



## Project name: Smart bin

|                      |                       |                      |
|----------------------|-----------------------|----------------------|
| Countries:           | Czech Republic        | Republic of Slovenia |
| Suitable for grade:  | 3                     |                      |
| Specialization:      | IT, Automatic systems |                      |
| Responsible teacher: | Pavel Urban           | Simon Horvat         |

### Project description:

ARDUINO with modules for GSM, GPS and sensor communication must be programmed for reporting abnormal states. The bin model is realized by the partner.

### Project tasks:

#### Student #1 (CZ):

- To select sensors and modules with the partner
- To build a provisional system
- To programme ARDUINO
- To perform simulation tests
- To write documentation both in English and Czech language

#### Student #2 (SLO):

- To Make the final model
- To Assemble sensors
- To programme HW tests on ARDUINO
- To perform final tests
- To write documentation in both English and Slovenian language

### Success criteria:

The smart bin can send a message when it is full or displaced

### Developed hard skills:

Analysis of real problems, usage of different sources of information, programming in C language, software configuration, improvements in English language, equipment selection, trouble shooting, complex problem solving

### Developed soft skills:

Communication skills, problem solving skills, creativity, team work capability