DigiEduHack Solution
Turin - Improving the learning experience through Robotics
Challenge: Turin - Improving the learning experience through Robotics Challenge 2020

Robot assistant

Talking to the robot, a certain action will be performed

Through a voice command, the robotic arm will be able to perform certain actions required by means of sensors that are able to acquire and process voice messages.

This will help people do certain jobs.

Team: Main Error

Team members

Alessandro Boarotto, Riccardo Olivetto, Luca Bordin

Members roles and background

Alessandro Boarotto made the clip with Blender

Riccardo Olivetto and Luca Bordin editing

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Solution Details

Solution description

Our project consists of a robotic arm able to assist people in carrying out certain activities / tasks: for example, it can pass tools or perform certain actions.

This arm will serve to facilitate people in terms of time and effort

Solution context

This robotic arm was created to assist people in carrying out certain activities / tasks: for example, it can pass tools or perform certain actions.

Solution target group

The goal of our solution is to make the robot perform the most "trivial" tasks, such as taking / placing a screwdriver, to save the user time and be more efficient in the work performed.

Solution impact

Our solution aims to help people perform certain tasks, thus reducing the time required and allowing the user to focus on something else.

Solution tweet text

Reduce working time thanks to the robot assistant! Ask him to take an object, ask him to help you in the kitchen and more!

Solution innovativeness

Our project is innovative.

Solution transferability

Our solution could also be used in other household areas: for example we could ask him to mix a pot, so in this case he would take a ladle or spoon and start mixing, or, again in the home environment, we could ask him to take a piece of bread and cut it into slices.

Solution sustainability

Our idea for the implementation of the project is to add a microphone to the arm to take input commands, a camera to identify the object to be taken.

Solution team work

Following the understanding of the project, we had an initial brainstorming phase in which we thought about different areas in which it could be applied.

At the end of this phase we opted to create a robot assistant capable of assisting people in their projects.

So, once the goal was chosen, we started creating the project using the Blender modeling / composition program by initially creating an arm, and then adding the sensors needed to carry out

the various operations.