KU LEUVEN

Faculteit Industriële Ingenieurswetenschappen / Elektronica-ICT
Campus De Nayer, Sint-Katelijne-Waver

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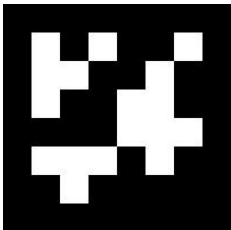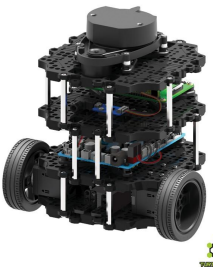
H.A.L.D.I.S.

The Mission

The HALDIS bot will interpret your instruction and fetch the correct beverage.

Follow this project on ▶ YouTube

Step 1: DETECT

HALDIS

Step 2: FOLLOW LINE

Step 3: RECOGNIZE AND GRIP

Step 4: FOLLOW LINE

Step 5: RELEASE

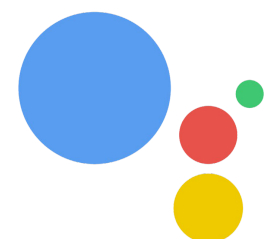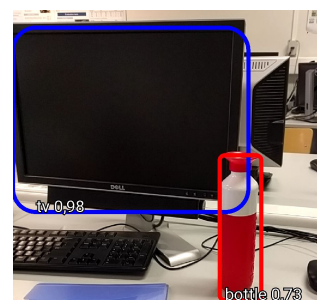*Stay seated, stay lazy!*
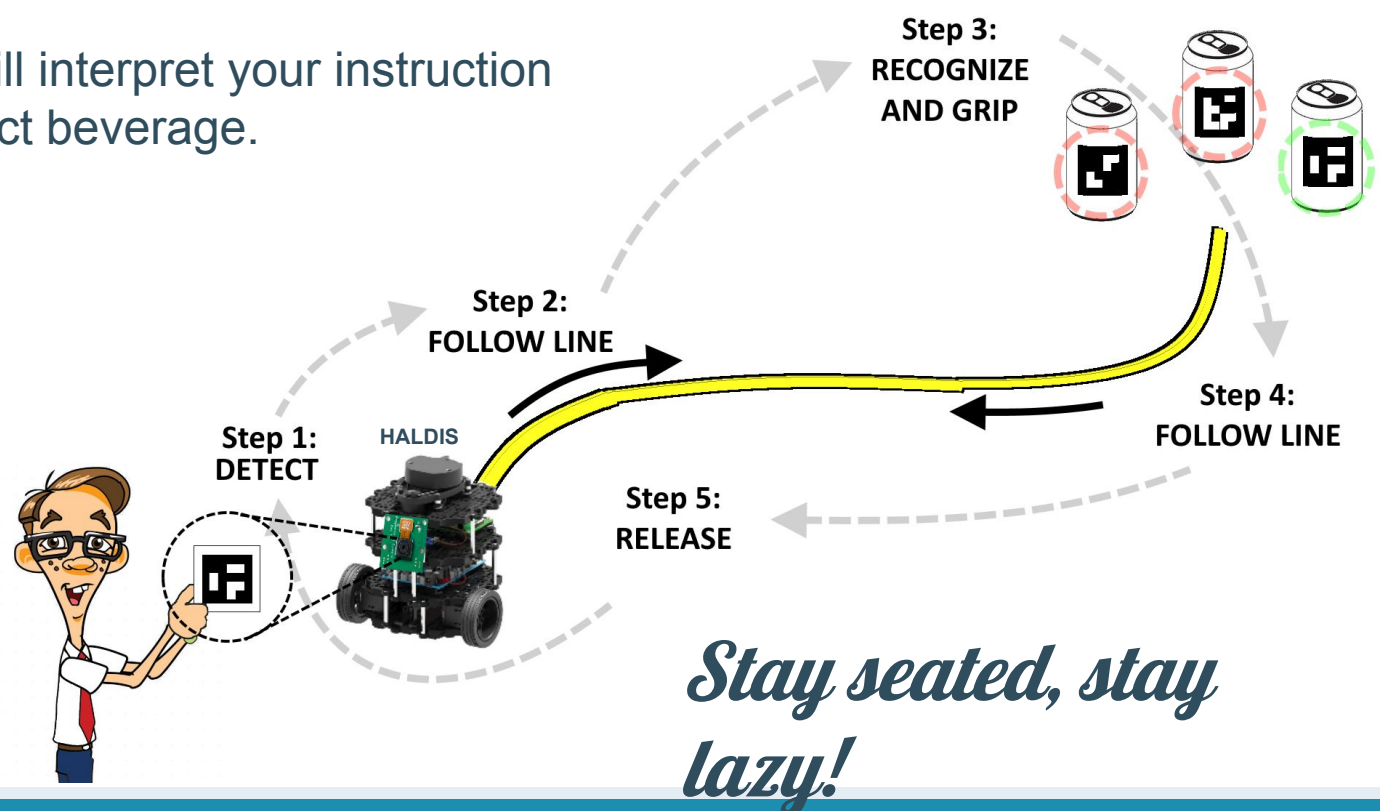
Design

Perception	Decision	Actuation
• Raspicam • ArUco Markers	• Raspberry pi	• Robot movement • Robot gripper

Future features

- Object detection and classification:
    - markerless drink detection
    - markerless visual commands (logos, gestures,...)

- Connect with Smart Home

- Use voice commands

Planning

HaldisBot planning

Jobs	Learning ROS	Movement	Integration and testing	Grabber	Integration and testing			
		Research		Research				
		Implementation	Line + Trajectory	Implementation	Add ArUco			
		Testing		Testing				
		Line detection		ArUco	Add grabber			
		Research	Integration testing	Research				
		Implementation		Implementation	Integration testing			
		Testing		Testing	Adding extensions + testing			
Milestones	20-2-2019	13-3-2019	20-3-2019	3-4-2019	22-4-2019	8-5-2019		

Time