# MUST DO PRIOR TO USAGE:

## Python requirements

Install requirements using the batch file "install requirements.bat" provided, or the command "pip install -r requirements.txt"

Note that python and pip are required. That can be its own rabbit hole, so google is your friend here if you don't already use python.

## Pacenotes plugin config

Included is a pacenotes mod to make this easier, but some may not want to use it (numeric swapped)

-If you don't want to use it:

1. go to "Advanced configuration" below.
2. You will have to add a note to the pacenotes plugin for "into" calls to work properly. To do this:
   1. Navigate to <Richard Burns Rally Install>/Plugins/Pacenote/config/pacenotes/packages/additional/Extended.in
   2. Add the following to the bottom:

[PACENOTE::PYTHON\_INTO]

id=1003

column=1

## RBR config:

In RSF the launcher set the UDP telemetry on, and port to 6776. You can edit the port below if needed for some reason.

## Script Config:

1. Open iniInterpret.py
2. Edit the RBR install directory in line 6 to match yours.

## More information

There are a few videos covering Voice to Pacenotes on my YouTube channel, https://www.youtube.com/channel/UCWZhWUPFWrufq1kQlGGxKKQ

Or, read below.

# Usage:

1. Simply run the python script to get started (I use a shortcut)
2. The script will ask "Export Joystick and Buttons?” y/n" if you enter "y" and then press enter, the script will list all available joysticks, along with their assigned number as the script sees them.
3. It will then allow you to pick which joystick to use, and which button will enter “listen mode” This is hereafter called “the button.”
4. This can be skipped by simply pressing enter, if you’ve already set the default as below:
   1. Find the line "#Edit the below to set defaults" below (use ctrl+f) and enter the joystick and button numbers you'd like to use on the next two lines.
5. The script should now beep, and show a message "ready for pacenotes.".
6. If RBR isn't already running on a stage, you'll see the message "no telemetry" printed.
   1. If you see this while RBR is running on a stage, verify telemetry is on and ports are set properly.
   2. if it still doesn't work, ¯\\_(ツ)\_/¯
7. -Start your recce run as normal.

## Writing notes:

1. Press and hold “the button.”
2. Wait a split second and then say your desired pacenote.

Note**:**

A pacenote is everything you'd like the co-driver to say at this location. They can be made up of any number of "note segments" A note segment is something like "left three" or "into".

1. Release the button as soon as you are done speaking.
2. The script will confirm the call by repeating it.
3. To add distance calls, simply drive to the corner exit, press the button, and say "distance".
4. To edit the last pacenote (like if you think a turn is a Left 3, then realize that it tightens) hold the button and say, "edit last".
   1. The script will say "edit last" to confirm, then listen for the correction. Simply respond with the correct note, like "Left 3 tightens".
   2. The script will respond with the existing pacenote and the correction, i.e., "Left 3 changed to Left 3 Tightens".
5. To edit any pacenote, drive as close as possible to where you put it, hold the button, and say "edit nearest".
   1. For example, let's say we put down the distance call before realizing that the turn tightens, as above.
   2. If we try to edit last, it will edit the distance call, not the turn, so we use "Edit nearest".
   3. The script will say "edit nearest" and then the existing note.
   4. Respond with the correction.
   5. The script will confirm the correction, i.e., "Left 3 changed to Left 3 Tightens."
6. To move notes
   1. This is done the same as above, only say "move last" or "move nearest", and then say "plus" or "minus" and the distance. i.e.
      1. "Plus 10" or "Minus 15"
7. To cancel an edit or a move, simply say "Cancel" instead of a correction.
8. If you'd like to pause, rather than stop the car:
   1. Press the button BEFORE you pause, or Telemetry will stop and the script won't know where you are.
   2. After pressing the button, you can pause the game and continue as normal.
   3. This should also work for editing notes, but I've never tested it.

## Outputting the result:

1. To exit the pacenotes writing loop, press the "Q" key.

Note:

You may have to hold it for a second.

1. The script will beep to confirm its entering output mode.
2. The script will open an explorer dialog named 'Select the default pacenotes file'.
3. Select the default pacenote file for the stage from <Richard Burns Rally Install>/Plugins/NGPCarMenu/MyPacenotes/<stage name>
4. will then immediately open another called 'New pacenotes file.'
5. Pick a name for the new pacenotes ("made with Wrench's awesome python script" would be a great name, just sayin')
   1. Remember to include the ".ini".
6. Press "save"

## Using the pacenotes

1. RBR RSF mod's version of the pacenotes plugin should use the latest pacenote file by default, so simply exit to the main menu (RSF menu) and reload the stage.

# ADVANCED CONFIGURATION:

## Pacenotes

1. To set up your own dictionary from your current pacenotes / codriver mod:
   1. To get a list of all possible notes, go to <rbr install>/Plugins/Pacenote/Sounds and create an empty folder called "blank".
      1. I name it "empty" so I know what it is.
   2. Open CMD and run <rbr install>/Plugins/Pacenote/bin/find-missing.cmd with that folder name. i.e.,

"D:\Richard Burns Rally/Plugins/Pacenote/bin/find-missing.cmd" empty

1. This will generate a list of all missing audio files, which is nice for us because they're all missing.
2. Look at "noteDict.py" to see how the dictionary is built and copy that with your list of missing files.
   1. You can copy the list from the CMD window to excel, and with some excel magic output the right format.
   2. Say you put the list in column A. split the text so that the audio file name is by itself (split by \, then again by .)
   3. Delete all other columns.
   4. In cell B1, enter the formula ="'"&A1&"'," (or something like that)
   5. Drag that down to the bottom of the list.
   6. Copy Column B and replace the list in noteDict.py.

Note:

Co-driver mods that have a combination of underscores between words, and words just smashed together won't work, i.e.

"LEFT\_TWO" and "DONTCUT"

They must all have underscores. Hopefully, I'll remember to make a YouTube video of all of that at some point.

1. If you've changed the config as above, and the pacenotes plugin UI now has names listed wrong, you have two options:
   1. Ignore it, the whole point of the script is to not need the UI in the first place.
   2. Edit the RBR install directory lines in translationFix.py and then run it
      1. This will change the translations to match the ones you've defined in the config.

## Pacenotes Verification

1. When the script runs, it first looks through the list of note segments in noteDict.py, and searches the pacenotes plugin folder for their IDs. To verify that it found them all, run the script and then open "failedtypes.txt" it should only contain "[]". If not, check if the calls listed there are missing altogether, or have an issue with the naming convention like a space instead of an underscore.

## Using languages other than English

1. In theory, you should be able to follow the above steps to generate your own noteDict.py, and then find the line containing “r.recognize\_google()” in voiceToPacenotes.py, and change it to match your language, i.e., r.recognize\_google(audio, language="fr-FR")
   1. Google's documentation on that is [here](https://cloud.google.com/speech-to-text/docs/speech-to-text-supported-languages):
2. You will also have to fiddle with the text replacement lines and function calls for "edit last" and such, but python is pretty human readable so it shouldn't be too hard to figure out.
3. Obviously, I have not tested this.

If you run into problems, or if I forgot anything here, join my discord [here](https://discord.gg/Mqk53VRj) or send me a DM @Wrench#4029