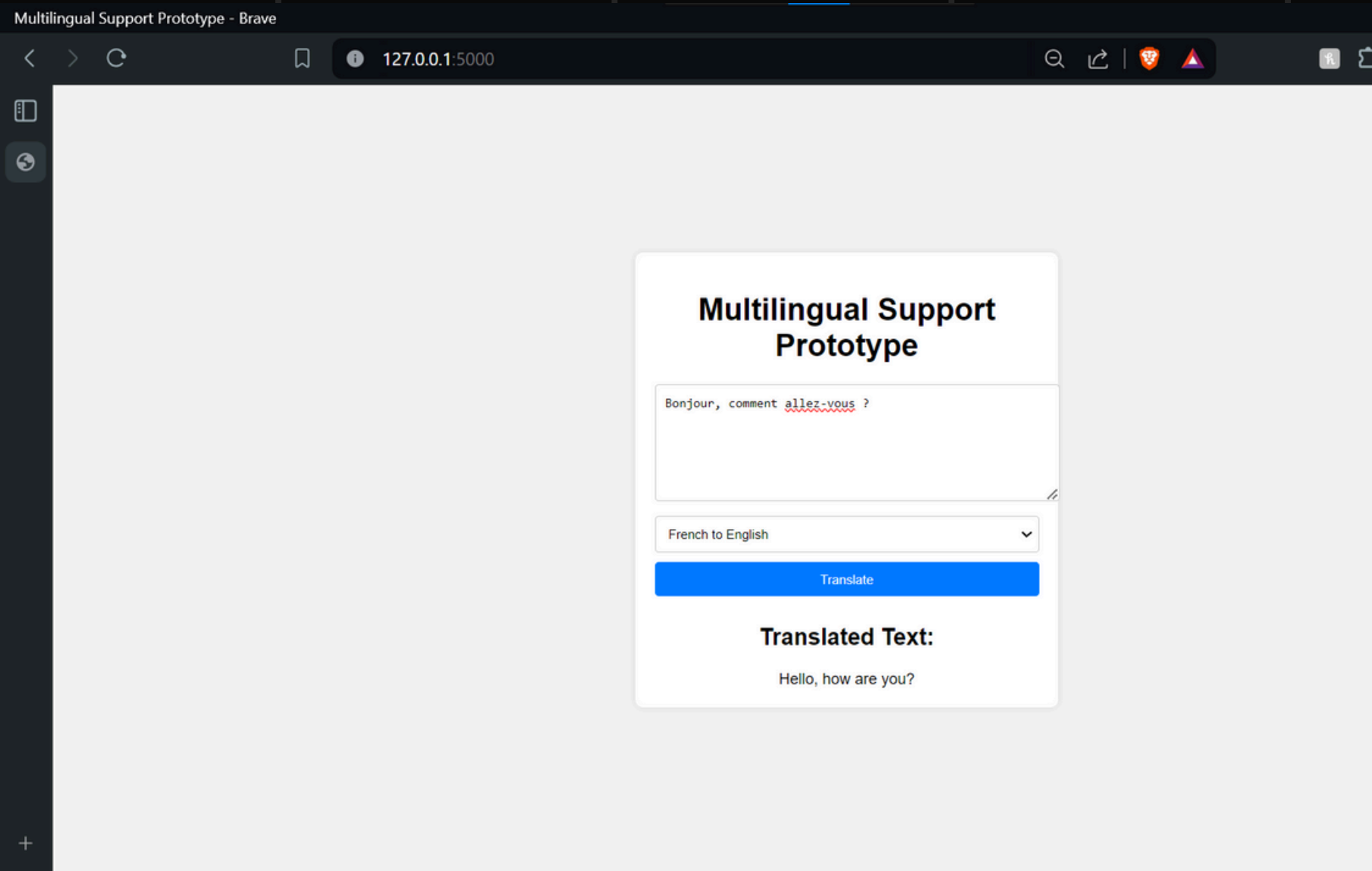
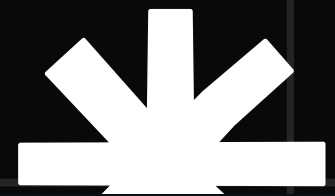
Managed project codebase with version control using Git, facilitating collaboration on GitHub platform.

Visual Studio Code (VS Code):

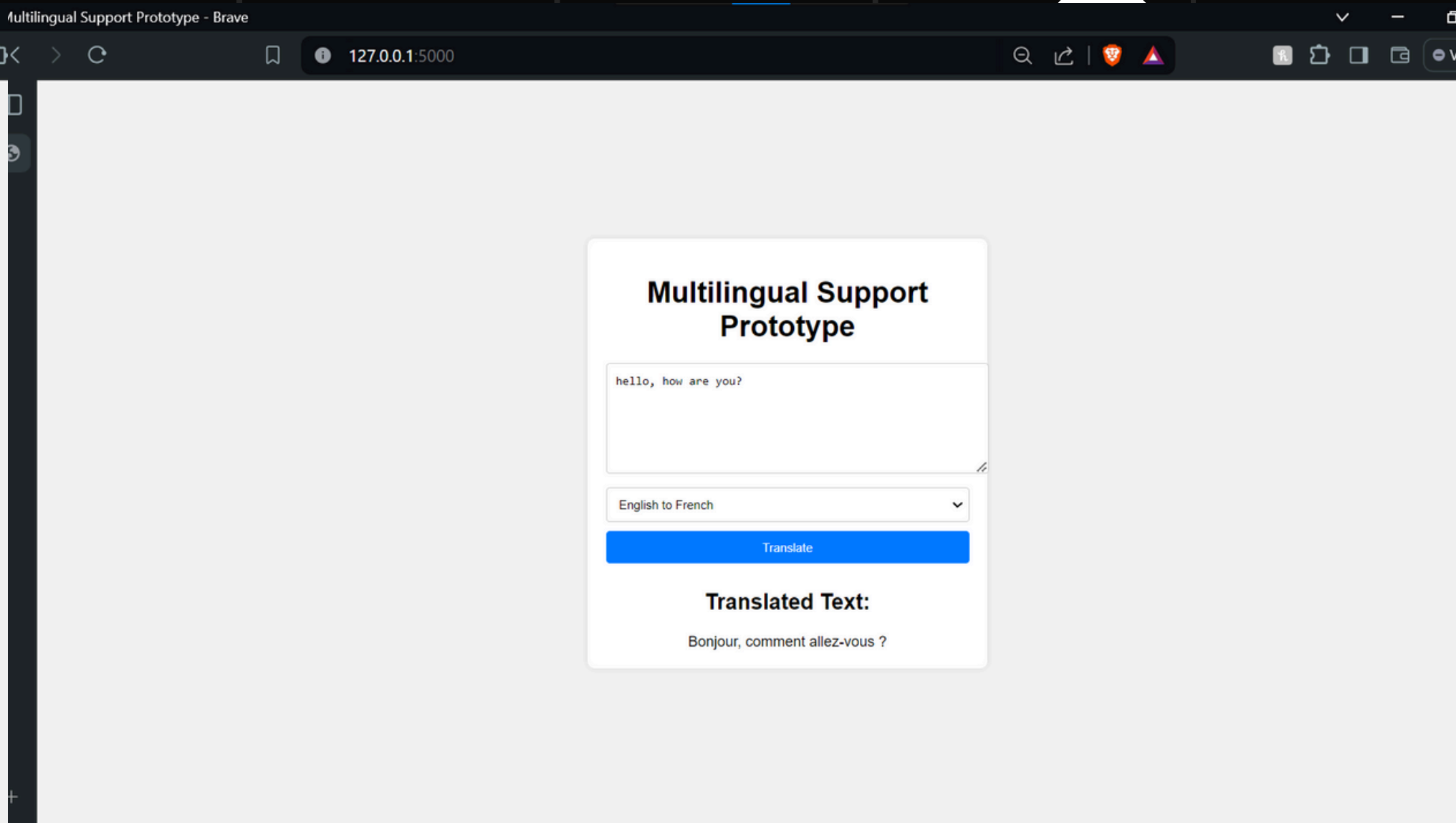
Leveraged VS Code as the primary integrated development environment (IDE) for coding, debugging, and version control, providing a seamless



Output:

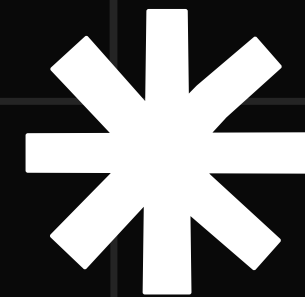
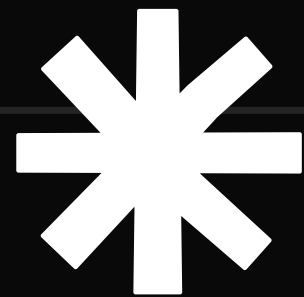


Translation from French to English

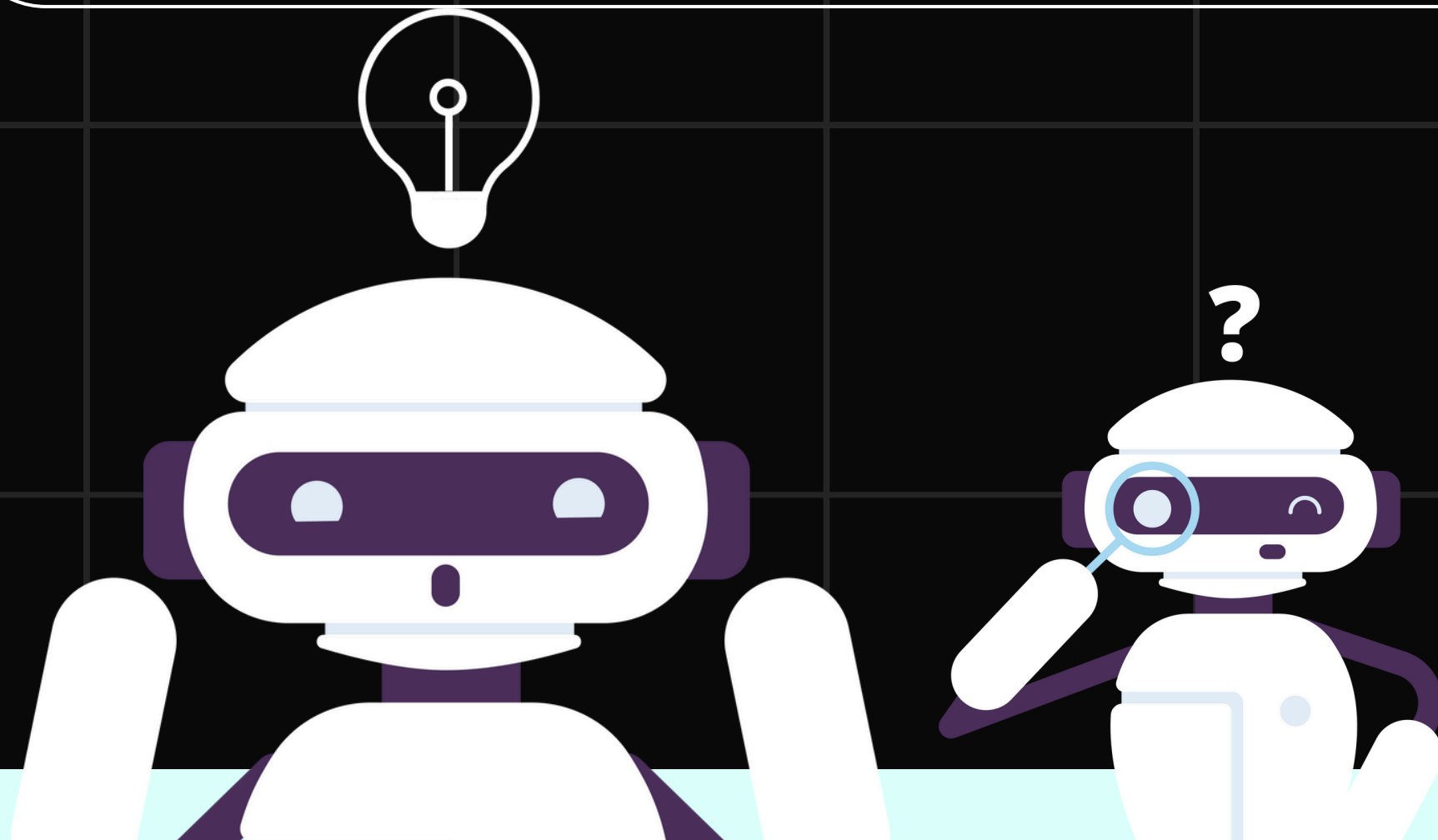


Translation from English to french

The Multilingual Support System is a significant advancement in employing cutting-edge Natural Language Processing (NLP) technologies to overcome real-world language barriers. By seamlessly integrating pre-trained machine translation models into a user-friendly online interface, the system offers a practical solution for increasing cross-linguistic communication. This study demonstrated the effectiveness of contemporary NLP models in delivering accurate and efficient translations across multiple languages.



Conclusion

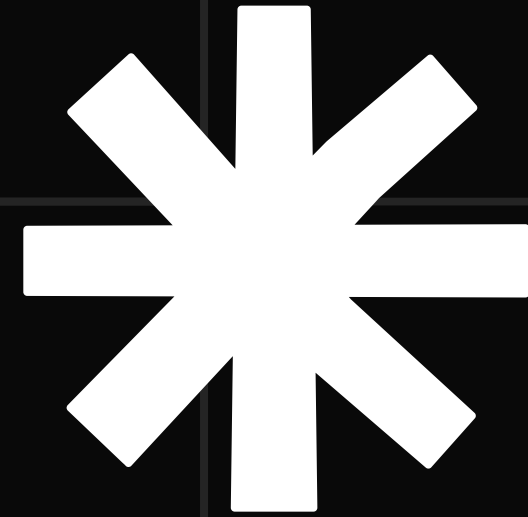


Speech-to-Text and Text-to-Speech Integration:

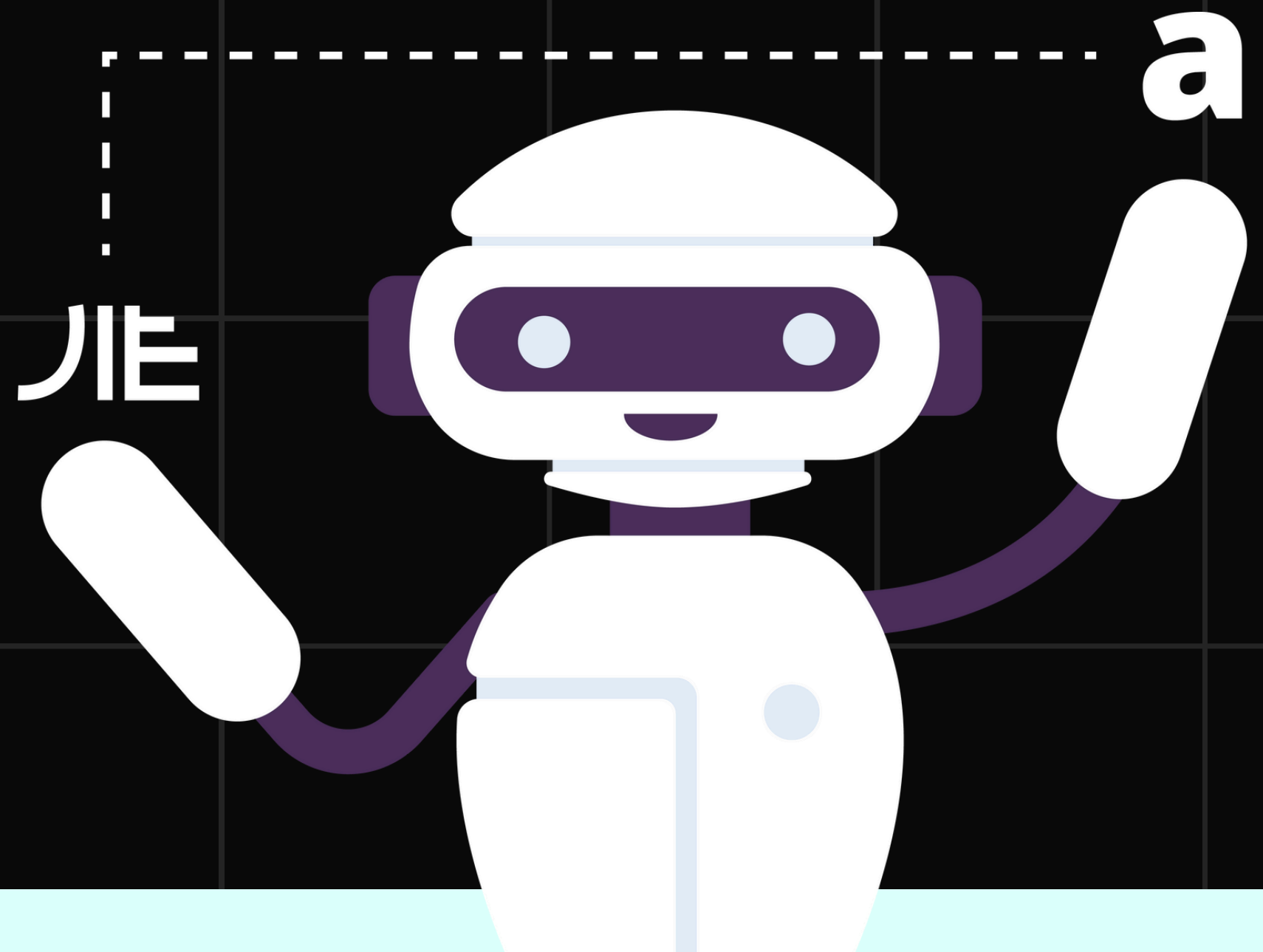
Integrating speech-to-text and text-to-speech capabilities can improve the user experience by providing more input and output options.

Mobile App Development

Creating a mobile application broadens the scope and accessibility of the translation service, allowing users to use it easily from their smartphones or tablets



Future Trends



Thankyou

