The Creation of a Prototype Automated System for Modifying the Control of Humidity and Temperature in the Room

Tudachkov, Ilya

Purpose: Is to create a prototype of a system that will be, primarily, intended to the aged people and people with reduced capabilities, who sometimes may face with difficulties in household chores. Creation phases: 1. Creation of a prototypes' diagram 2. Designing of a prototypes' 3D-model in Autodesk 123D Design program 3. Writing the program for prototypes' running 4. Assembling of a prototype 5. Issues identification and management Main functions: 1. Automatic conditioning system 2. Detection of gas leaking in the place 3. Automatic air change in the place when nobody is about 4. Fire detection 5. User settings control (e.g. by using smartphone) 6. Providing an owner with the information about incidents happened in the house without his presence. 7. Main functions system control using smartphone Summary: 1. I created a prototype that is able to demonstrate the running of a climate control system and to provide an individual with the information about different incidents. 2. Moreover, if this model becomes a proper system, it will reduce peoples' everyday actions in the house for sure, and the experiments with this model allowed to make sure of it. In times to come, I'm planning to begin the creation of a proper system and setting it into my own house afterwards.

Awards Won: