

Module: Intelligent house 4.0

Submodul: Installation and configuration of smart light control

Scenario to introduce into the learning situation

You are working as a trainee in a small electro installation company. A long time customer of you company gives you the order to complement and to expand the existing electrical installation step by step with smart home components.

The existing electrical installation is realized by a conventional installation. The light is controlled by two-way circuit with conventional switches.

The lighting control in the living room is done by two-way circuit with conventional switches, with which the ceiling lights are switched. Another luminaire is a floor lamp, which is connected to the power supply via a socket.

The customer wants to make the transition to smart home components gradually, in order to gain own experience with the new technology. For this purpose, in a first part of the project the lighting control in the living room will be switched to "smart" switches. The existing switching positions in the living room should be maintained. In addition, the light should be controlled also by an app via a smartphone.

Furthermore, the existing energy-saving lamps are to be replaced by LED lamps. With the new LED lights, the colour of the light can be changed. The control should be done by the app also.

Also the customer wants to be informed about additional automatization functions that could be realized with the app.