: # Sign Language Recognition Model

Task: Create a Convolutional Neural Network (CNN) model capable of recognizing and understanding sign language from static images or video input.

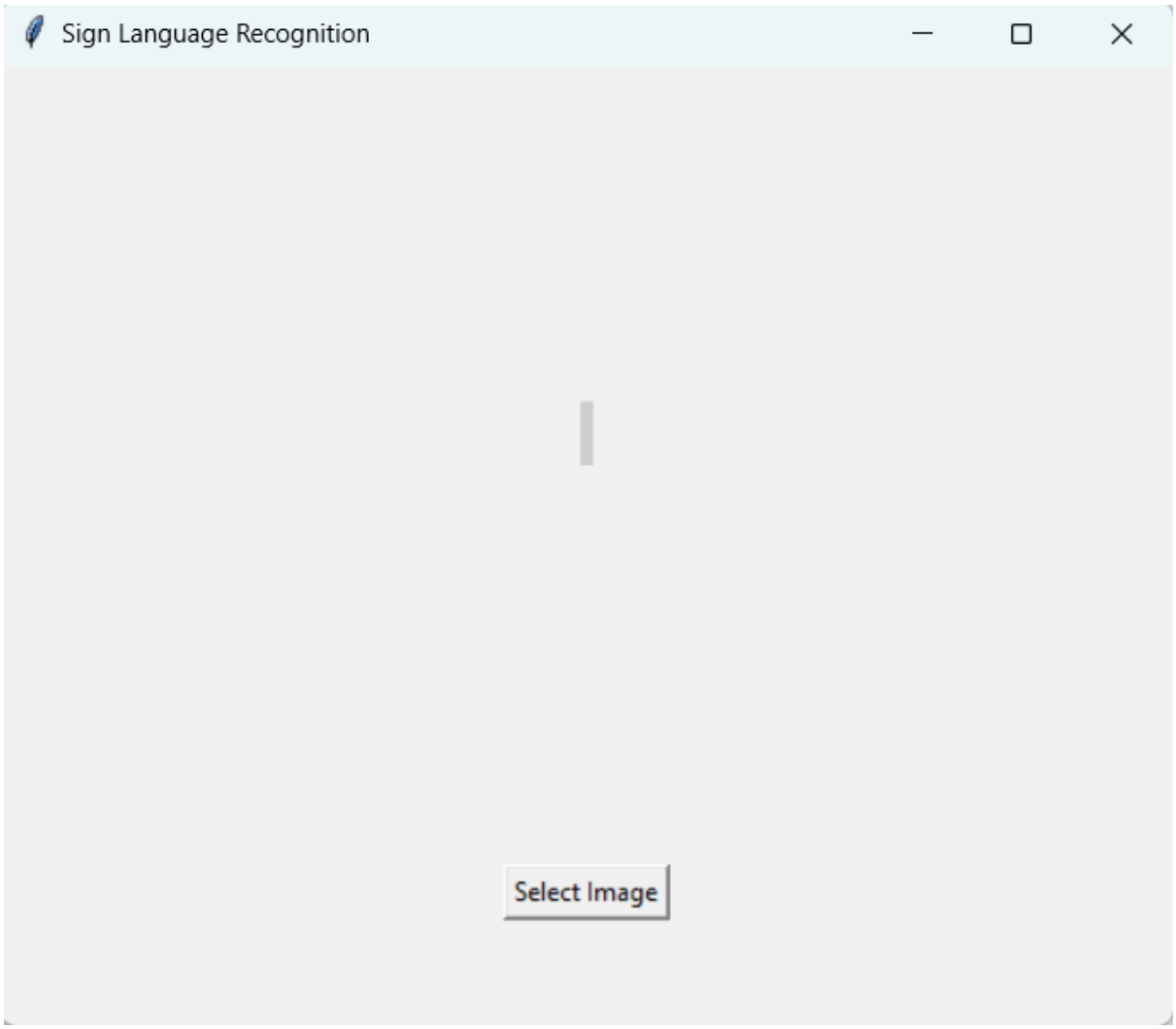
This is a particularly challenging task as it involves recognizing complex hand and finger movements.

How the task was implemented: The Model I used was sequential CNN model where the input to the model was through images of hand signs with class labels where each folder was a class which had similar signs related to the label.

The data for the implementation was taken from Kaggle (link provided at the end)

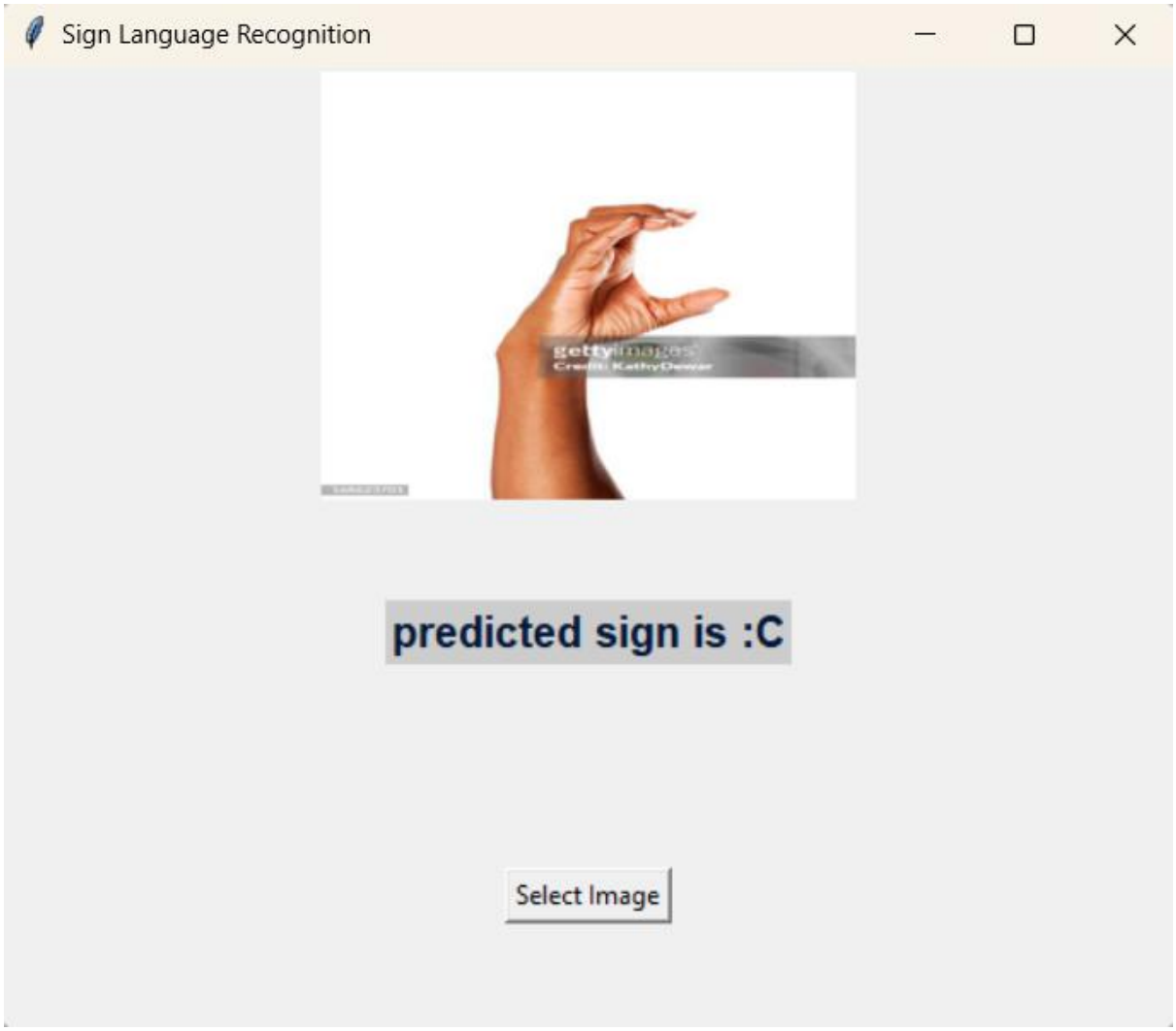
Consisted of training data and testing data the data of American Sign Language images which was then loaded after loading the data images were resized and then the images were used for training after splitting them into train and validation after splitting them the model was compiled in 5 epochs which gave us test accuracy of 96%.Then the model was tested on with a random hand sign image which the correctly predicted (To use only Signs from test as reference).

Interface



Input image

Output



Links

Data : ASL Alphabet (kaggle.com)