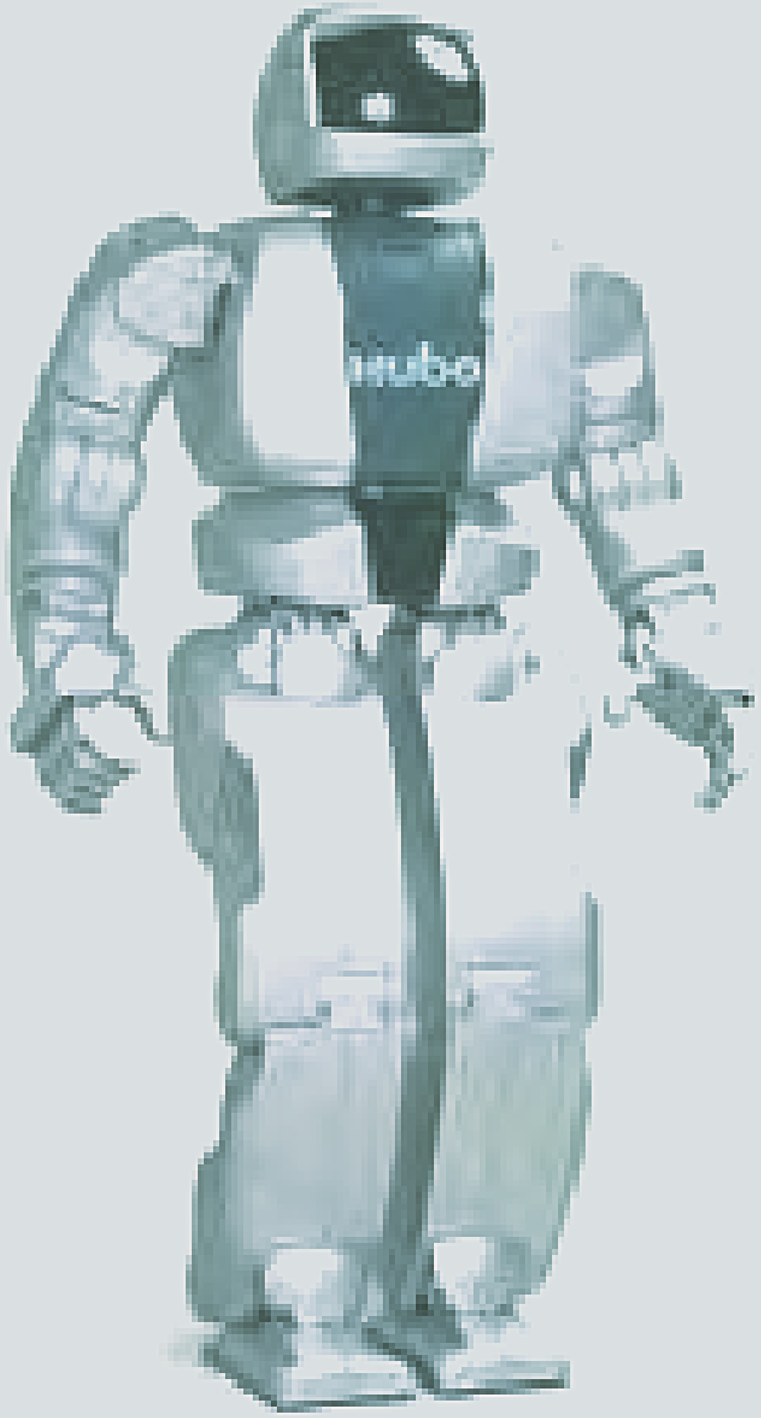


BECOME THE BEST FRIEND OF HUBO

JULY 14, 2021

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01 History

02 Impossible

03 The Other Side

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WENDIRAD DEMELASH

COMPUTER SCIENCE AND ENGINEERING STUDENT

CONTACT

+251 945 224 486
wendiradame@gmail.com
Ethiopia, Oromia, Adama

@wendirad

linkedin.com/in/wendirad-demelash

Vice President Of CSEC-ASTU

Python Developer

Competitive Programmer

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01 History

HUBO (Korean: 휴보; designated KHR-3) is a walking humanoid robot, head mounted on a life-size walking bipedal frame, developed by (KAIST) and released on January 6, 2005.

According to **Hubo's** creator Prof Jun-Ho Oh and his Plenary Session at ICRA 2012 entitled Development Outline of the Humanoid Robot: **HUBO II** the name **Hubo** is simply a name, not an abbreviation.

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01 Our Hubo

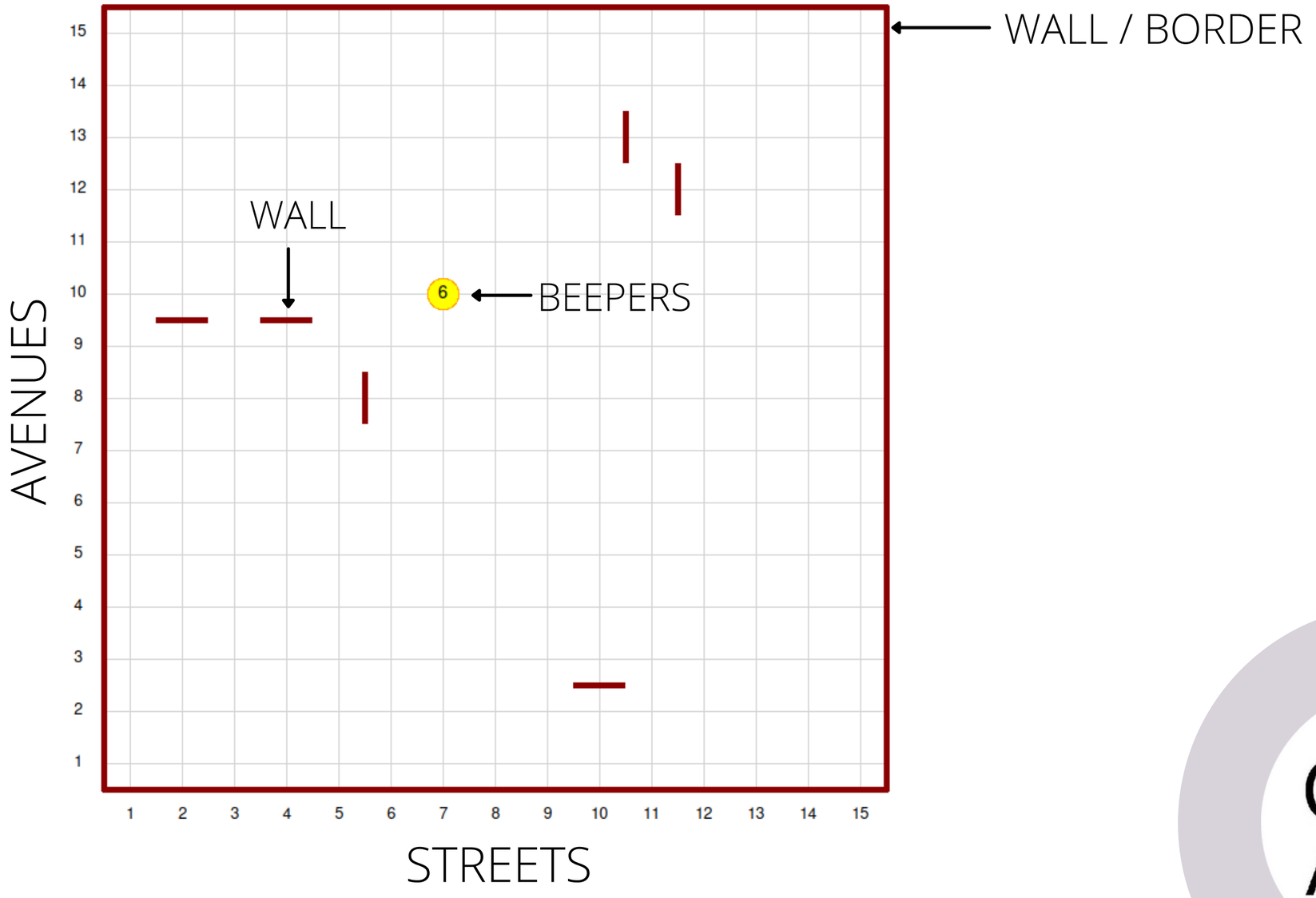
Environment for steering a robot through a grid world for learning to program in Python

"I created those materials in 2010, they are still used with only minor modifications." Otfried Cheong

Inspired by and using code from RUR-PLE. RUR - Python Learning Environment (RUR-PLE) is an educational tool to help students learn the Python programming language. Made by André Roberge

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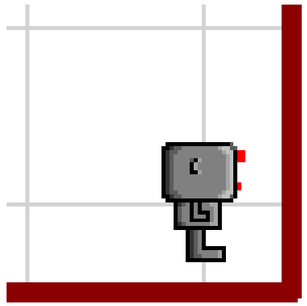
02 Impossible



02 Impossible ...

```
hubo.move()
```

RobotError("That move really hurt! Please, make sure that there is no wall in front of me!")



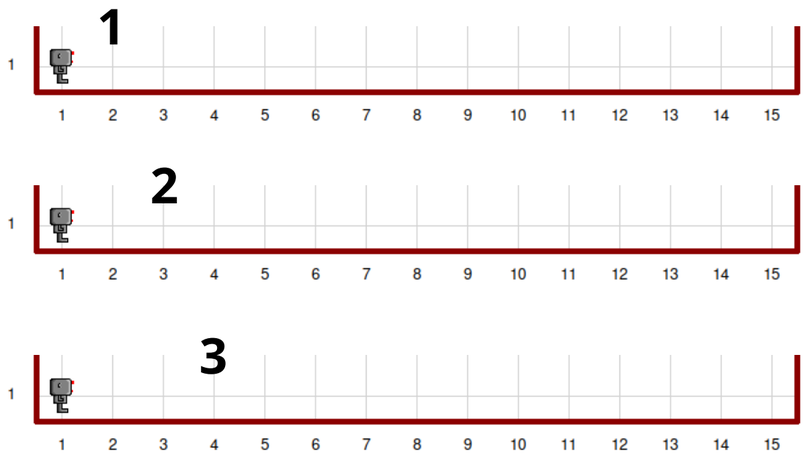
HUBO SAID

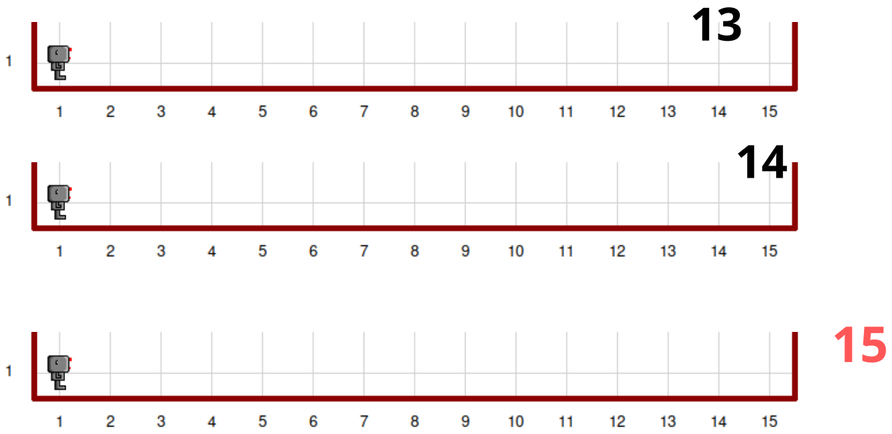
"I cannot pass through walls."

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02 The Other Side

Calculate number of steps before moving forward.



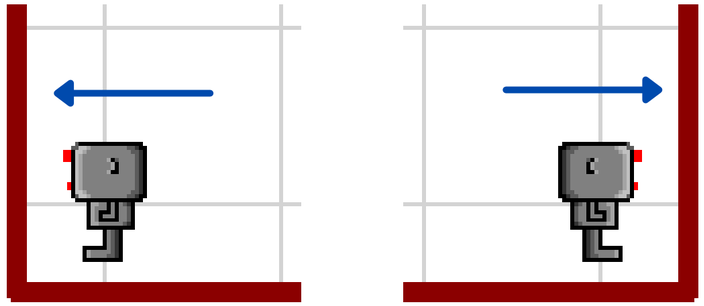


OR

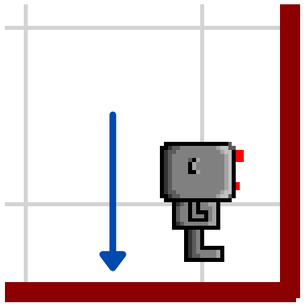
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02 The Other Side

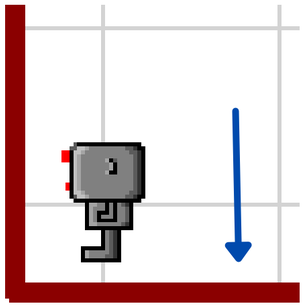
```
if hubo.front_is_clear():
    hubo.move()
```



```
if hubo.left_is_clear():
    hubo.move()
```



```
if hubo.right_is_clear():
    hubo.move()
```

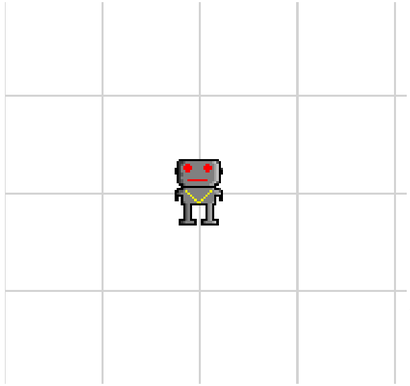


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01 Impossible ...

```
hubo.pick_beeper()
```

```
RobotError("I must be on a beeper to pick it up.")
```



HUBO SAID

"I'm cannot find beepers to pick."

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02 The Other Side

Tell Hubo to check up there is a beeper there before trying to pick up.

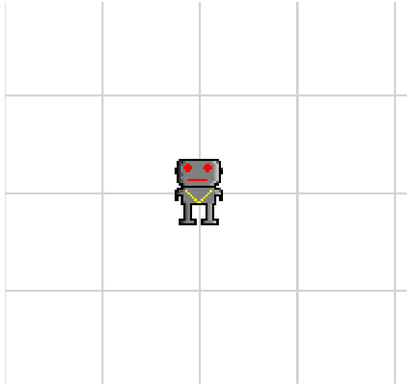
```
if hubo.on_beeper():
    hubo.pick_beeper()
```

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01 Impossible ...

```
hubo.drop_beeper()
```

```
RobotError("I am not carrying any beepers.")
```



HUBO SAID

"Give me something to put."

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02 The Other Side

1) Give enough beepers

```
hubo = Robot(beepers=100)
```

2) Check for beepers

```
if hubo.carries_beepers():
    hubo.drop_beeper()
```

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HUBO HAS

hubo.set_trace()

hubo.set_pause()

hubo.turn_left()

hubo.move()

hubo.front_is_clear()

hubo.left_is_clear()

hubo.right_is_clear()

hubo.facing_north()

hubo.carries_beepers()

hubo.on_beeper()

hubo.pick_beeper()

hubo.drop_beeper()

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Thank you!

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