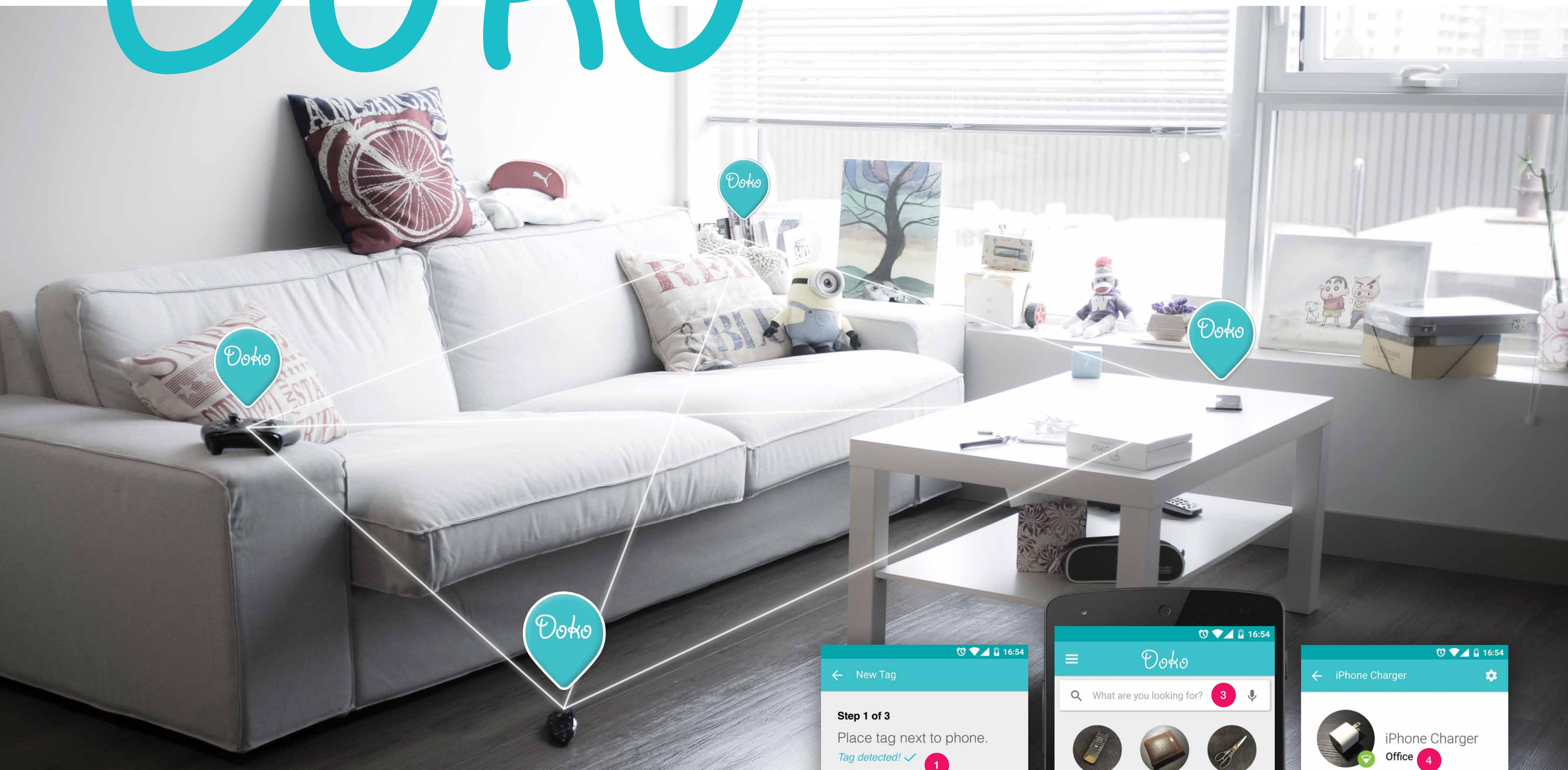
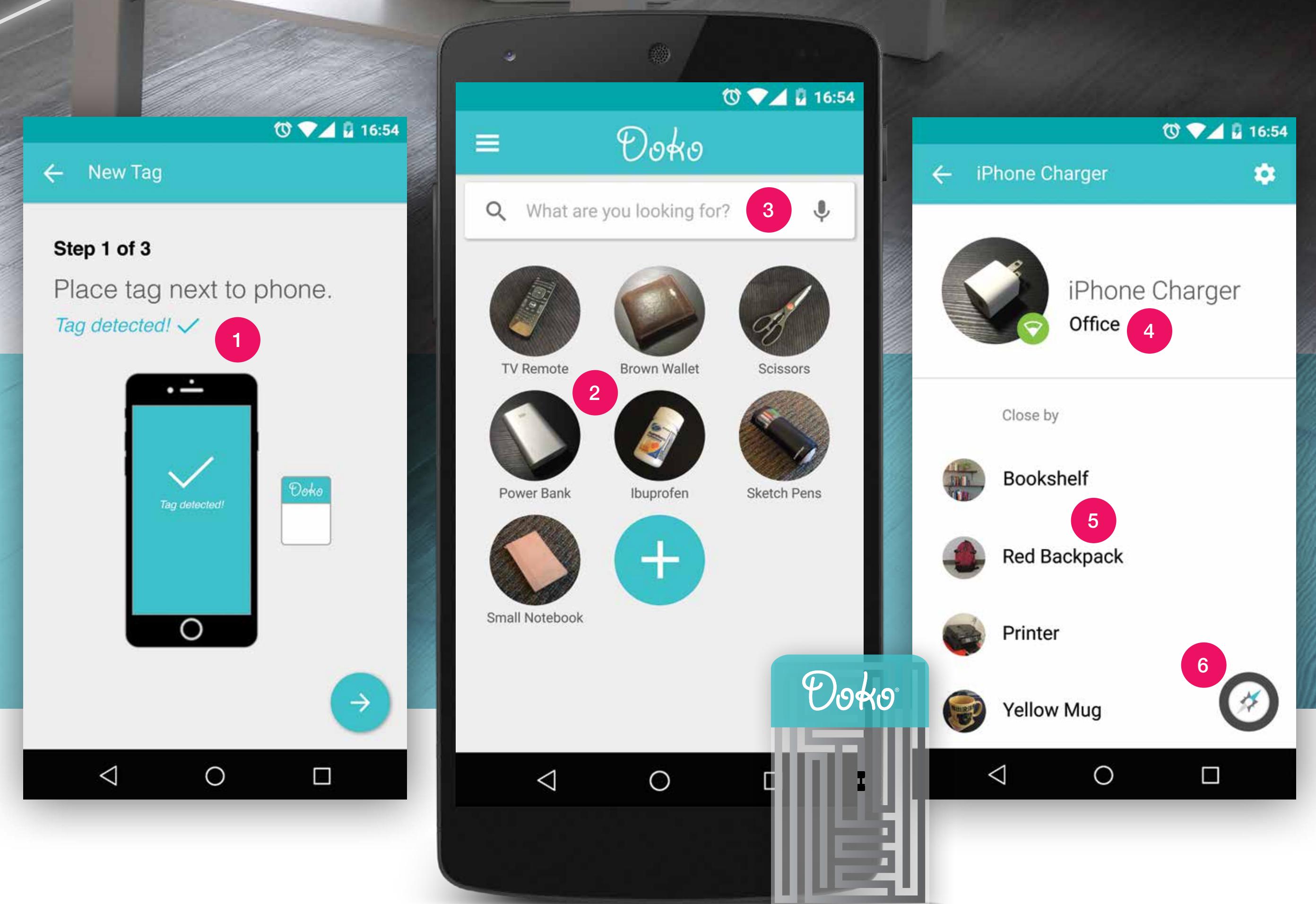


Doko

Locate, not Search. Doko saves you time by providing reference points and precise locations of the items you are looking for.



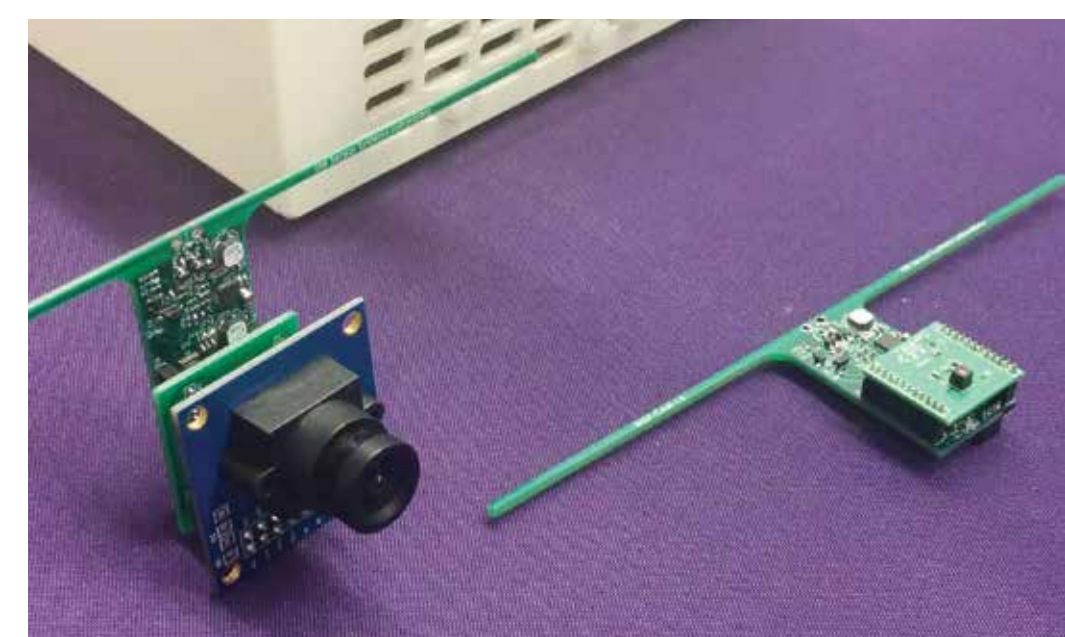
Tagged items, which are powered by the Doko adapter, form a network in each room, providing users with their precise locations without the need to replace batteries.



PROCESS HIGHLIGHTS

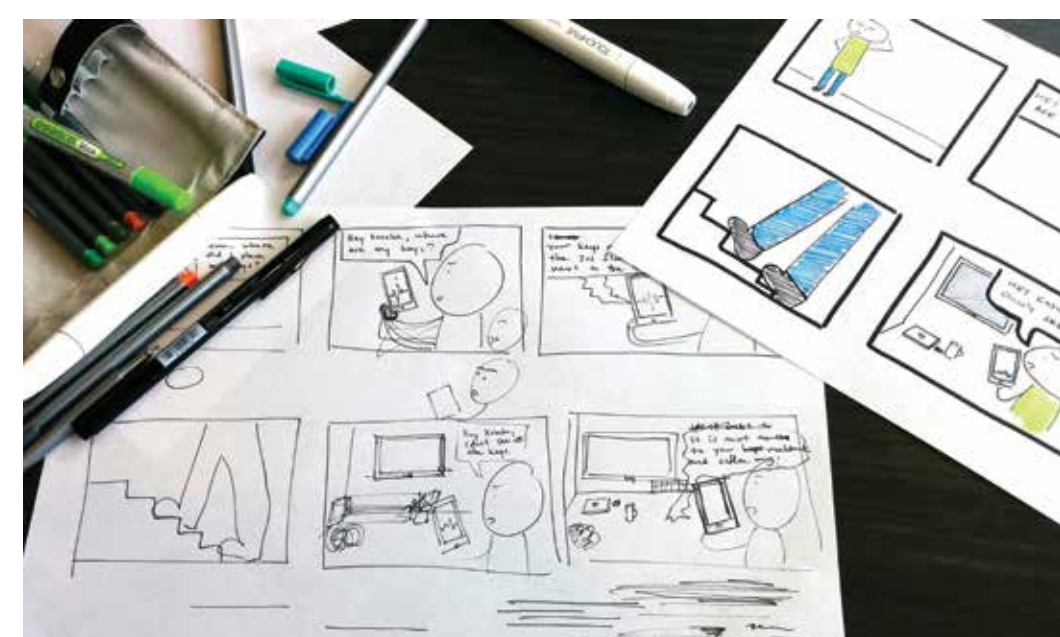
Understand the Technology

Ambient Backscatters communicate with each other by reflecting existing ambient wireless signals. Each device uses an antenna to pick up signals around us and converts them into electricity. Understanding the strength and limitations helps us build a feasible architecture.



Research and Ideation

By conducting 5 on-site field studies and analyzing collected data, we explored various potential domains for the project. We then brainstormed and proposed several solutions. Finally, through evaluating existing products, we were able to finalize our design scope.



Prototype and Evaluation

We created prototypes, ranging from low- to high-fidelity, to conduct three rounds of usability testing. We applied the RITE method to efficiently identify usability issues within a limited time frame, to iteratively refine the prototypes, and to perfect our final deliverables.



Final Deliverables

The combination of Doko adapters, tags, and app offers users a comprehensive indoor location service, saving time that would be spent searching for misplaced items. We are also planning to develop more advanced features building upon this technology and architecture.



UI Features

- 1 Optimized 3-step tagging process.
- 2 Re-arrangeable list of items.
- 3 Auto-complete function.
- 4 Doko adapters help users to identify rooms where items are located.
- 5 Reference points can be ordered by size and proximity.
- 6 Compass feature pinpoints the exact locations of missing items.