

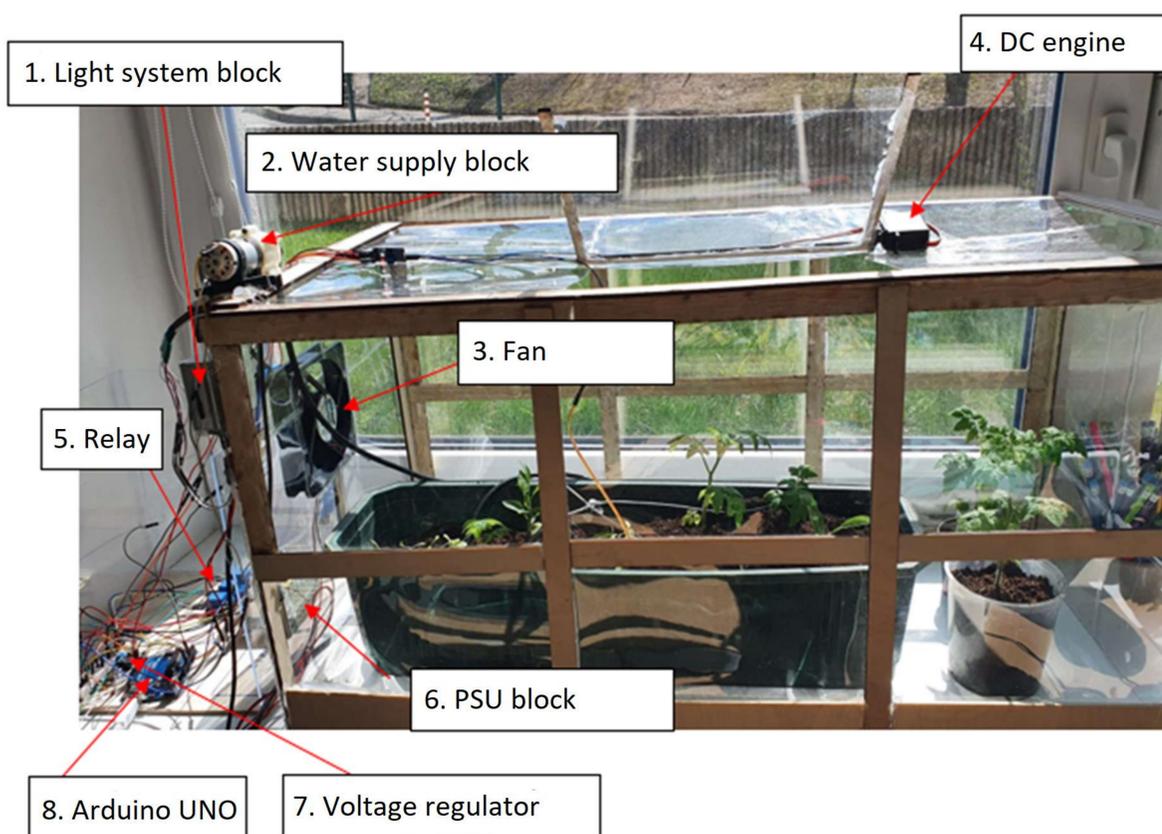
# TECHNOLOGIES IN STEM EDUCATION

Snieguolė Bagočienė | Vilniaus „Sietuvos“ progimnazija | Vilnius | Lithuania

## A smart greenhouse

The point of this project is to promote and develop practical prototyping and development skills in children by making a smart greenhouse from scratch.

The smart greenhouse works automatically by lowering the temperatures, changing the levels of humidity, soil moisture, reading the levels of water capacity that it still has, watering the plants. By having a system that is mostly self-sufficient at growing the plants we can enable older people, or the disabled to have an easy-to-use garden in the reach of their hands.



The smart greenhouse is built with the following parts:

- 1 - light system block;
- 2 - water supply pump;
- 3 - fan;
- 4 - DC engine;
- 5 - relay;
- 6 - power supply block;
- 7 - voltage regulator;
- 8 - controller "Arduino UNO".

Conclusion: The smart greenhouse project has been successful. Currently, our goals are set on making an aesthetically appealing variant that then could be launched onto the market.