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## Smart home technology

Smart home technologies evolved many years ago and for a long time they have been considered something fantastic or very expensive pleasure. Thanks to the advent of modern technologies, the development of artificial intelligence and home electronics, creating smart homes has become easy, comfortable and practically without impressive costs.

A modern automation system can be fully adapted to suit your lifestyle.

Every professional or you yourself are able to customize the system according to your needs.

Smart home technology allows you to control your smart systems with your mobile device or personal computer, even at a distance from home.

For example, turning on the air conditioner on the way to the house.

The electronic door lock and LED light will automatically work when you return home.

According to Bill Gates, in the future, homes without smart home systems will be as unfashionable as homes without Internet access today.

Let's find out more about smart home!

Let's model a smart home with our own hands using the Arduino software.

Smart home capabilities that will be presented to your attention:

1. LED blinking - imitation of switching on and off the LED;

2. Breathing light - PWM technology, to simulate the effect of breathing;

3. LED control by means of a button module - simulation of switching on and off a button;

4. Passive buzzer - sound indication simulation;

5. 1-channel relay module - simulation of an automatic switch;

6. Photocell sensor - imitation of the illumination level;

7. Angle adjustment - imitation in the creation of automatic rotation;

8. Servo motor - imitation of turning doors and windows;

9. Fan module - simulation of control of the direction of rotation and speed of the motor;

10. Steam sensor - imitation of humidity level;

11. PIP motion sensor - imitation of human or animal detection;

12. Analog sensor - imitation of a gas sensor;

13. Soil moisture sensor - imitation of a sensor for tracking the water level in the soil.

The smart home concept assumes that everyone can enjoy life.