

RideMe.

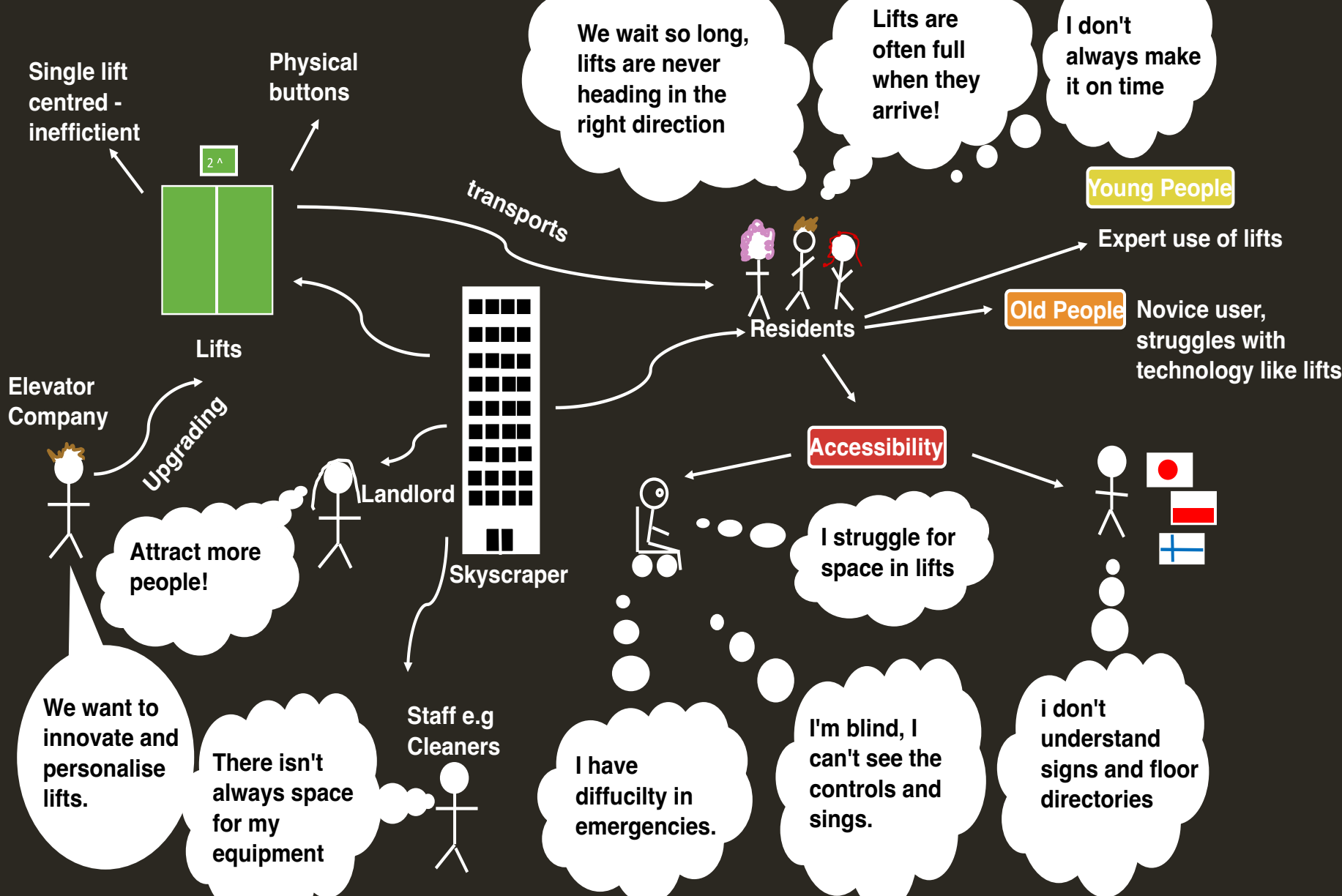


Click this box for complete collection of wireframes!

Introduction

The context of this design is to create a multi-user interface for lifts, replacing the typical buttons with a touch sensitive control panel. The push button meant the end of the lift boy and manual lift operation, passing on control to passengers. The new, innovative interface now means the end of push buttons, with a goal to increase personalisation of the experience, increase accessibility of lift riders and solve the common problems that occur in lifts. Passengers will be given even more control than before, and be able to personalise their experience. In addition, the development of an app is considered as part of the design to aid those with additional accessibility needs and to allow communication.

Rich Picture



Problems with Today's Elevators

Most people use lifts regularly in their everyday life. Issues that have been highlighted by these users consist of the following. Firstly, one of the major difficulties is that the wait times for lift are too long and they are often not going in the direction that you need them to, causing you to wait even longer. Following that problem closely behind, is that after you wait and finally get a lift going in your direction - it's often too full to enter and then you're back to waiting. Aside from wait times, those who have accessibility needs have issues during emergencies that occur in the lift, or people whose first language is not English have to rely on symbols which can be quite ambiguous, not to mention those who cannot even see the buttons. Modern day lifts have come a long way but still have their limitations.

Personas



Peter Grant 45

Executive Manager. In a wheelchair and partially blind in one eye due to a severe car accident. Good Communication and is charismatic. 10 years in the role he is in. He is newly divorced, has a 5-year-old daughter with ex-wife and shares partial custody of her. He likes spending time outdoors. He has a hobby of collecting stones. He dislikes reckless driving, things that make his life harder, and such designs that make things hard to read etc. Habits: tends to turn up the brightness on things, asking for help in situations, doesn't use tech if he can help it.



Yuki Sanada 26

Speaks Japanese and English but not very well, works as an illustrator. She's a freelancer and works part-time at the company in the advertising sector. Yuki is learning English as she goes and is not very confident. She has a sister in Japan and is a single woman. She is a dedicated and hard working woman; Yuki rarely asks for help and prefers to do things on her own. Her hobbies include cooking. She enjoys making things for her friends.

User Story

Peter was just on his way out of the office, he had worked quite late that evening and was tired. It was around 7and he had entered the lift with another colleague who had worked late. A malfunction took place in the lift system, so the lift had to come to an emergency stop between two floors. They pressed the emergency button and maintenance in-company was called however they were not equipped to get Peter out without great difficulty and external people were called to assist the maintenance team.

Accessibility Struggle: Overcrowded Lifts and Wheelchair Users



Peter is going to the office; as he is making his way to the lift, he looks at the clock and realises he is running late for his 8 am meeting with his supervisors. He reaches the lift and presses the button, because it's early the wait time for the lift is a little longer than usual. When the lift finally arrives, Peter rushes towards the opening doors but stops in his tracks when he sees that the lift is full. People in the lift see that Peter is in a wheelchair but are unwilling to make space for him and avoid eye contact with him as they to have places to be. So, Peter moves back allowing the lift to close and then presses the button again for another lift to come praying that there is space in this one.

User Requirements

- Requires creation of a touch screen interface for lifts in order to move away from physical buttons.

- This should consider safety implications. For example, keeping some physical buttons (open/close door, alert), in case the user cannot use the screen, or the system is down, and needs to escape.

- The interface should display the current floor, next floors, and allow the user to select a destination.

- The experience in the lift should be personalised according to the user's specific needs.

- Outside the lift, there should be a set of scheduling dashboards, to record arrival times, journey length, locations of lifts, and fullness.

- It should allow the user to know if the lift is full, to avoid scenarios such as what the persona Peter Grant experienced.

- a floor directory could also be useful

- There should be a mobile app to supplement the system, and to aid those with disabilities/ additional needs/ language requirements.

- Should provide remote access to features such as those included on the physical lift dashboards mentioned before. This would allow people to plan ahead of time.

- It should be consistent with the lift dashboards.

- Let the user report emergencies and call for help.

- For personalization, the app should allow the user to maintain their account preferences and permissions; for example, if they need additional space due to a wheelchair

- Should connect to the lift so it can adapt to the individual's needs.

- Voice activation should also be considered for those with difficulties seeing displays.

User Journey

A woman wants to impress her coworkers and arrive early to work every day. To achieve this when she is 10m away from her work, she reserves an elevator.

The lift swiftly arrives as soon as she enters the building. The RideMe app can see that there is a passenger with a wheelchair on the second floor, so only lets on a few riders onto the lift.

Unfortunately there has been an elevator malfunction. They are both able to contact the engineers through the app, which are able to see that one of the passengers requires special assistance, so they send out a special team to help them



Service Ecology



Mood Board



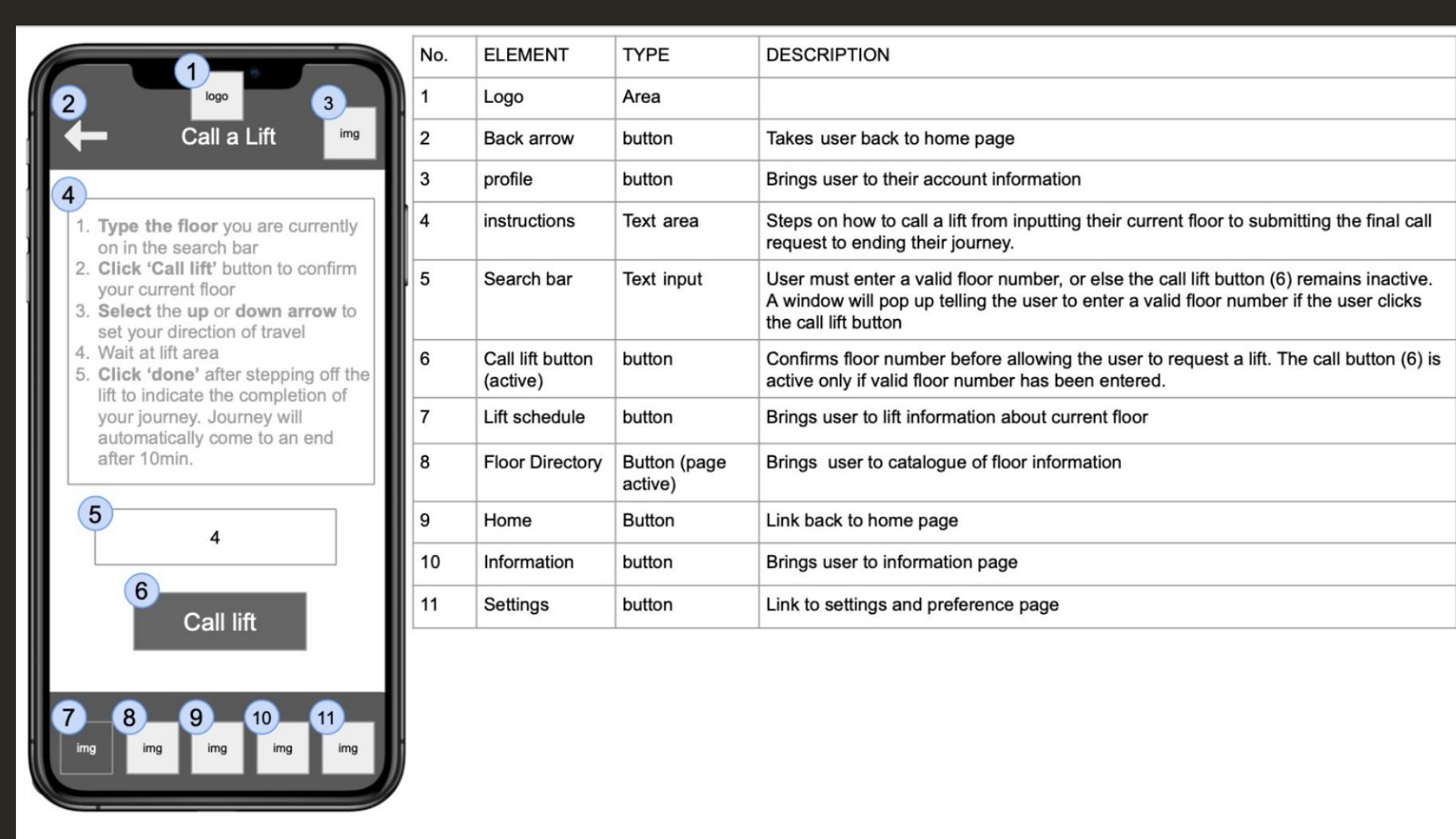
Service Blueprint



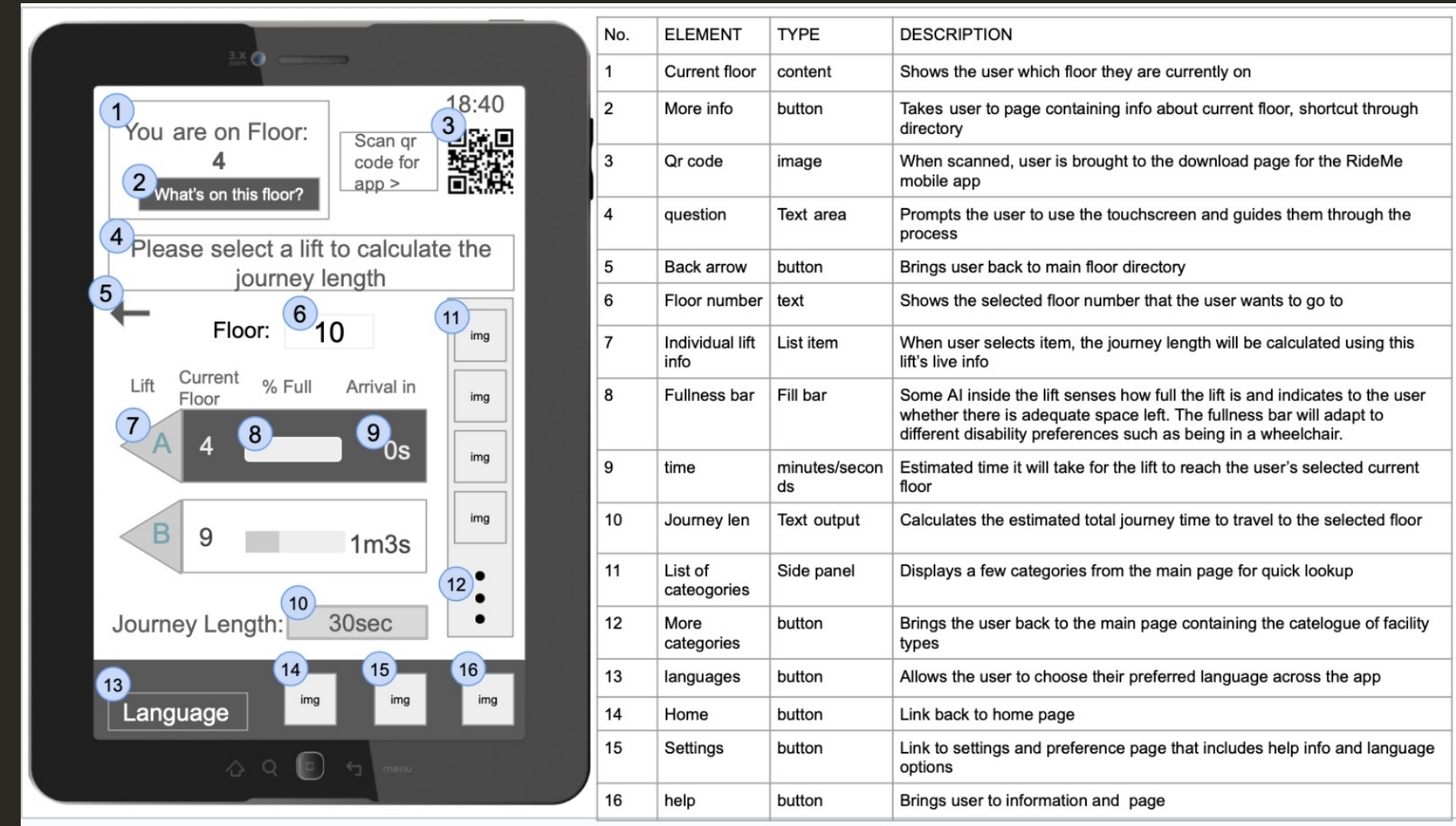
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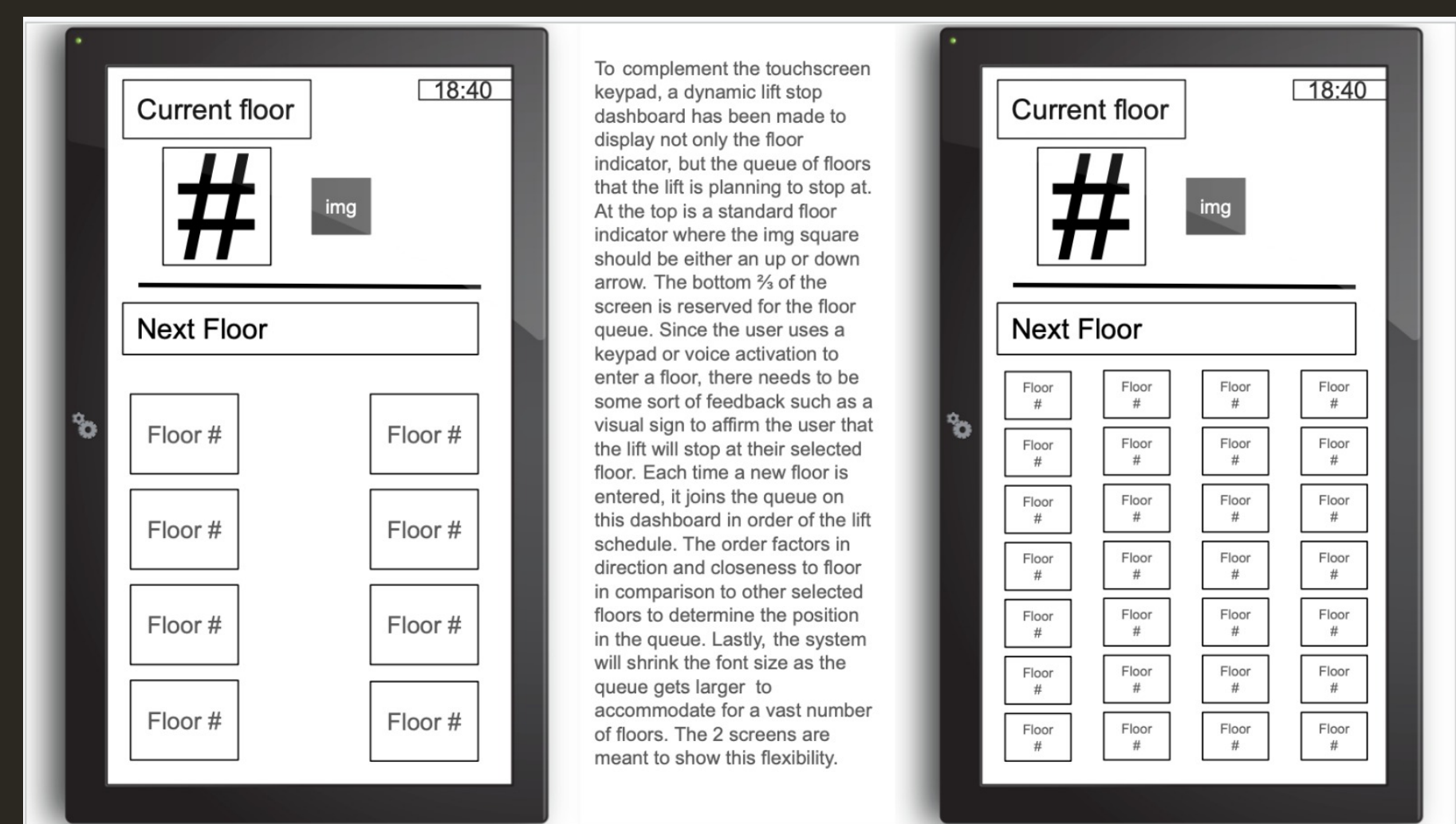
Wireframes



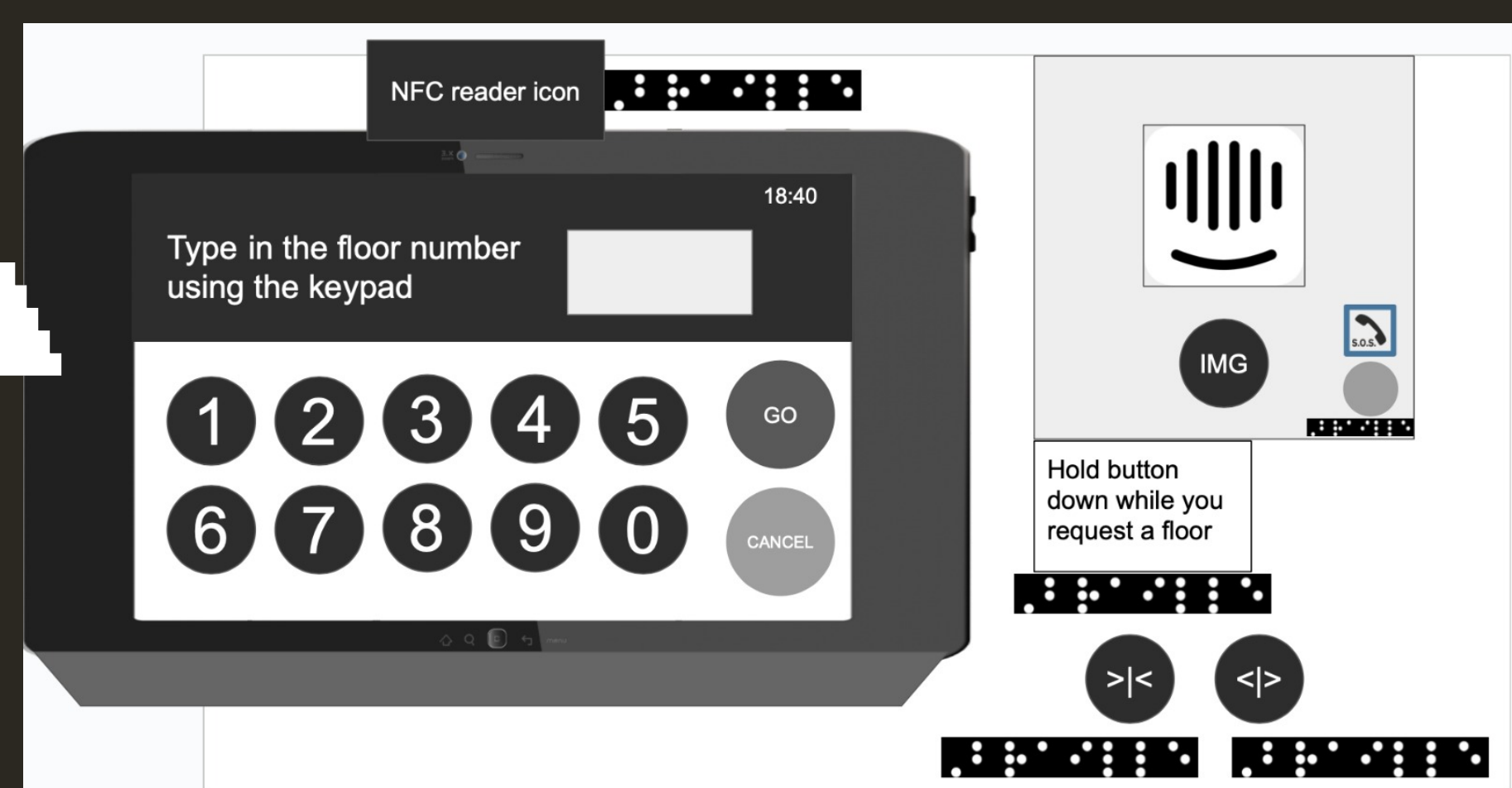
Lift interface - journey planner/floor directory



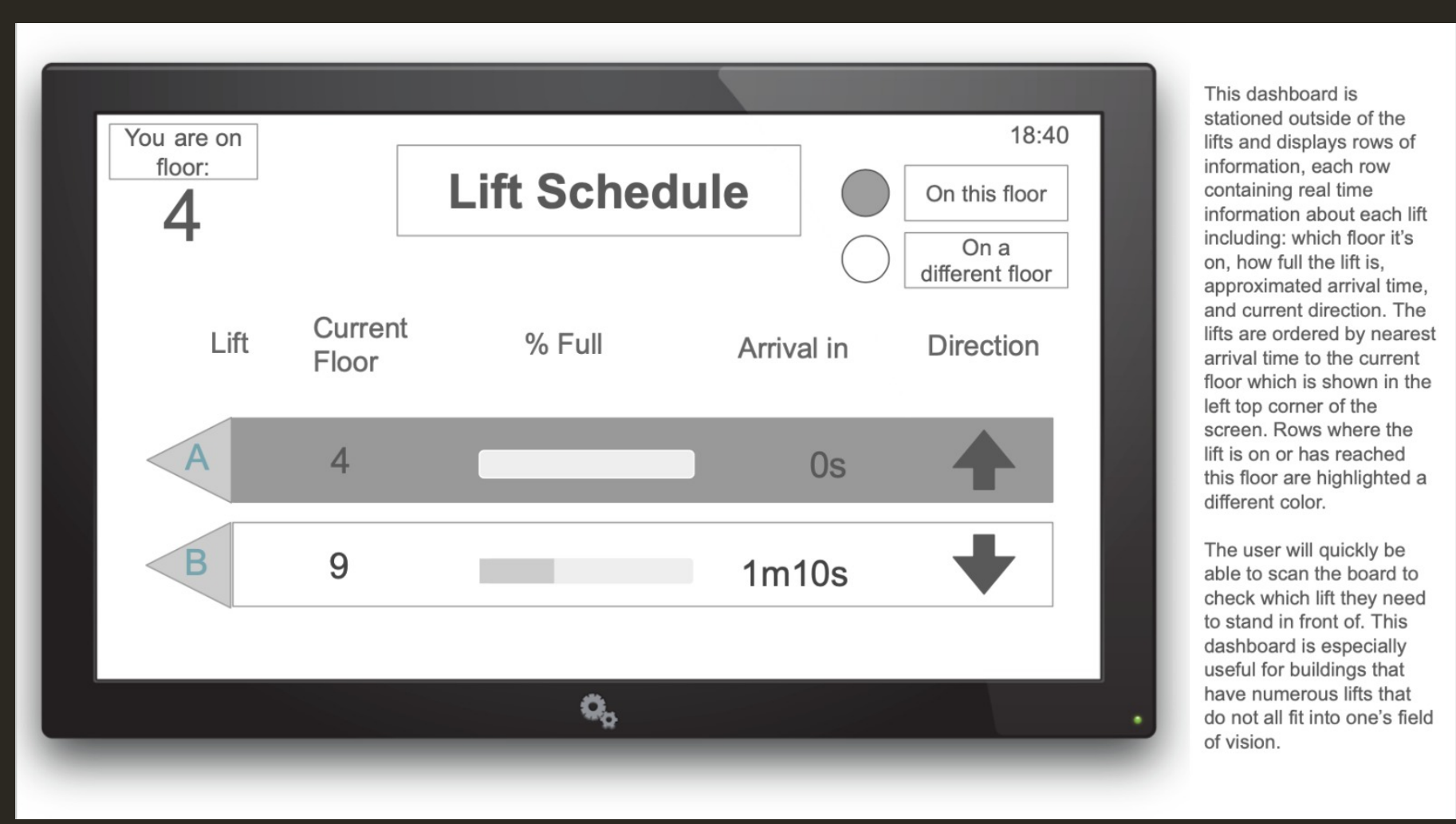
Lift Interface - Floor Queue



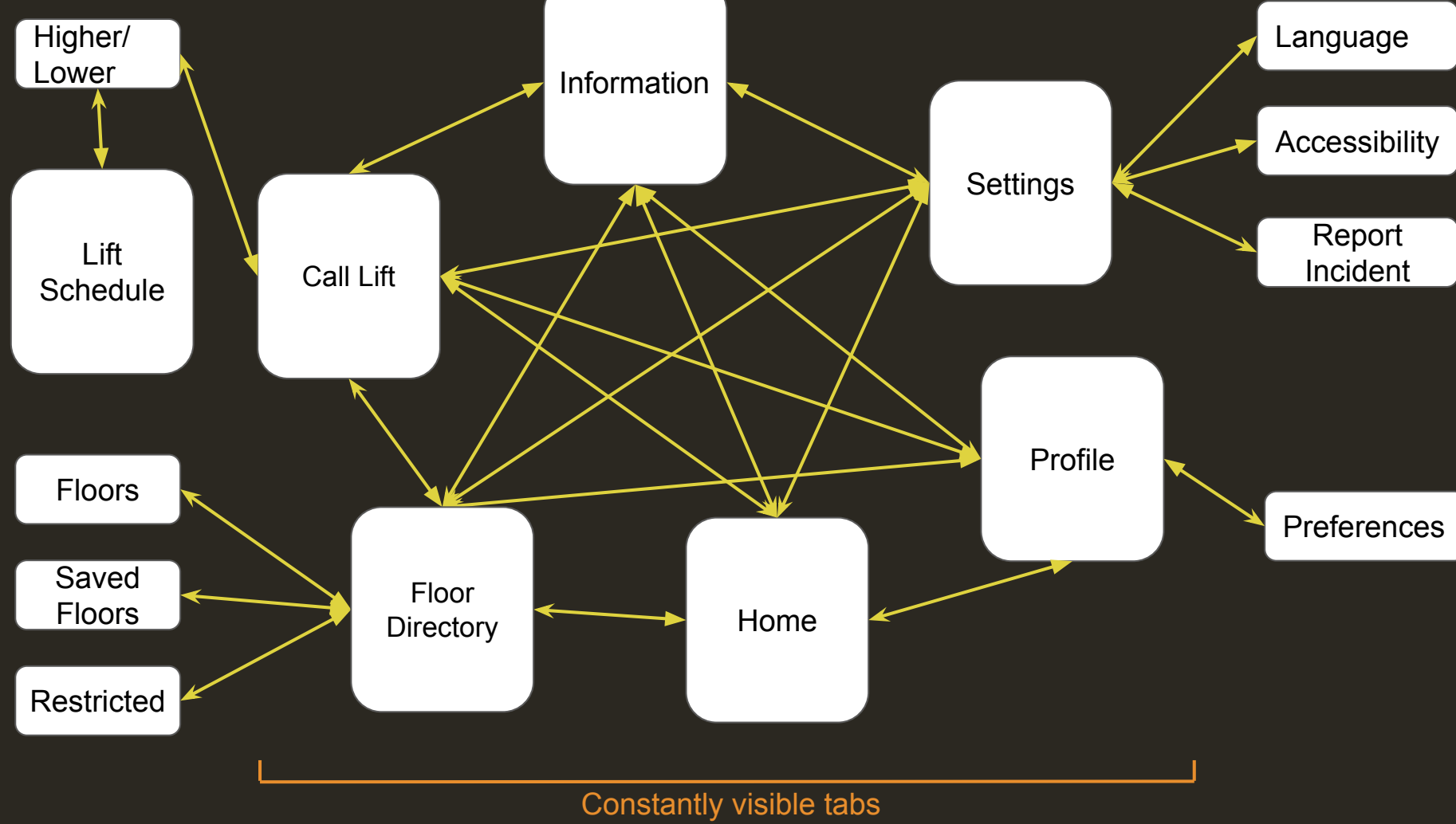
Lift Interface - Keypad Inside Lift



Interface outside of Lift - Schedule Dashboard



Mobile App Navigation Map



References

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