ECHO-EASE

Introduction

Welcome to Echo-Ease, an innovative mobile application designed to reduce the conversational gap between visually and hearing impaired individuals. This README file provides an overview of the project, its features, and instructions on how to set up and use the application.

FEATURES

- Real-time Sign Language Translation: Echo-Ease uses the device camera to analyze sign languages in real-time and translates them into English.

- Multi-Language Support: The app supports translation into various languages, including Hindi, Gujarati, Tamil, Telugu, Urdu, Kannada, Malayalam, Marathi, Punjabi, and vice versa.

- Offline Functionality: Echo-Ease offers offline functionality, ensuring accessibility even in areas with limited or no internet connectivity.

TECHNICAL DETAILS

- Dataset: Acquired from Kaggle, the dataset was used to train a Keras model, which was then converted into TensorFlow Lite.

- Implementation: The app is implemented using XML and Java for the Android platform.

- Authentication and Data Storage: Firebase is utilized for authentication and data storage, ensuring a secure and reliable user experience.

PAGES

LIGHT MODE PAGES

1. Login page
2. Sign-up page
3. Overview page
4. Home page
5. Post Home Screen page
6. Account page
7. Recent translation page
8. Change language page
9. Settings page
10. Settings translation page

DARK MODE PAGES

1. Login page
2. Sign-up page
3. Overview page
4. Home page
5. Post Home Screen page
6. Account page
7. Recent translation page
8. Change language page
9. Settings page
10. Settings translation page

USAGE

1. Open the Echo-Ease app on your device.
2. Log in or sign up using the provided pages.
3. Use the camera for real-time sign language translation.
4. Explore various features such as changing languages and accessing recent translations.

ISSUES

If you encounter any issues or have suggestions, please report them in the "Issues" section of this repository.