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Hallway Bot

Design Milestone Presentation
Networked Embedded Systems
TU Berlin

Building Guidance

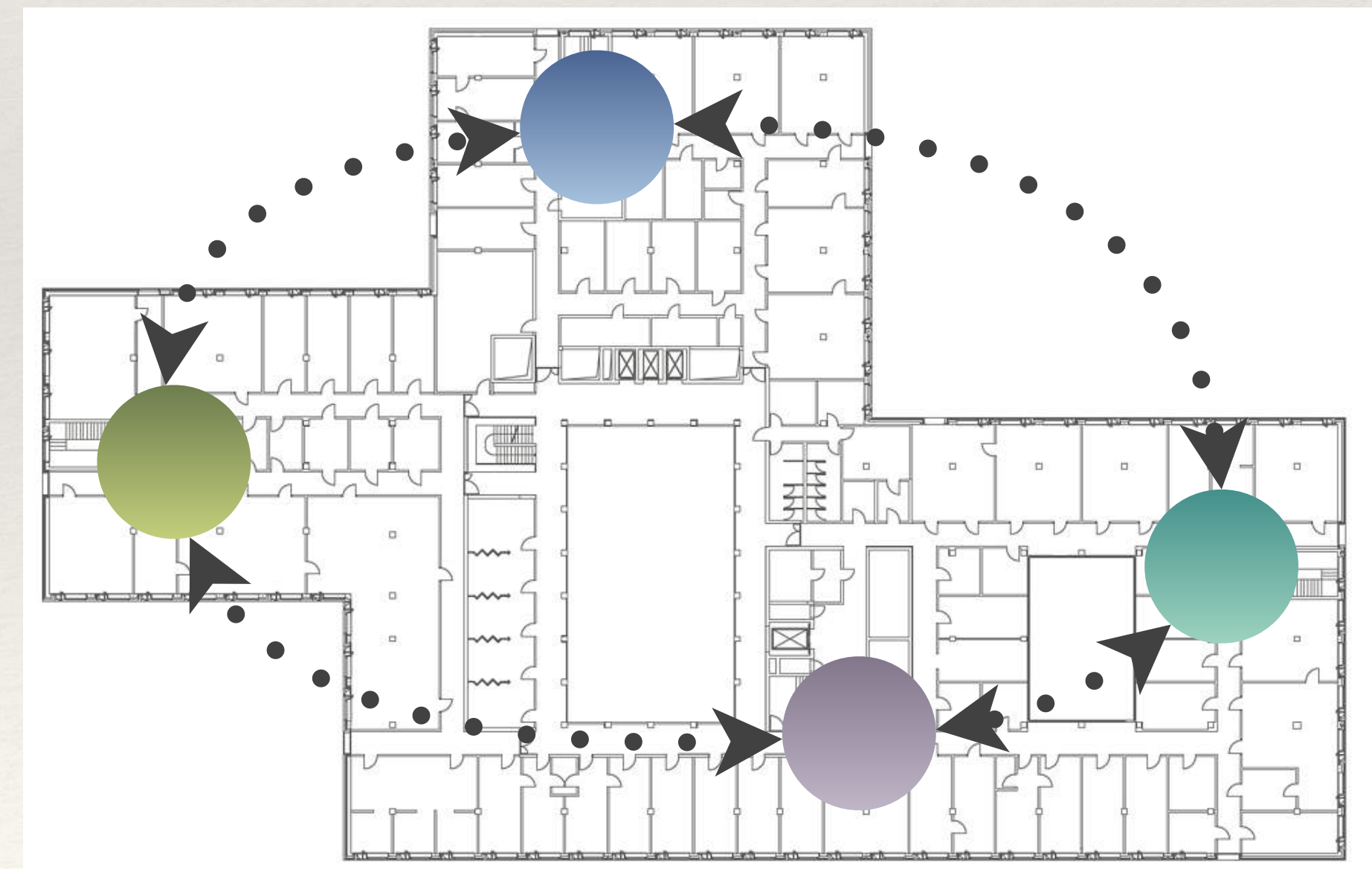
- Connection to one Entry Point
- Blinking the way
- Hand over to next lights

*Lighting guides
the way*



*Entry Points
welcomes user*

- Embedded System
- Connection to Internet
- Voice Interface
- Decentral Communication



System Requirements

- ❖ The system should guide the user the way to the requested room.
- ❖ There are at least two entry points at one floor.
- ❖ At the entry point a user can call for guidance.
- ❖ The user gets asked where he wants to go.
- ❖ The system shows the user the right way

Functional Specification

- ❖ Entry Points are connected to a network and connected to each other.
- ❖ At each entry point a voice interface is realized.
- ❖ The system has a wake word.
- ❖ The users intention is analyzed.
- ❖ The best route for the users request is calculated.
- ❖ The lighting for the route is submitted to other affected entry points / control units
- ❖ The lighting is showing the right way.

Workplan

- ❖ Entry Point Setup
 - ❖ Network Communication
 - ❖ Lighting Control
- ❖ Route calculation
- ❖ Voice Interface
 - ❖ Intention analysis
 - ❖ wake word

