

The Project

What is the project GoBuilding-2009?

It is an e-guide to help visitors finding their way around the BBS1 buildings in Mainz. This project was initiated by our predecessors and the idea behind it was to provide a system to pupils and visitors to find easily their way around the entire school buildings. Another goal was to grant easy access to various informations about the school.

The system consists of the following main components:



The **visitor terminal**, a 19" touch-screen, serves as interface between the user and the visual system.



The **model of the building**, depicting the school ground plan, is equipped with optical effects such illumination of building parts and respective floors to help the user finding the way.

How does it work?

The system's start page is being activated by a motion control as the user approaches the terminal.



This page has four main parts:

Start page
Room search
I seek...
School-Homepage

1. Start page

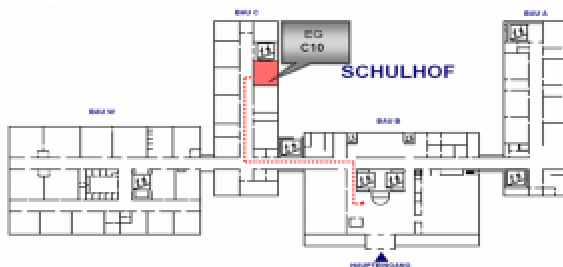
Welcomes the user and gives quick reference to operating the system. Information can be retrieved by clicking a button.

2. Room search

In case the room number is known, the shortest way can be displayed by following three easy steps:

choose building (confirm)
choose floor (confirm)
choose room (confirm)

The quickest way to the requested room will be displayed on the model, illuminating the building in the same color as the chosen floor by means of the LEDs. The same is displayed on the ground plan. Eventually, the button "print" will be activated to print this plan.



3. I seek...

Here, information such as "Where's the headmasters office/administration?" as well a search function for all teachers of the BBS1 is provided. Further facts concerning the type of school/department are included and will be completed with info about the various pupil-/parent representatives as well as the intermediary teachers.

4. School-Homepage

This will be the direct link to the school-homepage. It has to be checked though, whether the system can be equipped with a WLAN connection to the school's network.

Goal of the project

By using the existing system as a platform, the following changes and add-ons will be integrated, thus cutting on the costs:

exchanging the visualizing PC and adding of a printer
automating the switch on/off of the system (timed)
constructing a new model stand
integrating the optical guide to the model

installing a web-cam and configuring it as a motion control
adding the pathways from the VISU+ software
revising the ground plan, adding new buttons and further informations
adjusting the LED system to the model and the new site
renewing the staircase model
creating a circuit diagram in e-plan

Main hard- and software components used:

Phoenix Contact RFC 430 ETH, Firmware 4.6D

Standard PC for visualizing

Phoenix Contact AX OPC-Server, version 2.20.68

Phoenix Contact PC Worx, version 5.10.22, SP 2.3

Phoenix Contact Visu+, version 1.11