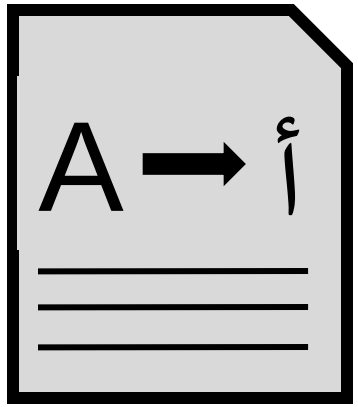
Note Translator

George Brown
Nitin Rachamalla
Robin Tellis
Uday Patlolla



Motivation

- Alleviate language barrier for collaborators.
- Streamline the researching and learning process.
- Provide translation of manuscripts.
- Simplify collaboration processes.
- Provide a highly accessible application via distributed computing.

Solution

- Machine Learning to translate manuscript from user's language to another language.
- Use of cloud services to host distributed application.
- Web-based application with intuitive GUI.
- Multi-user, user controls.

Conceptualization and Justification

- Google Trans API was built with ML for better accuracy.
- Optical Character Recognition (OCR) to extract text from images.
- AWS provides many services and benefits for distributed applications, i.e., elasticity, high availability, etc.
- Web-based design to provide heterogeneity amongst clients.
- User controls allow user to manage notes and share with other users.

Current Market Offerings

- Available Tools
  - Google Translate
  - ITranslate
  - Microsoft Translator
  - Scan and Translate
- Limitations
  - Although freely available, there is no built-in feature to share among users.
  - User must upload, translate and then manually share translated notes.

Target Market and Value Propositions

- Application is primarily a collaborative tool.
- Basic users will be students who can share notes among each other.
- Can also be used by working professionals to take down meeting notes and share with global peers.
- Exchange of research notes between international collaborators.

Business Model

- Subscription model
  - Note Translator application will have multiple users. Each user will be charged a monthly fee for the use of the product.
  - Can also include a freemium model wherein first 10 note translations or the first month of usage will be free (whichever comes first).
- Bundle to universities and colleges
  - Can be delivered to institutions for a yearly rate wherein members of said institution can use among themselves.

Team Expertise and Contributions

- George Brown: Full stack development, REST APIs, SQL databases, cloud deployment, containers.
- Nitin Rachamalla: Machine learning, computer vision, NLP.
- Robin Tellis: Full stack development, Docker containers.
- Uday Patlolla: Front end development with REST API integration and collaboration.

Collaborative Tools

- GitHub
- Microsoft Office tools (PowerPoint, Word, Excel)
- Discord