



INTELLIGENT CONTROL OF LIGHTING



THE PROBLEM

The classrooms in Slovenia usually have 3 rows of lights and each one has a separate switch. One of them rows is near the windows, the second one is in the middle of a classroom and the third one is at the wall.

Students and teachers have a habit to turn on all three switches at the same time, without considering if maybe turning on only one or two rows would provide enough light. In this way lots of energy is wasted!

OUR CHALLENGE

This problem would easily be avoided if students and teachers would have learned to switch on only the necessary rows of lights. At some schools they mark the switches with red, orange and green spots (red are for the lights near the windows, green for the lights

near the wall) to encourage the user to “thing before switching”.

But we took a challenge to invent something that would automatically adjust the lights in respect to the daylight.

OTHER ACTIONS

The Intelligent Control of Lighting is a microcomputer, which uses sensors on the tables and automatically adjust the lights. Besides the daylight criteria, user can choose between

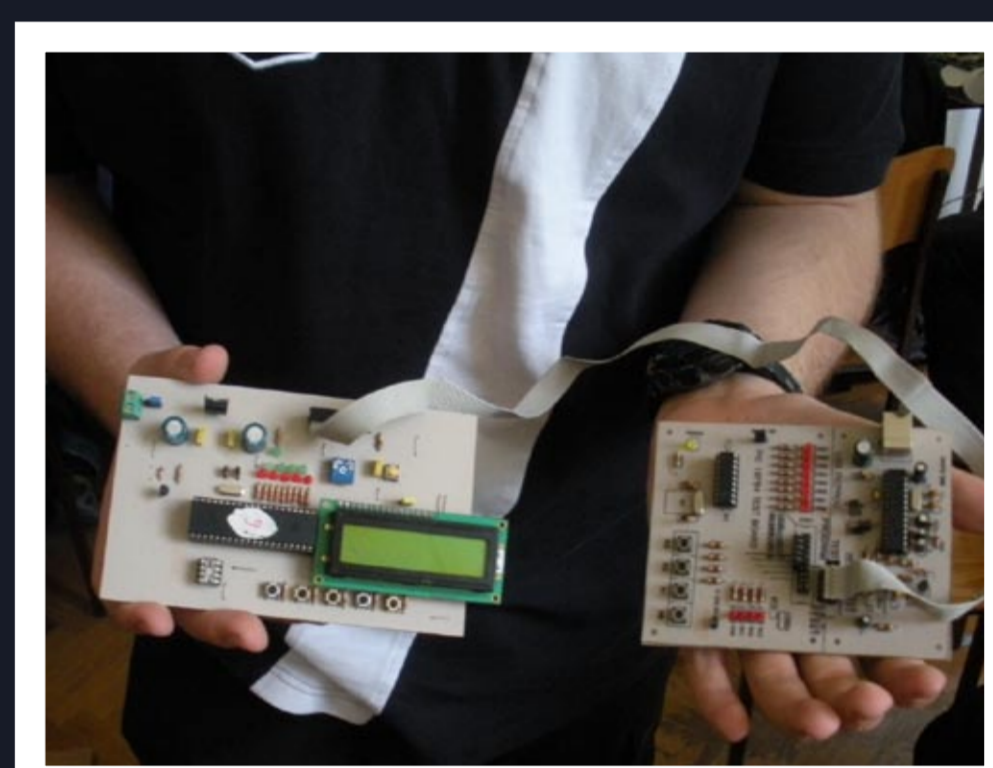
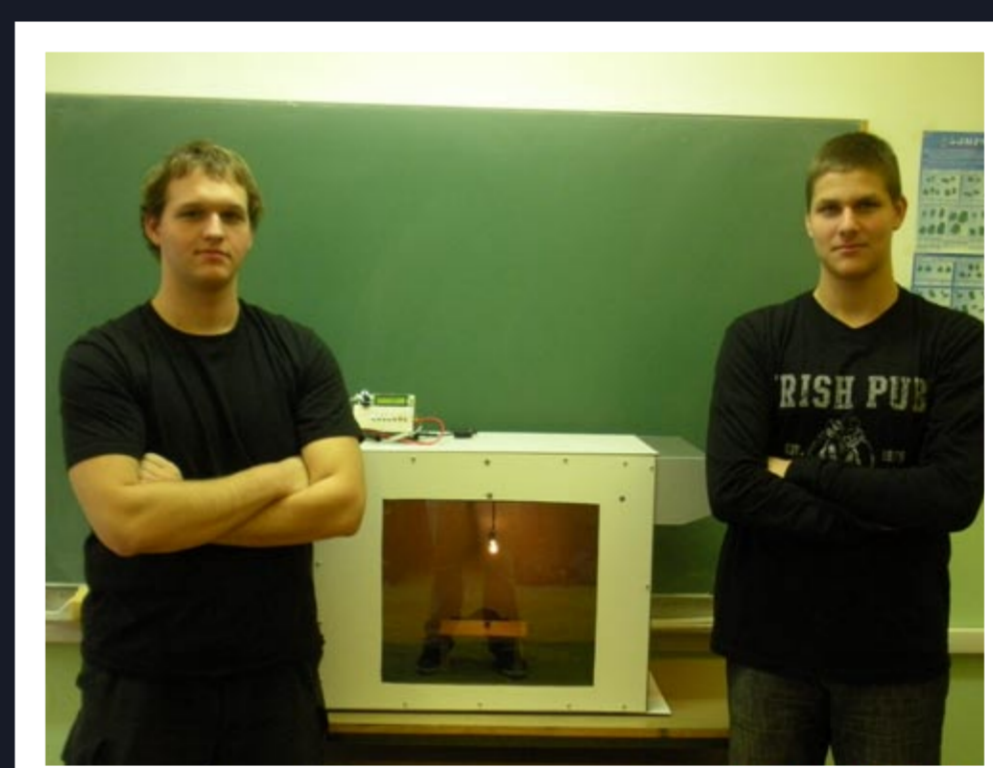
- reading mode
- writing mode
- mode for presentation (when less light is needed)
- blackboard mode (when more light on the blackboard is needed).

The main advantages of The Intelligent Control of Lighting are:

- All students have equally lighted desks.
- Saving with electricity (only so many lights are used, as needed).
- A user no longer needs to manually control the lights.
- Fast switching between modes.

KEY CONCEPTS

We have tested **The Intelligent Control of Lighting** in 4 rooms for 6 months and **saved 12 kWh!**



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