

behavior.xarの内容

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1:<?xml version="1.0" encoding="UTF-8" ?>
2:<ChoregrapheProject xmlns="http://www.aldebaran-robotics.com/schema/choregraphe/project.xsd" xar_version="3">
3:  <Box name="root" id="1" localization="8" tooltip="Root box of Choregraphe's behavior. Highest level
   possible." x="0" y="0">
4:    <bitmap>media/images/box/root.png</bitmap>
5:    <script language="4">
6:      <content>
7:        <![CDATA[]]>
8:      </content>
9:    </script>
10:    <Input name="onLoad" type="1" type_size="1" nature="0" inner="1" tooltip="Signal sent when diagram is
   loaded." id="1" />
11:    <Input name="onStart" type="1" type_size="1" nature="2" inner="0" tooltip="Box behavior starts when a
   signal is received on this input." id="2" />
12:    <Input name="onStop" type="1" type_size="1" nature="3" inner="0" tooltip="Box behavior stops when a
   signal is received on this input." id="3" />
13:    <Output name="onStopped" type="1" type_size="1" nature="1" inner="0" tooltip="ボックスBehaviorの終了時に
   信号を送る." id="4" />
14:    <Timeline enable="0">
15:      <BehaviorLayer name="behavior_layer1">
16:        <BehaviorKeyframe name="keyframe1" index="1">
17:          <Diagram>
18:            <Box name="Set Language" id="2" localization="8" tooltip="Select the language you would
   like the robot to speak and understand. Any following call toALSpeechRecognition (Speech Reco. box for
   instance) or ALTextToSpeech (Say box&#xA0;for instance) will use this language." x="258" y="294">
19:              <bitmap>media/images/box/interaction/say.png</bitmap>
20:              <script language="4">
21:                <content>
22:                  <![CDATA[class MyClass(GeneratedClass):
23:  def __init__(self):
24:    GeneratedClass.__init__(self, False)
25:
26:  def onLoad(self):
27:    try:
28:      self.tts = ALProxy("ALTextToSpeech")
29:    except:
30:      self.logger.warn("ALTextToSpeech is not available, language setting cannot be applied to speech")
31:      self.tts = None
32:
33:    try:
34:      self.asr = ALProxy("ALSpeechRecognition")
35:    except:
36:      self.logger.warn("ALSpeechRecognition is not available, language setting cannot be applied to
   recognition")
37:      self.asr = None
38:
39:    try:
40:      self.dialog = ALProxy("ALDialog")
41:    except:
42:      self.logger.warn("ALDialog is not available, language setting cannot be applied to dialog")
43:      self.dialog = None
44:
45:  def onInput_onSet(self):
46:    lang = self.getParameter("Language")
47:    try:
48:      if self.asr:
49:        self.asr.setLanguage( self.getParameter("Language") )
50:      if self.tts:
51:        self.tts.setLanguage( self.getParameter("Language") )
52:      if self.dialog:
53:        self.dialog.setLanguage( self.getParameter("Language") )
54:      if self.tts is None and self.asr is None and self.dialog is None:
55:        raise RuntimeError("Cannot set language: neither ALTextToSpeech nor ALSpeechRecognition nor
   ALDialog is available.")
56:    except:
57:      error = "Language " + lang + " cannot be set."
58:      self.logger.warn(error)
59:      self.onError(error)]]>
60:      </script>
61:    </content>
62:  </script>
63:  <Input name="onLoad" type="1" type_size="1" nature="0" inner="1" tooltip="Signal
   sent when diagram is loaded." id="1" />
64:  <Input name="onSet" type="1" type_size="1" nature="1" inner="0" tooltip="The data is
   set when a signal is received on this input." id="2" />
65:  <Output name="onReady" type="1" type_size="1" nature="2" inner="0" tooltip="Signal
   sent when the data has been set." id="3" />
66:  <Output name="onError" type="3" type_size="1" nature="2" inner="0" tooltip="Error
   output:&#xA0;- triggered if the language asked cannot be set" id="4" />
67:  <Parameter name="Language" inherits_from_parent="0" content_type="3" value="English"
   default_value="English" custom_choice="1" tooltip="Set the language the robot speaks and understands." id="5">
68:    <Choice value="Arabic" />
69:    <Choice value="Brazilian" />
70:    <Choice value="Chinese" />
71:    <Choice value="Czech" />
72:    <Choice value="Danish" />
73:    <Choice value="Dutch" />
74:    <Choice value="English" />
75:    <Choice value="Finnish" />
76:    <Choice value="French" />
77:    <Choice value="German" />

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78:         <Choice value="Greek" />
79:         <Choice value="Italian" />
80:         <Choice value="Japanese" />
81:         <Choice value="Korean" />
82:         <Choice value="Norwegian" />
83:         <Choice value="Polish" />
84:         <Choice value="Portuguese" />
85:         <Choice value="Russian" />
86:         <Choice value="Spanish" />
87:         <Choice value="Swedish" />
88:         <Choice value="Turkish" />
89:     </Parameter>
90:     <Resource name="Speech" type="Lock" timeout="0" />
91: </Box>
92: <Box name="Say" id="1" localization="8" tooltip="Say some text. Note that you must open
the box to enter the text." x="642" y="565">
93:     <bitmap>media/images/box/interaction/say.png</bitmap>
94:     <script language="4">
95:         <content>
96:             <![CDATA[class MyClass(GeneratedClass):
97: def __init__(self):
98:     GeneratedClass.__init__(self, False)
99:
100: def onLoad(self):
101:     self.bIsRunning = False
102:
103: def onUnload(self):
104:     self.bIsRunning = False
105:
106: def onInput_onStart(self):
107:     self.bIsRunning = True
108:
109: def onInput_onStop(self):
110:     if( self.bIsRunning ):
111:         self.onUnload()
112:         self.onStopped()]]>
113: </content>
114:     </script>
115:     <Input name="onLoad" type="1" type_size="1" nature="0" inner="1" tooltip="Signal
sent when Diagram is loaded." id="1" />
116:     <Input name="onStart" type="1" type_size="1" nature="2" inner="0" tooltip="Box
behavior starts when a signal is received on this Input." id="2" />
117:     <Input name="onStop" type="1" type_size="1" nature="3" inner="0" tooltip="Box
behavior stops when a signal is received on this Input." id="3" />
118:     <Output name="onStopped" type="1" type_size="1" nature="1" inner="0" tooltip="Signal
sent when box behavior is finished or stopped." id="4" />
119:     <Parameter name="Voice shaping (%)" inherits_from_parent="0" content_type="1"
value="100" default_value="100" min="50" max="150" tooltip="Used to modify at runtime the voice feature (tone,
speed). In a slightly different way than pitch and speed, it gives a kind of 'gender or age'
modification; effect. For instance, a quite good male derivation of female voice can be
obtained setting this parameter to 78%. Note: For a better effect, you can compensate this parameter
with the speed parameter. For example, if you want to decrease by 20% the voice shaping, you will have
to increase by 20% the speed to keep a constant average speed. Warning! This feature is not
available yet in Japanese, Chinese and Korean." id="5" />
120:     <Parameter name="Speed (%)" inherits_from_parent="0" content_type="1" value="97"
default_value="100" min="50" max="200" tooltip="Changes the speed of the voice. Note: For a better
effect, you can compensate this parameter with the voice shaping parameter. For example, if you want to
increase by 20% the speed, you will have to decrease by 20% the voice shaping to keep a constant
average speed. Warning! This feature is not available yet in Japanese, Chinese and Korean."
id="6" />
121:     <Timeline enable="0">
122:         <BehaviorLayer name="behavior_layer1">
123:             <BehaviorKeyframe name="keyframe1" index="1">
124:                 <Diagram>
125:                     <Box name="Say Text" id="2" localization="8" tooltip="Say the text
received on its input." x="422" y="65">
126:                         <bitmap>media/images/box/interaction/say.png</bitmap>
127:                         <script language="4">
128:                             <content>
129:                                 <![CDATA[import time
130:
131: class MyClass(GeneratedClass):
132:     def __init__(self):
133:         GeneratedClass.__init__(self, False)
134:         self.tts = ALProxy('ALTextToSpeech')
135:         self.ttsStop = ALProxy('ALTextToSpeech', True) #Create another proxy as wait is blocking if audioout is
remote
136:
137:     def onLoad(self):
138:         self.bIsRunning = False
139:         self.ids = []
140:
141:     def onUnload(self):
142:         for id in self.ids:
143:             try:
144:                 self.ttsStop.stop(id)
145:             except:
146:                 pass
147:         while( self.bIsRunning ):
148:             time.sleep( 0.2 )
149:

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150:     def onInput_onStart(self, p):
151:         self.bIsRunning = True
152:         try:
153:             sentence = "%RSPD=" + str( self.getParameter("Speed (%)") ) + "% "
154:             sentence += "%VCT=" + str( self.getParameter("Voice shaping (%)") ) + "% "
155:             sentence += str(p)
156:             sentence += "%RST%"
157:             id = self.tts.post.say(str(sentence))
158:             self.ids.append(id)
159:             self.tts.wait(id, 0)
160:         finally:
161:             try:
162:                 self.ids.remove(id)
163:             except:
164:                 pass
165:             if( self.ids == [] ):
166:                 self.onStopped() # activate output of the box
167:                 self.bIsRunning = False
168:
169:     def onInput_onStop(self):
170:         self.onUnload()]]>
171:</content>
172:
173:         </script>
174:         <Input name="onLoad" type="1" type_size="1" nature="0" inner="1"
175:         tooltip="Signal sent when Diagram is loaded." id="1" />
176:         <Input name="onStart" type="3" type_size="1" nature="2"
177:         inner="0" tooltip="Box behavior starts when a signal is received on this Input." id="2" />
178:         <Input name="onStop" type="1" type_size="1" nature="3" inner="0"
179:         tooltip="Box behavior stops when a signal is received on this Input." id="3" />
180:         <Output name="onStopped" type="1" type_size="1" nature="1"
181:         inner="0" tooltip="Signal sent when Box behavior is finished." id="4" />
182:         <Parameter name="Voice shaping (%)" inherits_from_parent="1"
183:         content_type="1" value="100" default_value="100" min="50" max="150" tooltip="Used to modify at runtime the voice
184:         feature (tone, speed). In a slightly different way than pitch and speed, it gives a kind of "gender or
185:         age" modification effect. For instance, a quite good male derivation of female voice can
186:         be obtained setting this parameter to 78%. Note: For a better effect, you can compensate this
187:         parameter with the speed parameter. For example, if you want to decrease by 20% the voice shaping, you
188:         will have to increase by 20% the speed to keep a constant average speed." id="5" />
189:         <Parameter name="Speed (%)" inherits_from_parent="1"
190:         content_type="1" value="100" default_value="100" min="50" max="200" tooltip="Changes the speed of the voice.
191:         Note: For a better effect, you can compensate this parameter with the voice shaping parameter.
192:         For example, if you want to increase by 20% the speed, you will have to decrease by 20% the voice shaping
193:         to keep a constant average speed." id="6" />
194:         </Box>
195:         <Box name="Localized Text" id="5" localization="8" tooltip="Send on
196:         the output the text associated with the robot's current voice language. You can display and edit the
197:         text associated with any language by selecting the language in the combobox. Warning!! The
198:         text sent on the output is NOT the displayed one but the one associated with the robot's current voice
199:         language." plugin="localizationbox_plugin" x="114" y="68">
200:             <bitmap media/images/box/interaction/vocabulary.png</bitmap>
201:             <script language="4">
202:                 <content>
203:                     <![CDATA[# /!% Generated content. Do not edit!
204:
205: class MyClass(GeneratedClass):
206:     def __init__(self):
207:         try: # disable autoBind
208:             GeneratedClass.__init__(self, False)
209:         except TypeError: # if NAOqi < 1.14
210:             GeneratedClass.__init__( self )
211:
212:         self.tts = ALProxy("ALTextToSpeech")
213:         self.sentences = {
214:             "Arabic" : "مرحبا",
215:             "Czech" : "Ahoj",
216:             "Danish" : "Hej",
217:             "German" : "Hallo",
218:             "Greek" : "",
219:             "English" : "Hello",
220:             "Spanish" : "Hola",
221:             "Finnish" : "Hei",
222:             "French" : "Bonjour",
223:             "Italian" : "Ciao",
224:             "Japanese" : "こんにちは",
225:             "Korean" : "안녕하세요",
226:             "Dutch" : "Hallo",
227:             "Norwegian" : "",
228:             "Polish" : "Cześć",
229:             "Brazilian" : "Olá",
230:             "Portuguese" : "Olá",
231:             "Russian" : "Привет",
232:             "Swedish" : "Hallå",
233:             "Turkish" : "Merhaba",
234:             "Chinese" : "你好"
235:         }
236:     )
237:
238:     def onInput_onStart(self):
239:         sDefaultLang = self.tts.getLanguage()
240:         self.onStopped(self.sentences[sDefaultLang]]]]>
241:</content>
242:
243:         </script>
244:         <pluginContent>

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223:                                     <arabic>
224:                                     <![CDATA[مرحبا]]>
225:</arabic>
226:                                     <czech>
227:                                     <![CDATA[Ahoj]]>
228:</czech>
229:                                     <danish>
230:                                     <![CDATA[Hej]]>
231:</danish>
232:                                     <german>
233:                                     <![CDATA[Hallo]]>
234:</german>
235:                                     <greek>
236:                                     <![CDATA[]]>
237:</greek>
238:                                     <english>
239:                                     <![CDATA[Hello]]>
240:</english>
241:                                     <spanish>
242:                                     <![CDATA[Hola]]>
243:</spanish>
244:                                     <finnish>
245:                                     <![CDATA[Hei]]>
246:</finnish>
247:                                     <french>
248:                                     <![CDATA[Bonjour]]>
249:</french>
250:                                     <italian>
251:                                     <![CDATA[Ciao]]>
252:</italian>
253:                                     <japanese>
254:                                     <![CDATA[こんにちは]]>
255:</japanese>
256:                                     <korean>
257:                                     <![CDATA[안녕하세요]]>
258:</korean>
259:                                     <dutch>
260:                                     <![CDATA[Hallo]]>
261:</dutch>
262:                                     <norwegian>
263:                                     <![CDATA[]]>
264:</norwegian>
265:                                     <polish>
266:                                     <![CDATA[Cześć]]>
267:</polish>
268:                                     <brazilian>
269:                                     <![CDATA[Olá]]>
270:</brazilian>
271:                                     <portuguese>
272:                                     <![CDATA[Olá]]>
273:</portuguese>
274:                                     <russian>
275:                                     <![CDATA[Привет]]>
276:</russian>
277:                                     <swedish>
278:                                     <![CDATA[Hallå]]>
279:</swedish>
280:                                     <turkish>
281:                                     <![CDATA[Merhaba]]>
282:</turkish>
283:                                     <chinese>
284:                                     <![CDATA[你好]]>
285:</chinese>
286:                                     <language>5</language>
287:                                     </pluginContent>
288:                                     <Input name="onLoad" type="1" type_size="1" nature="0" inner="1"
289:                                     inner="0" tooltip="Signal sent when diagram is loaded." id="1" />
290:                                     <Input name="onStart" type="1" type_size="1" nature="2"
291:                                     inner="0" tooltip="Data is sent on the output when this input is stimulated." id="2" />
292:                                     <Output name="onStopped" type="3" type_size="1" nature="1"
293:                                     inner="0" tooltip="Data sent when asked." id="3" />
294:                                     </Box>
295:                                     <Link inputowner="0" indexofinput="4" outputowner="2"
296:                                     indexofoutput="4" />
297:                                     <Link inputowner="5" indexofinput="2" outputowner="0"
298:                                     indexofoutput="2" />
299:                                     <Link inputowner="2" indexofinput="2" outputowner="5"
300:                                     indexofoutput="3" />
301:                                     </Diagram>
302:                                     </BehaviorKeyframe>
303:                                     </BehaviorLayer>
304:                                     </Timeline>
305:                                     <Resource name="Speech" type="Lock" timeout="0" />
306:                                     </Box>
307:                                     <Link inputowner="1" indexofinput="2" outputowner="2" indexofoutput="3" />
308:                                     <Link inputowner="0" indexofinput="4" outputowner="1" indexofoutput="4" />
309:                                     <Link inputowner="2" indexofinput="2" outputowner="0" indexofoutput="2" />
310:                                     </Diagram>
311:                                     </BehaviorKeyframe>
312:                                     </BehaviorLayer>
313:                                     </Timeline>

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308: </Box>
309:</ChoregrapheProject>
310:





