Week 3 group assignment
MKI59: Robotlab practical
November 14, 2018

In this assignment you will integrate what you learned in the **audio, sonar and vision** tutorials into the interface that you started working with last week. Update the interface and backend such that it includes the following capabilities:

1. Add a 'parrot mode' button: When this button is pressed the Nao will listen for familiar words. When the Nao hears a familiar word it will say the word. The Nao will remain in this mode until a specific word is mentioned, a stopword basically. When the Nao hears this stopword it will stop listening and exit this listening mode.
   The list of familiar words: `hermione, duck, spinoza, alpha, pikachu`
   Stopword: `stop`

2. Last week you created two buttons where the Nao makes some arm movement. Choose one of those buttons, and modify the underlying action such that when you press said button, the Nao looks around, walks towards the nearest person (face), stops 50 cm before the person (try using the sonar) and does the arm movement.

3. Add a 'terminator vision' button. When this button is pressed:

   a) it opens a new window and it streams the feed from one of the Nao cameras

   b) the camera feed needs to look something like Figure 1: red filter, bounding box around the face, stream of meaningful numbers in the top left corner.

   c) The Nao eyes turn red

   d) When the Nao detects a face it says **hasta la vista baby**

When you complete the assignment, push your code to your group Gitlab repository.

Figure 1: Example terminator vision