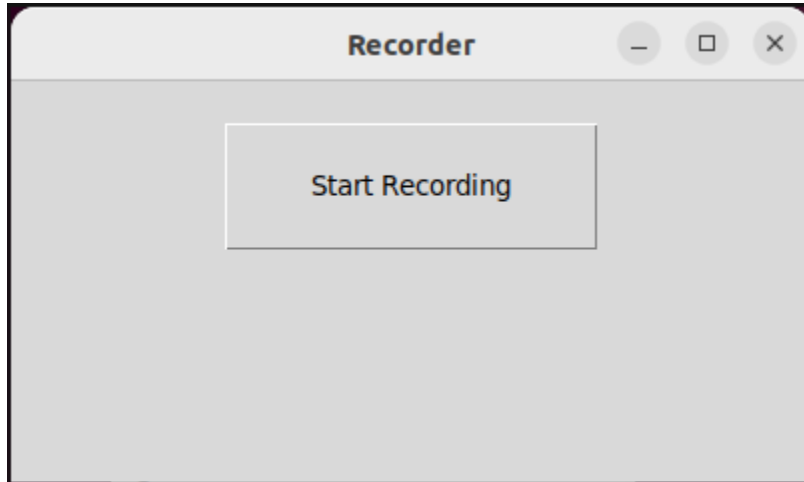# Audio from Microphone

The program provides a simple GUI for users to input audio.

After running app. py, the GUI will pop up.

There are two ways for users to start and end recording:

1. Click the recording button with the mouse to start recording, and then click again to end recording.

2. Press the spacebar to start recording, and press the spacebar again to end recording.

After the recording is completed, the program will publish the address of the recording file to the "audio_filepath" topic for further processing.

The system will always store only one recording file, and each new recording will overwrite the original file.

If using automated scripts, after the recording ends, there will be a delay of 1s-3s for the big date, and the result will be output. The results will be posted in 'translated'_ Sentence ' topic.

Why not start recording by holding down the space and end recording by releasing it?

When the user holds down the spacebar, the repeated key function of the keyboard will be triggered, which is reflected in the system as repeatedly repeating press release press release This process caused significant problems in our judgment of the end of the recording. We want to record between the first press and the last release, but it's difficult to judge.

We have considered using a timer to determine, waiting for a certain amount of time after each release command, and ignoring the release command if a release occurs again. However, this method requires adding a lot of additional functions as it is not compatible with the original mouse click method. Secondly, there may still be issues, as the recording may not be successful when the user wants to input continuously, and the delay after recording may be high. We couldn't find a replacement method after searching, so in the end, we decided to give up the method of continuously holding down the space bar and instead use the method of clicking on the space bar.