



Laboratory for Systems and Signals

Telecontrol of a Mindstorms® NXT robot

Department for Electronic Systems and Signal Processing

Faculty of Electrical Engineering and Computing

University of Zagreb



Project team

◆ **student team:**

- Kristina Bashota
- Tibor Čordaš
- Dalibor Jelača
- Iva Jelenčić
- Vedran Koruga
- Damir Kušević

◆ **supervisor:**

- Ana Sović, dipl.ing.

◆ **mentor:**

- mr.sc. Predrag Pale

◆ **head of Laboratory:**

- prof. dr.sc. Branko Jeren



Presentation content

- ◆ **Aim of the project**
- ◆ **Introducing the robot**
- ◆ **Realisation**
- ◆ **Ideas**
- ◆ **Information**



Aim of the project

◆ Encouraging K-12 students by

- Making them familiar with the technology
- Giving them ideas on how to telecontrol a robot for
 - Playing
 - Learning
- Showing and giving them detailed directions how to make similar telecontrolling projects themselves
- Using low cost and available techniques

Introducing the robot

◆ The Mindstorms® NXT robot

◆ Accessories

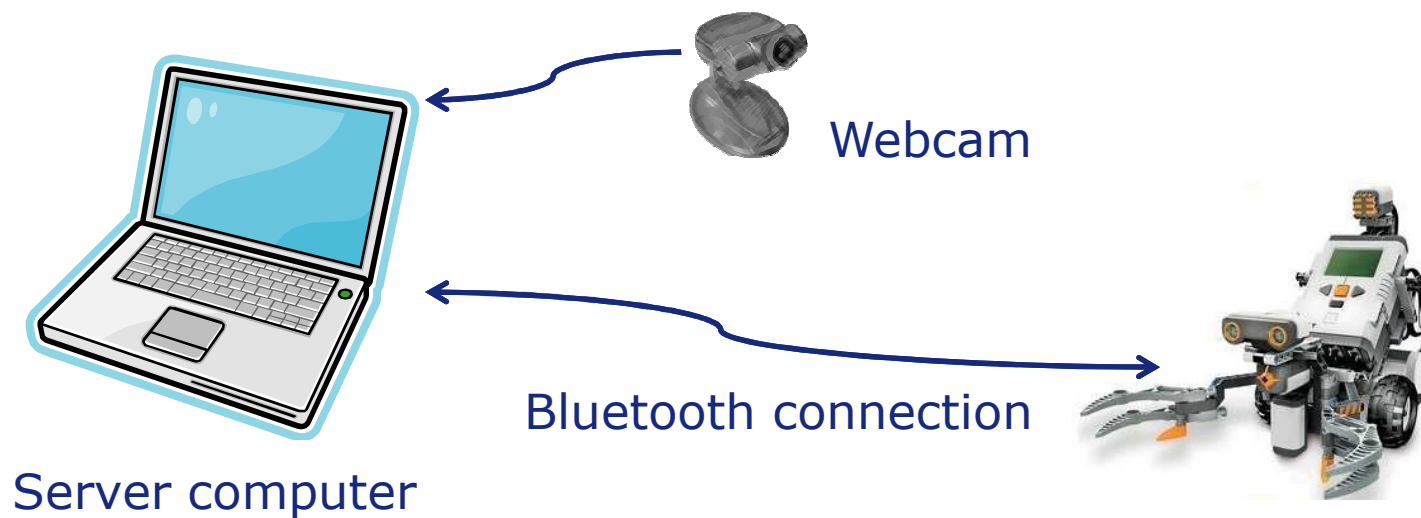
- Ultrasonic sensor
- Touch sensor
- Sound sensor



Realisation

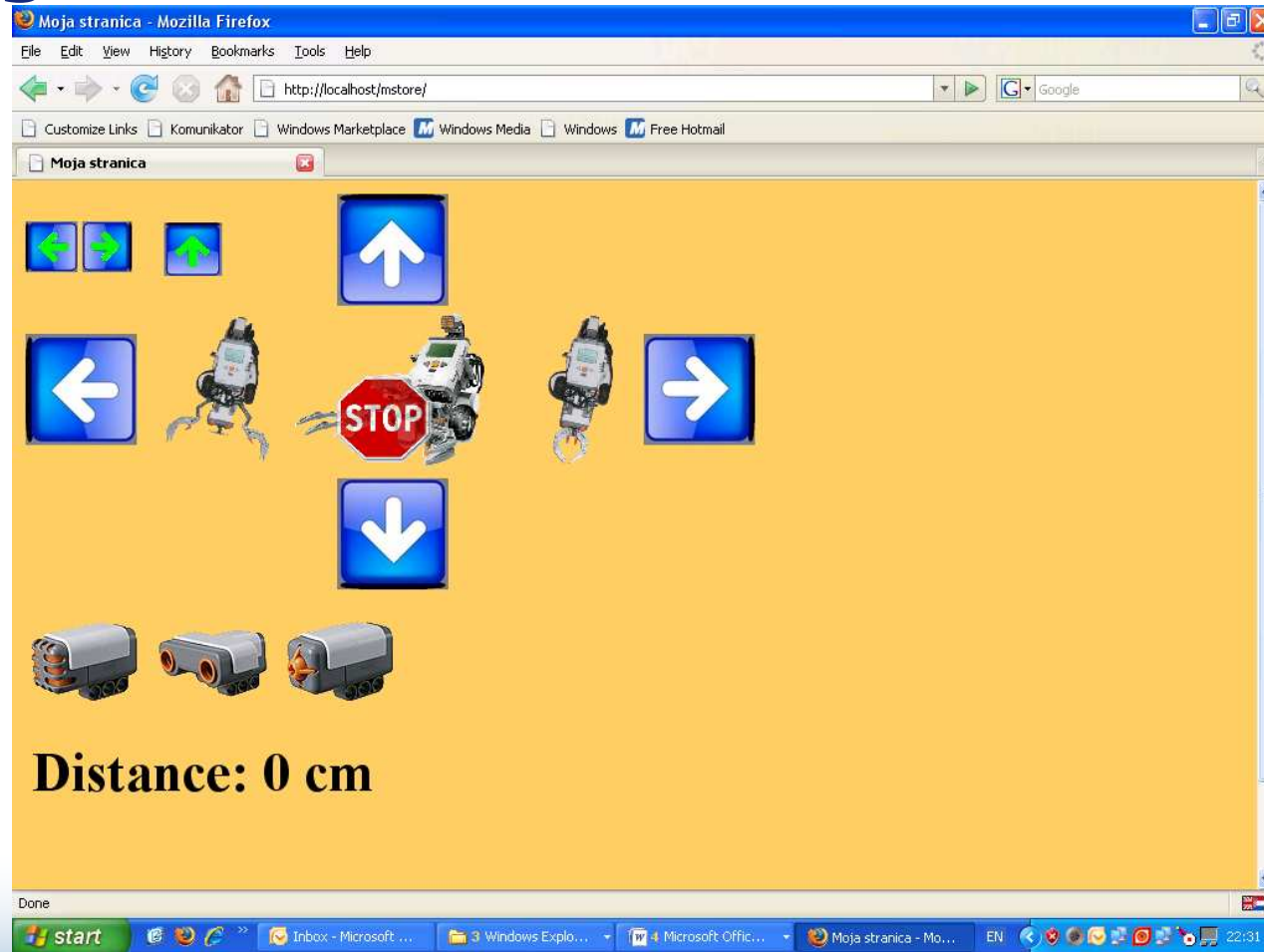
◆ Communicating via a Bluetooth connection

- Server computer communicates with the robot
- Wireless connection



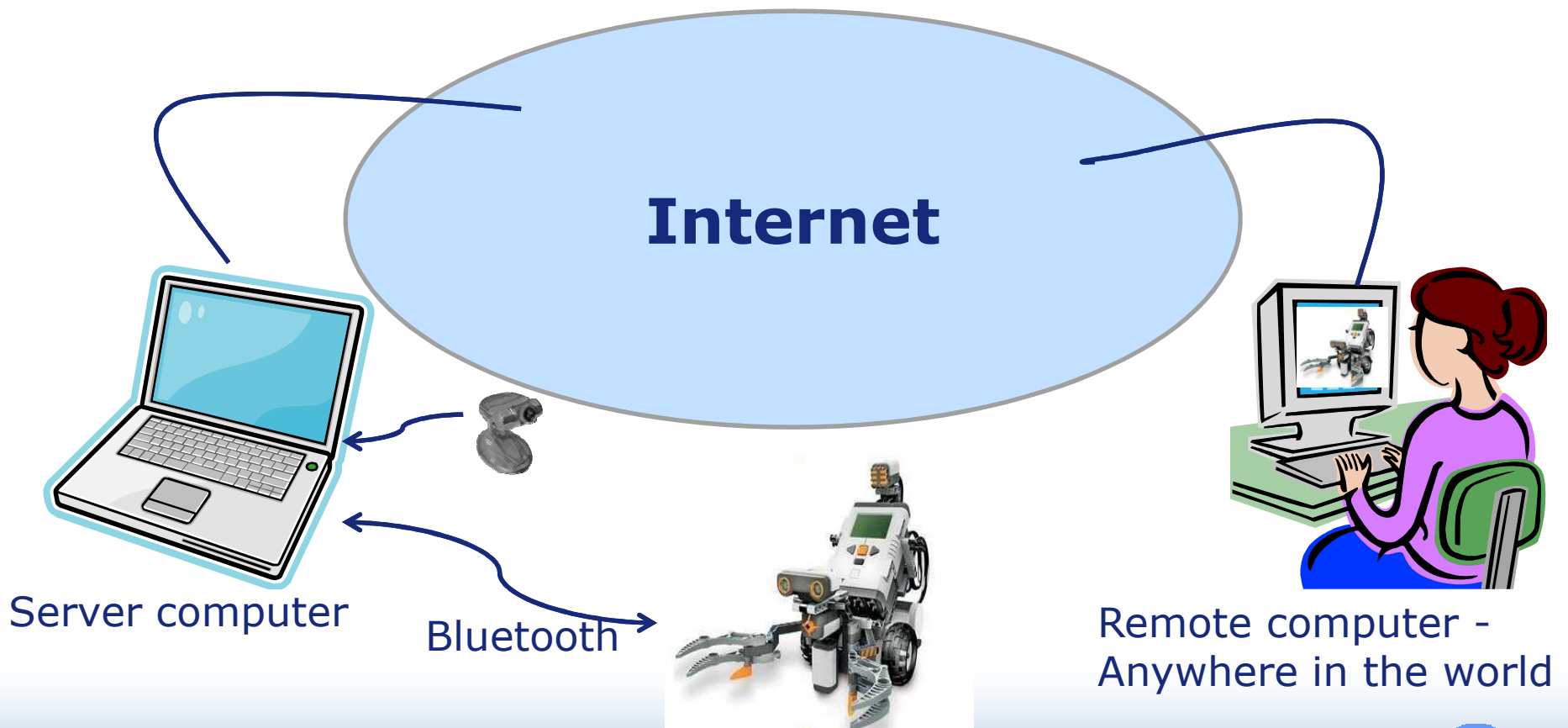
Realisation

◆ Controlling the robot through a web page



Realisation

◆ Controlling the robot over the internet



Ideas for student projects

- ◆ Robots competing
- ◆ Programming robots for tasks
- ◆ Assembling the robot into a different configuration, e.g.





Information

- ◆ **Written material and the program can be found at**
www.lss.hr/mindstorms



Thank you for your attention!

www.LSS.hr

office@LSS.hr