



Report on tasks' completion within output four

## **EDUTRONIX – interactive educational module designed for teaching mechatronics**

**Project number:** 2015-1-PL01-KA202-016561

Key Action 2: Cooperation for innovation and the exchange of good practices, action: strategic partnerships, sector: Strategic Partnerships in the field of Education and Vocational Training

**Project's duration:** October 2015 - September 2017



## **OUTPUT 4: Software and a set of assumptions for vocational training using a model.**

During the fourth outcome our consortium chose the software which will be used in order to design and program robots or control systems. Theoretical materials and knowledge tests were created. Access to all the materials will be available through the educational platform created on the project website: [www.edutronix.eu](http://www.edutronix.eu).

List of software used in the EDUTRONIX module:

1. mBlock  
<http://www.mblock.cc/>
2. Skretch for Arduino (S4A)
3. <http://s4a.cat/>
4. Arduino  
<https://www.arduino.cc/>
5. Fritzing  
<http://fritzing.org/home/>
6. AppInventor  
<http://appinventor.mit.edu/explore/>

List of documents with theoretical materials:

- Amplifiers
- Analog and digital signals
- Basic definitions of electrical engineering and electronics
- Breadboards
- Buttons
- Capacitors
- Control systems
- Digital Displays

- Diodes
- Direct current engines
- Induction Coil
- Microsonrollers(microprocessors)
- numerical systems
- opto-isolators
- Power cables
- Rectifier circuits
- Resistors
- Semiconductors
- Sensors
- Servomechanisms
- Stabilizers
- Transformers
- Transistors
- Voltage multiplier

List of tests for checking theoretical knowledge:

- Amplifiers test
- Analog and digital systems test
- Breadboards, test
- buttons, test
- capacitors, test
- control system, test
- definitions, test
- Digital displays test
- Diode, test
- Direct current engines, test
- electrical wires , test
- inductive coil, test
- microcontrollers, test
- numerical systems, test
- Optocoupler questions
- Rectifiers, test
- resistors, test

- semiconductors, test
- sensors, test
- Servomechanisms test
- stabilizers, test
- Test transformers
- transistors, test
- voltage multipliers test

Theoretical materials along with the tests are available on the educational platform in the "MATERIALS" tab and on the DVD