SMART HOME MODERN TECHNOLOGIES

We live in era of discoveries in the technological world. New technologies and the Internet penetrate our life, they help us with our work, studying, hobbies, household chores etc. The modern world is full of gadgets, services, mobile solutions called upon to make communication, free time more efficient and productive. Smart home is a modern technology that makes our life easier. It is the technology that helps to automate simple and routine things.

Smart home allows us to make interaction with other technologies in our home easier and more comfortable. When you get home your smart house will already be waiting for you: lighting has already been put on, music of your mood is playing and ready-made coffee is waiting for you. Devices that create a network of smart home, are able to automate ordinary household chores. A couple of another examples: In the morning alarm clock rings, curtains open, lights and radio turns on, and breakfast is also being prepared. And all this is done without your participation. A smart house consists of many devices. This technology has a "heart" that controls everything, sensors keep track of the parameters of your home and "smart" things like bulbs, lamps, household appliances, furniture with an integrated "smart" component and much more.

A large number of solutions for home automation have already been produced for the consumer market by large manufacturers and brands. For example, smart bulbs and lamps have already been presented on the market. First idea of light bulbs for a smart home was presented by Philips. Philips HUE lamps were one of the first devices to create a smart home. As early as in 2012, these devices could track the location of people and animals in the room, automatically adjust to the current task (the person sat in a chair and lamp lit), accompany the person from the room to the room (the light puts on in front of you and goes out behind you). For these tasks, the lamps were connected to the network using a special controller, which had to be connected to your router [2].

Now there are a lot of devices for a smart home; starting from sensors, finishing with smart home appliances.

Even the large IKEA brand represented furniture with smart stuff, and now the company has announced a line of Trådfri smart devices. LED bulbs, remote controls, motion sensors, dimmers, floor and ceiling lamps, and special LED panels that can be installed in cupboard [1].

Companies like Apple and Google have already integrated the gadget support for smart home into their platform - Apple Home Kit and Google Home, respectively. Now every user has the opportunity to turn his house into a complete automated system.

For enthusiasts, there are open platforms, such as Arduino, Raspberry Pi and many others. These platforms allow you to create your smart devices and their management system. These platforms have open source code, which makes it possible to use ready-made developments to realize your own goals, and these platforms have a low entry threshold for new users because they have a large number of lessons starting from the basics. If you are interested in creating such systems, you can always try yourself using
one of these platforms. If you want to develop something new in this area Arduino and Raspberry Pi will be the best choice for your ideas.

Now a smart home can help you to save time on doing daily tasks and make their fulfillment more interesting. This is a technology that is no longer remains fantastic but is available to everyone.

REFERENCES