



BRAILLE-TRANSLATOR GUI

**GREESHNA P
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What is Braille?

- Braille is a system of raised dots that blind people can feel with their fingertips to read and write.



BRAILLE ALPHABET												
A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
NUMBERS												
1	2	3	4	5	6	7	8	9	0			

Existing system

BRAILLER



Relevance

Limitations of existing system

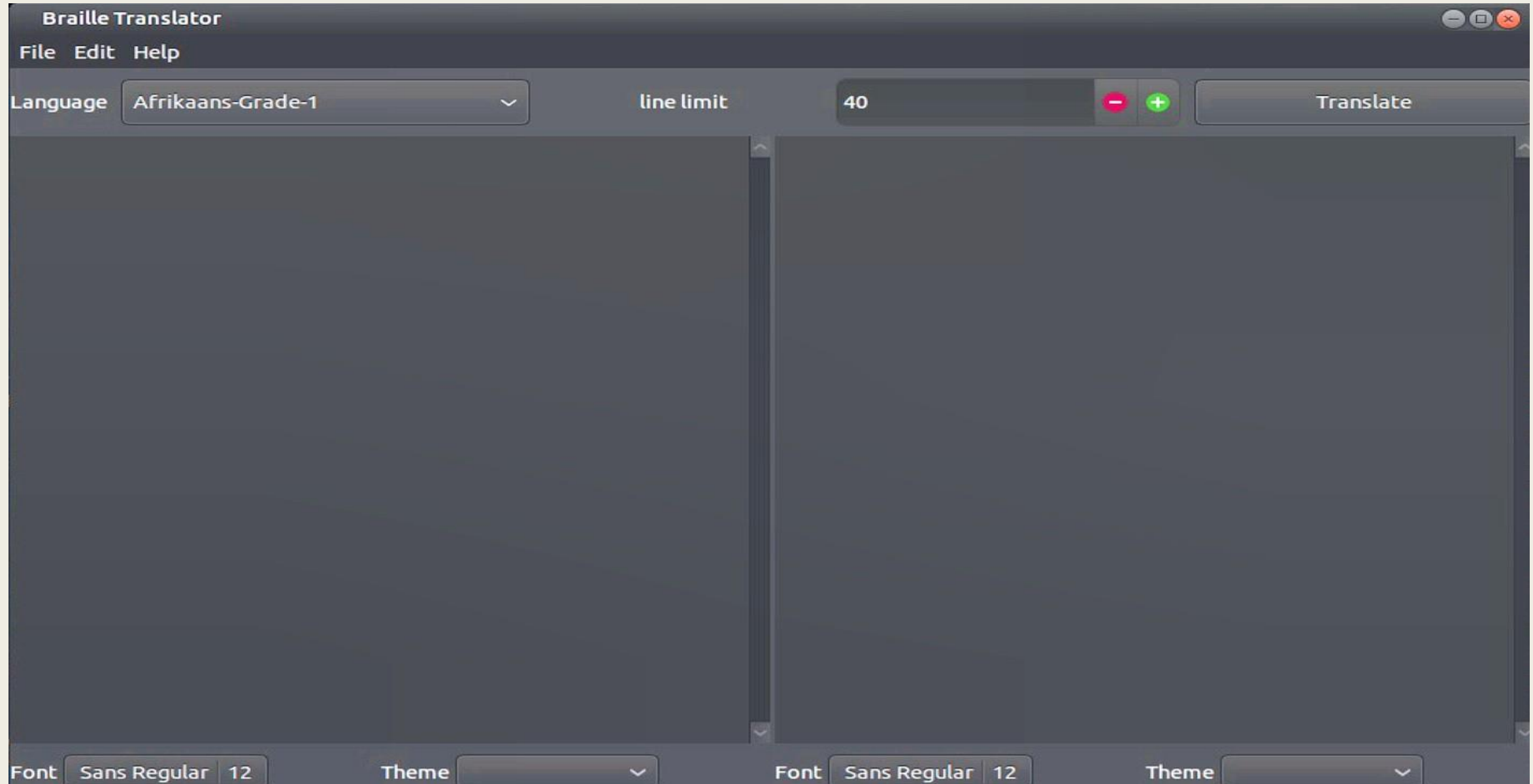
1. Typing Braille texts manually is often difficult and time-consuming due to the need to type each character as Braille dots. Textbooks are usually typed manually using a braille. However, typing in Braille dots can be error-prone and reading Braille takes a lot of time.
2. Braille papers costly .
3. Braille printer head is costly and needs regular cleaning.
4. There is a no such software on the linux platform
5. There is no free and open source braille translator yet
6. Although, Liblouis is a free and open source, it does not have an open source user interface

Development of SRS

- Blind school visiting
- Interaction with students
- Interaction with teachers (asking their needs on technology)
- Discussion with Sathyan sir and Nalin sathyan



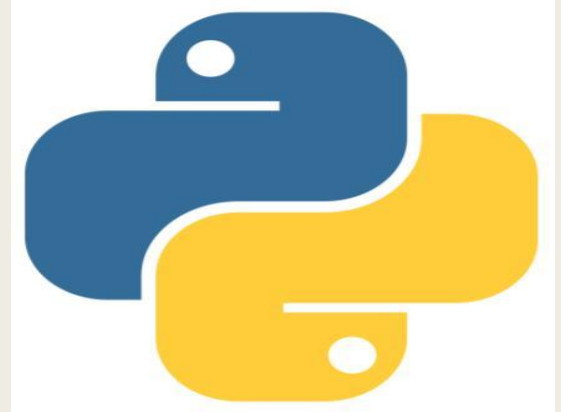
Project Demonstration



Features

- It is simply say, text to braille translator
- This translator converts any language into Braille.
- User can change font size, color, background color.
- User can create new file, and open existing file and save current file and also include save as.
- More features included, like cut, copy, past, find, find and replace, goto line etc.
- There is a option for choose the line limit of braille text
- Select language they want to translate to braille.

IMPLEMENTATION DETAILS



Why Python?

- It's a user friendly language
- Python has a clear and readable syntax, making it easier to write
- Extensive libraries and frame works

Why Gtk?

- This application is developed using GTK framework
- It is developed in 1998
- Gtk is a free and open sources
- It also support software modifications
- Gtk is more accessible and mature framework

Libloulise Table

- Here we are using this Libloulise because it is an open source braille Translator and back translator named in honour of louis braille. New languages can easily be added through tables that support a Rule or dictionary based approach.
 - It is developed in 2002
 - It give good infrastructure
- Geany is used as IDE
 - Git is used as version controlling system
 - Source code is hosted in GitHub
 - <https://github.com/greeshnasarath/braille-translator>



Future Enhancement

- ❖ Real time braille translation
- ❖ By utilizing an OCR engine to extract text from images or documents, and subsequently using that extracted text to translate it into Braille using Braille translator

THANK YOU!!