

**Baderia Global Institute of Engineering and
Management, Jabalpur, Madhya Pradesh 482002**

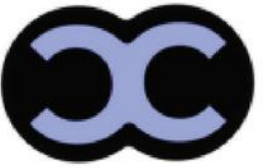


BrahmaX 1.0

The Creation of Tomorrow

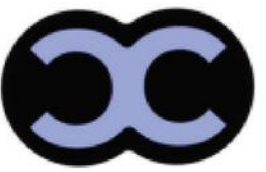
BrahmaX 1.0

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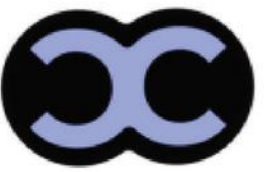
Profile Overview

- **Theme:-** EdTech
- **Problem statement title:-** Global Language translator
- **TeamID:-**
- **Team Name:-**EduFabricators



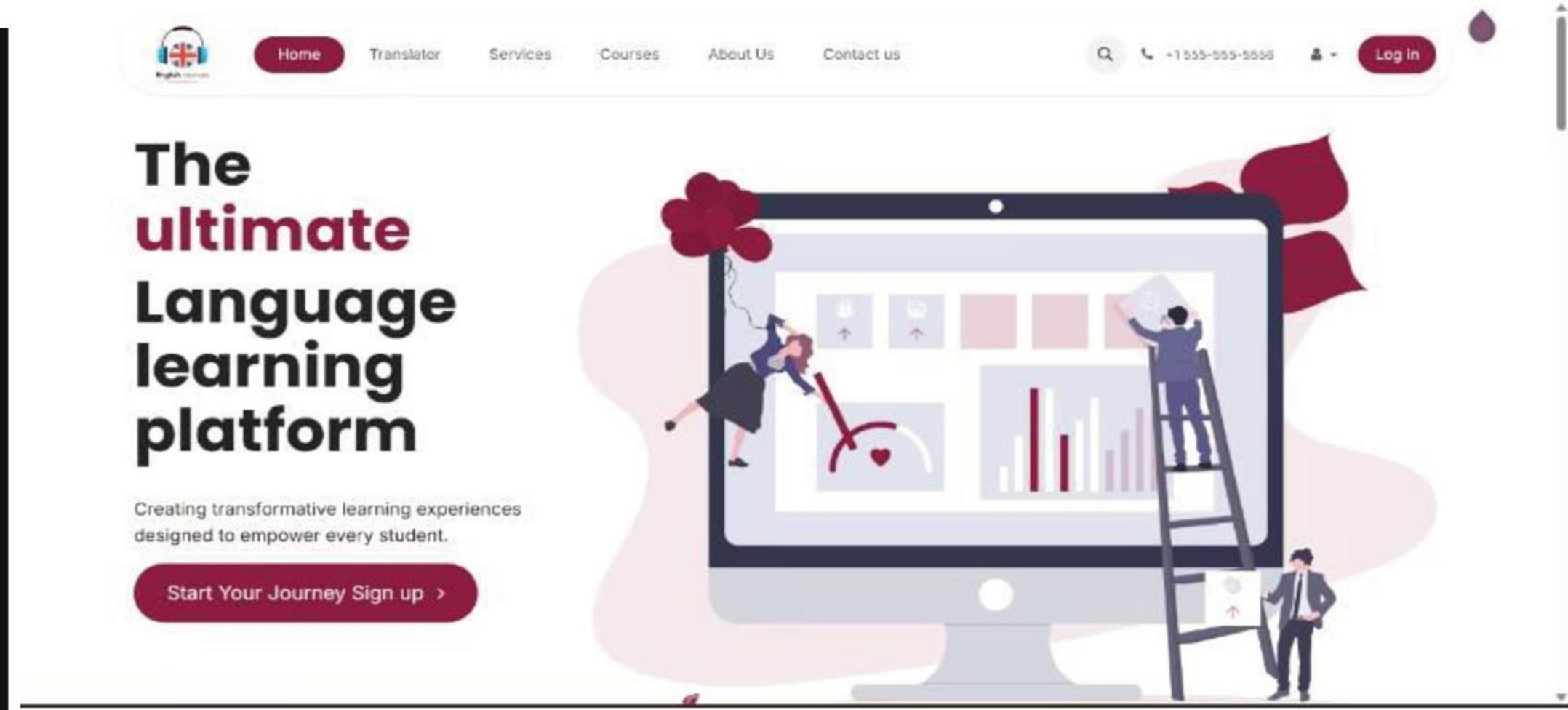
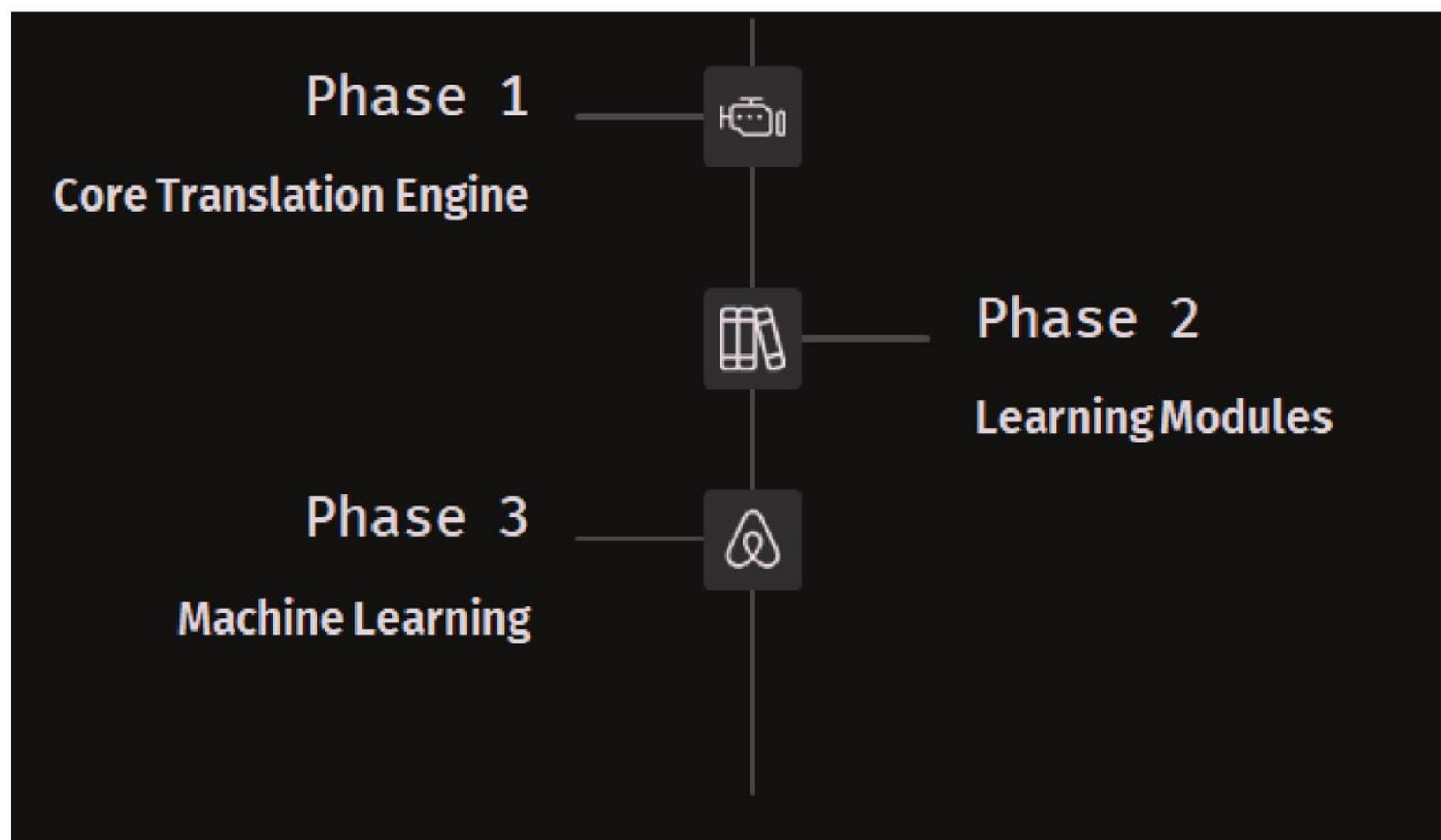
Breaking Communication Barriers

- **Solution Overview:** *Language barriers limit effective global communication. Current tools often lack learning features. People struggle with second language acquisition. We need an AI-powered, intuitive solution to tackle these problems(e.g., Transformer models, fine-tuned LLMs)*
- **Innovation:** *This project will build an innovative solution for universal language learning. Our goal is real-time translation across multiple languages. We want to empower global communication through user-friendly technology*



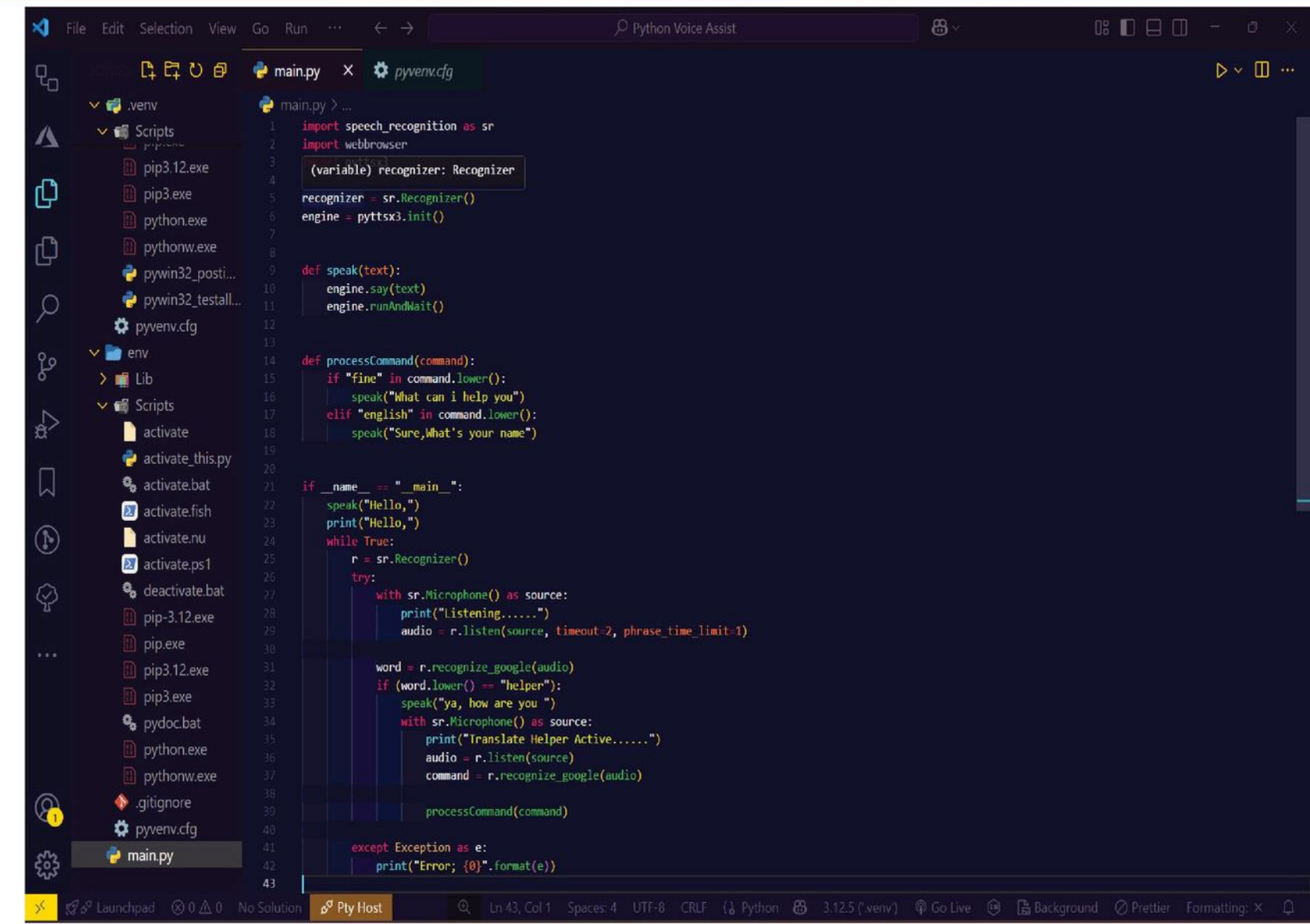
Technical Approach

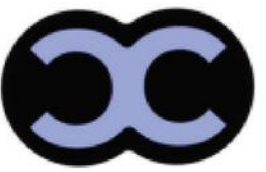
- **Technologies Used:** *We will use Python with Django for the backend. HTML, CSS and Javascript will power the frontend.*
- **Methodology:** *Phase 1 focuses on the core translation engine. Phase 2 develops learning. Modules Phase 3 enhances machine learning. Phase 4 involves global rollout, and continuous iteration to meet user needst*



Core Feature Overview

- *Voice input/output*
- *Flashcard based learning from translated sentences*
- *Feedback based model improvement*





Feasibility and Viability

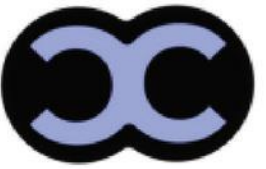
- **Feasibility:** *Partially-adoption is promising, but success hinges on accurate, context-aware, and culturally sensitive translation.*
- **Challenges & Risks:** *Machine translation faces challenges with low-resource languages due to limited data. It often misinterprets context like idioms Slang and tone. Real-time translation is demanding, requiring both speed and high computational resources.*
- **Mitigation Strategies:** *We envision global language connectivity, breaking cultural barriers. We aim to democratize language learning, and empower communication. Our app will impact education and professional growth*



Impact and Benefits

A Global Language Translator benefits a wide range of users

- *Travelers, migrants, professionals, students, and healthcare workers-by enabling clear, multilingual communication.*
- *It supports business expansion, access to education, better healthcare, and global content reach.*
- *Key benefits include social inclusion, economic growth through global trade, and environmental advantages by reducing travel and printed materials.*
- *Example:- A Japanese professional learning Spanish for South America business expansion*



References

- *Google.com*
- *W3 schools*
- *Github.com*
- *Youtube.com*