Hygiene is one of the most important things to stay healthy. Especially in hospitals hygienic conditions play a major role in helping patients recover. In a hospital with not as clean facilities people can catch infections which can lead to suffering or even death.

In many, especially big, hospitals it is extremely hard to monitor hygienic conditions and to ensure that everything is as clean as it can be. Facilities and items like door handles, remote controls or toilet seats get cleaned regularly but not efficiently. Things which get dirty quickly are not cleaned enough and items which are barely used are cleaned even though they are not dirty at all. But it is not possible to blame anyone because no one knows about the specific hygienic conditions.

My prototype helps to solve this problem. Through pressure sensors data on how many times an item has been touched can be gathered. This data is being sent to a Smartphone App which reveals at one sight the hygienic conditions of an object. When it gets dirty a cleaning staff member gets informed to clean it. Through this a more efficient way of cleaning is guaranteed and bacteria can be eliminated before they can cause any harm.
Persona (Chris Lean)

Chris Lean
Head Housekeeper in St. Marie’s Hospital

„Hygiene is the most important thing in a hospital, as it helps the patients recover more quickly“

About
- 40 years of experience in housekeeping
- Supervisor of every cleaning staff member within the hospital
- Contact person for hygienic concerns of patients, doctors and other hospital employees

Responsibilities
- I am responsible that the hospital facilities meet the hygienic standards
- I am responsible for the organization and timetable of the cleaning staff
- I am responsible for the maintenance of the working material

Main Goals
- Making sure that everything in the hospital always excels the hygienic standards
- Making sure that no patient infection because of hygienic problems occur
- Ensuring a good allocation of cleaning staff members to specific locations
- Ensuring an efficient and good cleaning timetable

Needs
- I need to know when a specific item in the hospital was cleaned the last time
- I need to know about the hygienic conditions in the most used facilities
- I need to know which cleaning staff member is currently available

Pain Points
- I have no specific information about the hygienic conditions (guesses for the cleaning have to be made)
- A clear overview over the last cleaning of an object or facility is almost non-existent
- Coordination and contacting of the cleaning members is very difficult and time consuming
Point of View

As the Head Housekeeper
I need a way to monitor the hygienic conditions of an item or facility
so that I know when it has to be cleaned.

As the Head Housekeeper
I need a way to know which cleaning staff member is available
so that I can allocate them easily to a specific location or work.
## User Experience Journey

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>Enter the Hospital to start with work.</th>
<th>Talk with a doctor about the hygienic conditions</th>
<th>Look at the timetable of the cleaning staff members</th>
<th>Look for Joe</th>
<th>Call Joe and tell him that the door handles have to be cleaned again</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINDSET</td>
<td>“Oh, the door handles of the rooms look really dirty.”</td>
<td>“It seems that the hygienic conditions are not too good.”</td>
<td>“Everyone is already here and busy working.”</td>
<td>“Where is he?!”</td>
<td>“I could finally deliver the message.”</td>
</tr>
<tr>
<td>FEELING</td>
<td>😊</td>
<td>😞</td>
<td>😞</td>
<td>😞</td>
<td>😞</td>
</tr>
<tr>
<td>TOUCH POINTS</td>
<td>- Door handles</td>
<td>- Doctor</td>
<td>- Timetable</td>
<td>- Hallways</td>
<td>- Phone</td>
</tr>
</tbody>
</table>
Prototype Mockups

For Interactive Display go to:
https://app.moqups.com/valleback@gmail.com/c2Bat5AIKo/view
Door handle

Description: Door handle from room 205

Last Cleaned: 2 days ago

Touches since last cleaning: 13

Location

Notify Housekeeping to clean this item
Responsible Rooms

- Room 205
- Room 206
- Room 207
- Room 208

Housekeeping Staff

- Send Automatic message to Housekeeping at 33%
- Get Notifications at 25%