Let’s Learn ROILA: Lesson 1
Robot Interaction Language

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Introduction to Robotics
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What is ROILA

- Robot Interaction Language
- Spoken language meant for robots
- Easy to understand for robots
- Easy for humans to learn
- You will:
  - Learn ROILA
  - Play with LEGO robots
Planning for this Assignment

- 3 weeks (3 classes) – same time as Science Class
- 7 homework lessons in Moodle and in total 50 words to remember
- End of 3rd lesson there will be 1 final exam (worth double!) also in Moodle
- At the end of the 3 weeks, there will be an extra practical activity
- ROILA Diary/Notebook (notes in class or while doing homework)
  - Please write down how much time it took you to complete the homework
- To learn the ROILA Vocabulary you can also use WRTS.com
Any questions so far?
Let's get started with ROILA – The Sounds

- Vowels in ROILA
  - a, e, i, o, u

- Consonants in ROILA
  - b, f, j, k, l, m, n, p, s, t, w

- 3 type of ROILA words
  - CVCV (pito, means I)
  - CVCVC (fosit, means walk)
  - CVCVCV (wekepo, means error)
Vocabulary List

- **bofute** (b oh fuh t eh) - start
- **kanek** (k aeh n eh k) - go
- **botama** (b oh t aeh m aeh) - turn
- **koloke** (k oh l oh k eh) - forward
- **webufo** (w eh b uh f oh) - left
- **besati** (b eh s aeh t ih) - right
- **nole** (n oh l eh) - backwards

*Remember! Say words as you see them, vowels and consonants always sound the same.*
Vocabulary List

- jimeja (dj eh m eh dj aeh) - quickly
- bobuja (b oh b uh dj aeh) - run
- kipupi (k ih p uh p ih) - slowly
- buse (b uh s eh) - no, not
- wopa (w oh p aeh) - ok, good
- wekapa (w eh k aeh p aeh) - error
- wolej nawe (w oh l eh dj n aeh w eh) - (an)other way

Remember! Say words as you see them, vowels and consonants always sound the same.
## Commands that you need for this lesson

<table>
<thead>
<tr>
<th>What you can say</th>
<th>What the robot can say</th>
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<tbody>
<tr>
<td>bofute – start</td>
<td>wopa = ok/good</td>
</tr>
<tr>
<td>kanek – go</td>
<td>wekapa = error</td>
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<tr>
<td>kanek koloke – go forward</td>
<td>wolej nawe = other way (when the robot bumps into something)</td>
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<tr>
<td>kanek nole – go backward</td>
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<tr>
<td>botama webuco – turn left</td>
<td></td>
</tr>
<tr>
<td>botama besati – turn right</td>
<td></td>
</tr>
<tr>
<td>botama nole – turn back</td>
<td></td>
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<tr>
<td>bobuja - run</td>
<td></td>
</tr>
<tr>
<td>kanek jimeja – go quickly</td>
<td></td>
</tr>
<tr>
<td>kanek kipupi – go slowly</td>
<td></td>
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<tr>
<td>buse kanek - stop</td>
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</tbody>
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Now let’s play and drive the robot around

**Assignment**

- Build the touch sensor and attach it to the robot (cable goes to port 4)
- Run the program (Scenario1_Lego.nxj) on your robot
- Run the program on your laptop (Eclipse, Scenario1_Imp)
- Start speaking when you see “Start Speaking” in Eclipse
- Every student should try each command
Homework (yes we have to)

- Homework is in your Science section in Moodle
- Before the next lesson you have to finish homework 1 – 4
- There is also a ROILA dictionary in Moodle
- Please remember to write down how much time it took you to do the homework
- Please remember to take notes in your ROILA diary
- Homework is important! Final exam will be from both homework and class
Thank you
See you next week!

Questions?