# Title: Word Wizard: A Santhali Dictionary

## **Project Brief**

The Santhali Dictionary and Learning Platform is a pioneering initiative aimed at bridging the gap between tribal communities and the urban world. This project is designed to serve the Santhali tribal community by providing a comprehensive dictionary of more than 10,000 words in the Santhali language. The primary objective is to empower tribal students and community members to access limitless knowledge from the internet in their native language, thereby facilitating their education and integration into the modern world.

#### **Problem**

The Santhali community faces a significant linguistic and educational barrier as they often lack access to resources in their native language. This can hinder their ability to learn, communicate, and engage with the broader society.

#### Solution

The project provides a user-friendly Santhali dictionary that allows users to input any Santhali word and receive its meaning and real-life examples. It is built on the OI Chiki script, making it culturally relevant and accessible to the Santhali community. The platform's future prospect is to evolve into a comprehensive learning platform where knowledge-based interactions can occur in both English and the tribal language.

### Frontend Technology

• HTML, CSS, Jinja2

The front end of the Santhali Dictionary and Learning Platform is designed to provide a user-friendly interface for easy navigation. It uses Jinja2 templates to display data and interact with users effectively. This technology enables seamless integration of dynamic content and static HTML, making the platform responsive and user-centric. The platform's responsive design ensures accessibility across various devices, including smartphones and desktops, further enhancing its usability.

## **Backend Technology**

#### • Python, Flask

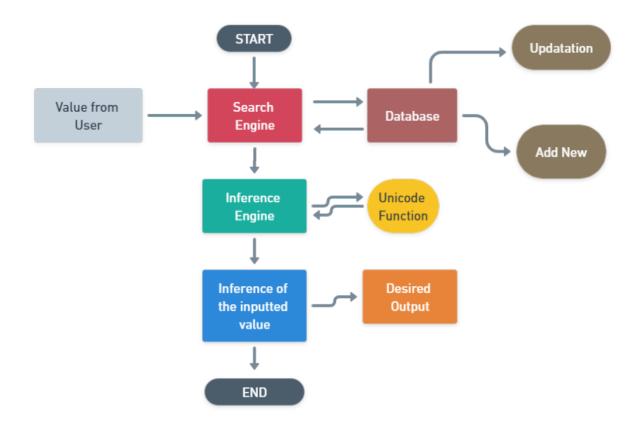
The platform's backend is powered by Flask, a lightweight and versatile Python web framework. Flask provides a robust and efficient foundation for the platform, enabling the handling of user requests, data processing, and responses. It allows for the seamless integration of the database and the frontend, facilitating a smooth user experience. The use of Python and Flask ensures scalability and ease of maintenance as the platform evolves into a more comprehensive learning platform.

#### **Database**

#### SQLite3

The project employs SQLite as its database management system. SQLite is well-suited for this application as it is lightweight, easy to set up, and efficient for handling structured data, which is essential for a dictionary platform. The database stores the extensive list of more than 10,000 Santhali words along with their meanings and real-life examples. This structured database enables efficient retrieval and display of word information, contributing to a responsive and user-friendly experience.

#### **Flowchart**



### Conclusion

The Santhali Dictionary and Learning Platform is an innovative project designed to empower the Santhali tribal community by providing a comprehensive dictionary in their native language. It addresses the linguistic and educational challenges faced by the community, allowing users to access knowledge from the internet and fostering education. The use of Ol Chiki script, Flask Python backend, Jinja2 templates, and SQLite database ensures a user-centric and scalable platform. As it progresses, the project aims to become a full-proof platform for knowledge-based interactions in both English and the tribal language, facilitating a deeper connection between the tribal communities and the urban world.

### Reference

- Santhali Keyboard
- Ol Chiki Unicode

### **Author**

- Prof.(Dr.) Saikat Maity, Professor, Department of CSE, Sister Nivedita University, Newtown.
- Tushar Mukhopadhyay, 3rd Year Student, Department of CSE, Sister Nivedita University, Newtown.
- Debajit Adhikary, 3rd Year Student, Department of CSE, Sister Nivedita University, Newtown.
- Sanyukta Misra, 3rd Year Student, Department of CSE, Sister Nivedita University, Newtown.