Program Flow Chart for Visual Recognition Demo

Red processes are handled by robot

Blue processes are handled by IBM Bluemix

1. Verbal command to robot

6. Animated speak results

5. Parse results into coherent English

4. Process request and return results

3. Make API call to Bluemix VR (sending photo?)

2. Take picture of person

1. Verbal command to robot
   1. Known
      1. I have been able to setup the robot to use the “basic channel” and autonomous life. With that setting, it has pre-built behaviors and it will listen for verbal commands. When it receives a verbal command that it recognizes, it then executes the behavior
   2. Unknown
      1. How to create new verbal command
      2. Is it better to have our commands running with all of the others, or to run the robot in a state that it only is listening for our commands.
2. Take picture of person
   1. Known
      1. There is a behavior in Choregraphe for taking a picture.
   2. Unknown
      1. Where it stores the photo
      2. How you access the photo so that you can forward
      3. The Accenture demo included an animation when the robot took the picture, along with some verbal comment like “Say cheese”
3. Make API call to Bluemix VR (sending photo?)
   1. Known
      1. Have sample Python code that calls the service via API and returns analysis
      2. Have setup service in Bluemix with authorization keys
   2. Unknown
      1. Does the returned result include both gender and age?
      2. How to implement that in Choregraphe
      3. How to send image file with request rather than reference image URL (as is used in the sample code)
4. Process request and return results
   1. Known
      1. Tested basic API call successfully with Python file
5. Parse results into coherent English
   1. Known
   2. Unknown
      1. How to break apart the JSON response to just the info we want
      2. How to combine the info from result into coherent response
      3. How to have the robot convert to speech
      4. Assuming that we would use text to speech conversion in robot (and that it already has that capability). Another alternative might be to use that service inside of Watson. Then would we return an audio file for playback?