# PROGRAMMING FOR ROBOTS AND MANIPULATORS (VRM)

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## Project no. 2 (Team project)

#### Title:

The title of the project will correspond to the chosen topic and will be supplemented by the name of the team (e.g., Intelligent Sorting Machine - IACS Beasts).

### Detailed description:

The team project focuses mainly on the topic of robotic control using software such as Unity3D, ROS, Robot-Studio ABB, B&R Automation Studio, and others. The team with a maximum of 3 to 4 members will create the appropriate robotic application and present the project in the last week of the semester. A more detailed description of individual projects will be discussed with the lecturer.

Note: It will be possible to create your own project theme, but in accordance with certain principles!

#### Language:

Comments: Czech, Slovak, English (recommended) Variables, functions, and other: English

Form:

Specified files for the selected project.

Location:

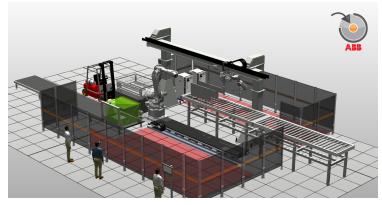
GitHub

Important Dates:

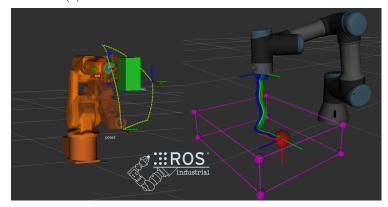
Assignment, Deadline: Discussed with the lecturer.

Maximum Score:

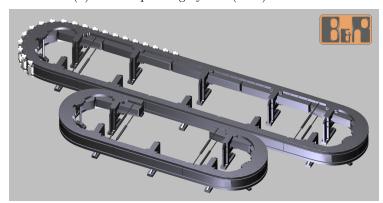
40 points



(a) RobotStudio ABB - Production line



(b) Robot Operating System (ROS)



(c) B&R Automation Studio, Scene Viewer, Mapp View



(d) Unity<br/>3D and/or Vuforia - Digital-Twin  $\,$ 

Figure 1: Project no. 2