

Comparison QR-code and RFID

To activate the hubs, the main device would need to scan either a QR-code or use an RFID tag. A comparison between those two options is made on this page.

QR- unique code or link to site?	RFID
+ <ul style="list-style-type: none"> - Common recognized - Linked to site - payment wall - Can be printed - Similar to AR - Screen can be used for additional text 	+ <ul style="list-style-type: none"> - 2 way communication - Tags can be delivered if offline - Small tag - Don't has be be visible
- <ul style="list-style-type: none"> - Changing every time slot - LCD screen - Opening camera (1 extra step) - Delayed internet - Always internet connection needed - Small electronics 	- <ul style="list-style-type: none"> - Electronics - Not supported by all phones - Not common recognized

Workflow for activation of the hub:

- Scan code
- Confirmation in the app which hub
- Start audio for 4 phones + send message to hub activating lights
- Button on app for activation appear

Conclusion

The conclusion is to make use of a QR-code for several reasons. The biggest advantage of a QR-code is that it is commonly recognized by a lot of people. RFID is way less recognized. Next to that, we already want to incorporate an LCD screen in the hub for users to read along with the story, so this screen can be used for displaying the QR-code as well. Also, it is possible to generate a new QR-code every few minutes. This means that hacking becomes more difficult. When someone scans the QR-code, but does not have the app, he/she will be sent to our website where information about the tours can be found. An important thing to think about is that we make the messages between the hub and app as small as possible, so the delay will not become too big.