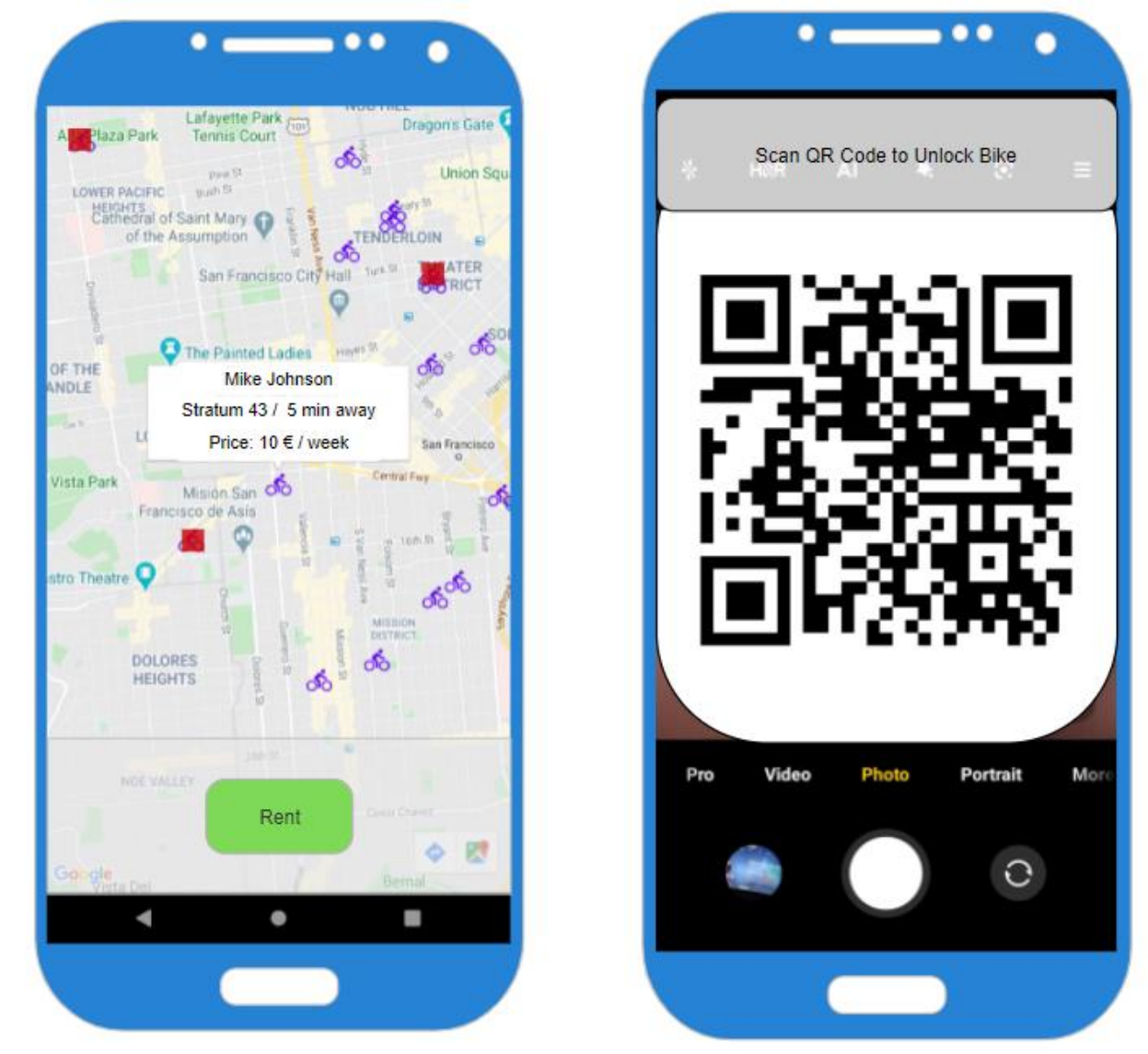
Android Bike Rental

Design

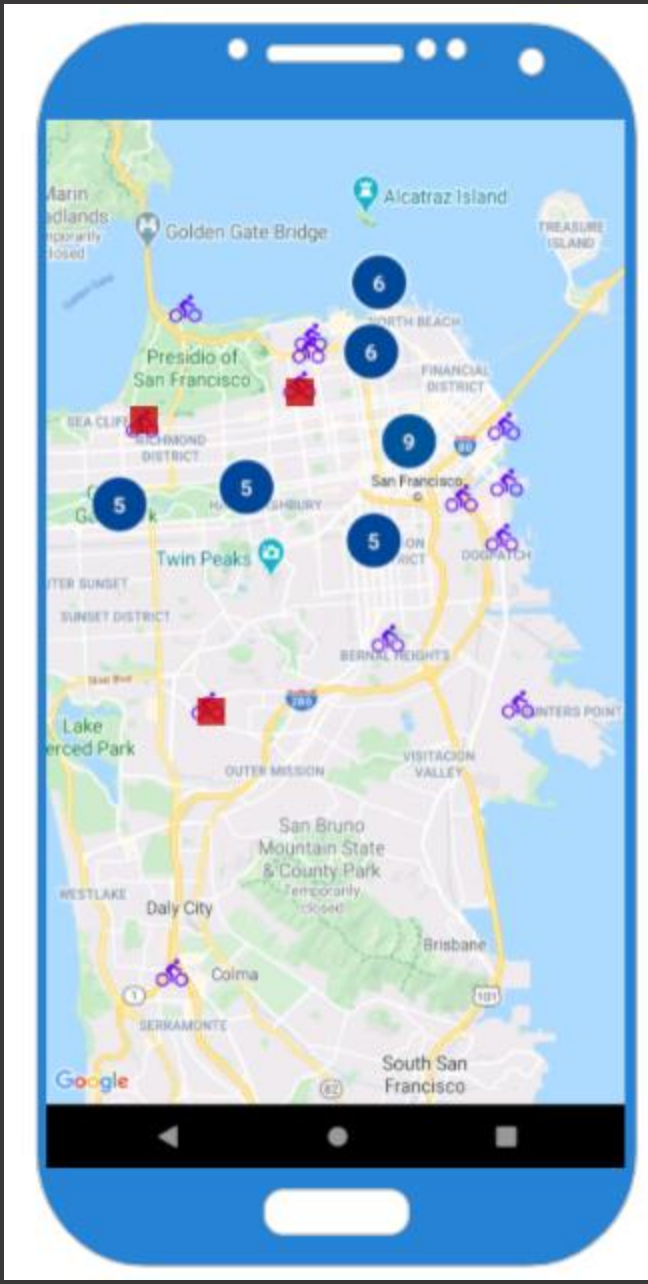
1. Wireframes

I started by creating simple wireframes of the main parts of our app



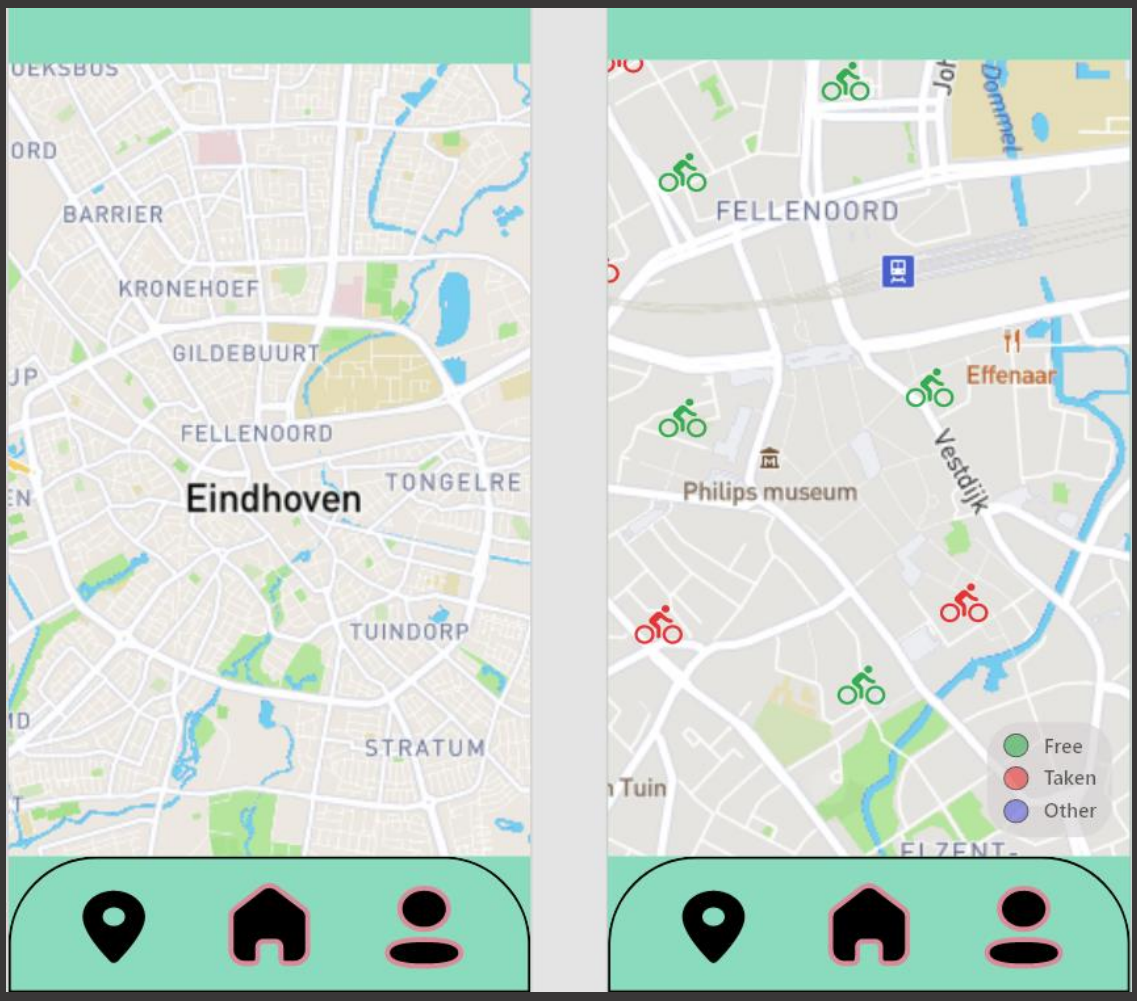
On the left wireframe you can see the information you get when you click on a bike. When you click the “Rent” button you will be contacted by the seller and make an agreement from when you are going to use the bike

On the right wireframe you can see what will happen before you unlock the bike. You will scan the seller’s unique QR code to confirm the transaction.

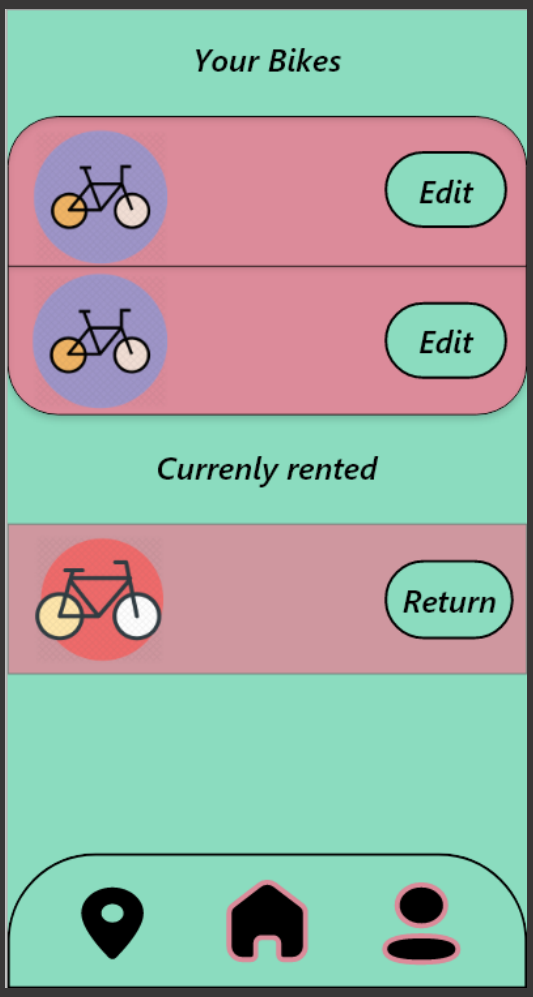


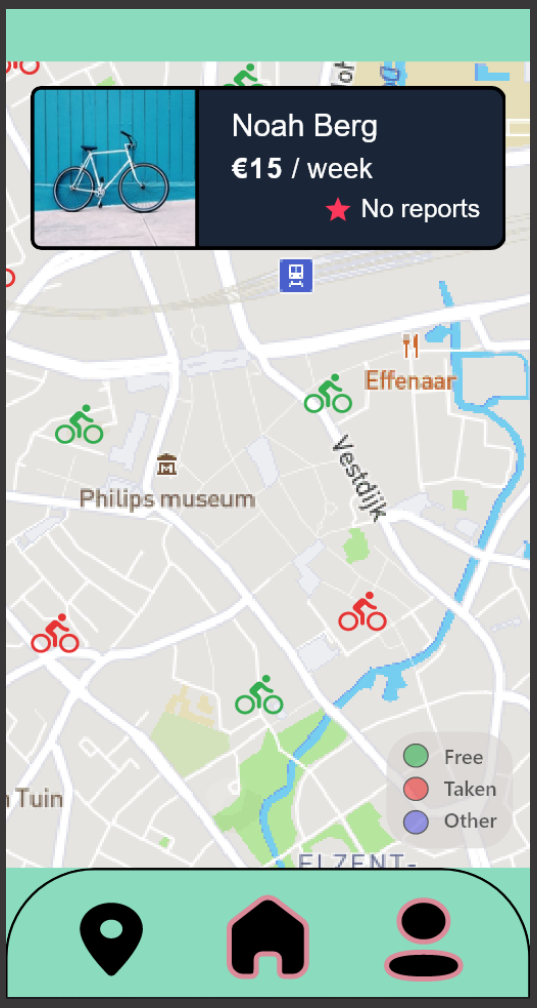
This is the overview page, where you can see all the bikes near your location If the bike has red on in, that means it has already been taken.

2. Clickable Prototype (iteration 1)



Here you have the map page when you zoom you will see bikes in your area. The colors here aren't final, just a placeholder. We changed them in the next iteration.





Changes to be made (Feedpulse checkpoint 3)

- Better color scheme
- Resize the home buttons (with text)
- More consistent icons

3. Clickable Prototype Iteration 1.5

You can find it the XD file in our GIT repository and here you can see a quick user flow.

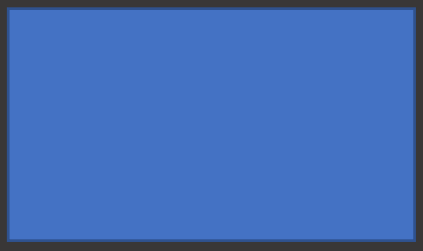
https://www.youtube.com/watch?v=nD9Wt48fUak

4. Style Guide

What's the difference between rounded and rectangle objects?

Some experts say that rectangles with rounded corner are easier on the eyes, rather than a rectangle with sharp edges, because they take less cognitive effort to visually process.

Another explanation is that our daily life is filled with rounded objects. As children we know that sharp edges can hurt, while for example a ball is completely fine. But if a child were to play with a fork, parents would be alarmed. This provokes what neuroscience calls "avoidance response" to sharp objects.



Sharp corners take focus outside the rectangle, they are also identical so harder to recognize

Rounded corners put focus inside the rectangle, makes it more unique and easier to recognize.

Color Psychology

What emotions would we want out users to feel?

Color is important in UX, as it can trigger certain emotions in users.

Our main color is blue. It represents trust, peace, loyalty which are qualities we look for, if you are going to trust a stranger with your bike. Although a peaceful color, blue can also bring some negative color meaning, as some people may see it as a sign of coldness. For our second color we chose **white**, as it represents cleanliness and simplistic view. It makes the black icons on the nav bar popup.

This is our shade variation for our main color
On the blue color variations, you can see a yellow and red dot. The color with the red dot is the one we use in our background, and the yellow one – status bar on top.

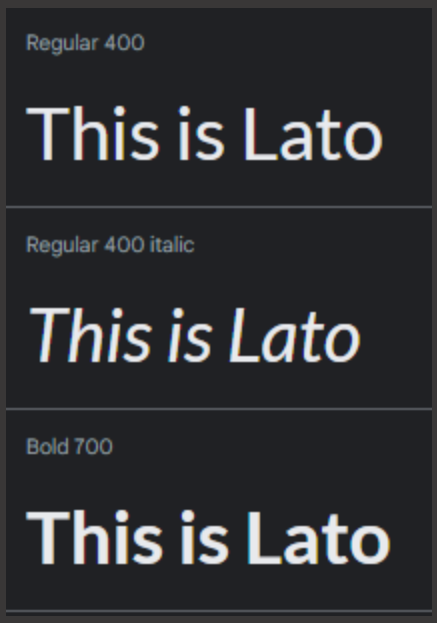
For the white we decided to stick with the basic white.

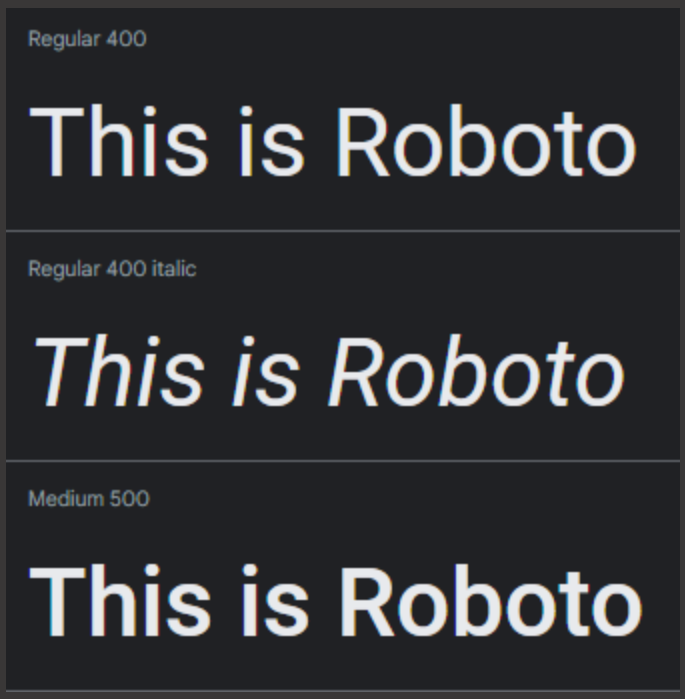
Fonts:

For our prototype we wanted to add distinctive fonts so it would be easier for users to navigate.

Our main font is Lato – a sans-serif font. It comes from a Polish designer and in translation means summer. It's the main font on the Lego website. Fun, welcoming, creative, and friendly.

Our second font is Roboto. Interestingly Google chose it as the main font for the android system. Which makes it even better as users are already used to this font. Also our main font Lato goes well with Roboto.





References:

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5. Validating the design in app

When thinking about the design, we wanted something simplistic, so even the most non-tech savvy person can get around in the app.

- Navigation bar: Has 3 clickable buttons, that lead to the main parts of our app: Home, Map and Profile. The icons we use are the most well known icons for the particular page.
- Custom text fields: In Login/Registration pages. When you click on one of the fields, the borders will be colored blue, showing to the user, it has been selected. The icons will change color as well - from black to blue
- Our 2 main colors in the app are Blue and White. Blue represents calmness, security and stability. White represents simplicity and purity. Although a bland color, white can be used very well in apps, as it clears space and makes the app more simplistic

6. Heuristic Evaluation

I decided to create a Heuristic Evaluation, so that we could measure the usability of our app, using the 10 rules.

1. Visibility of system status: The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.	If some kind of maintenance was about to happen to the app, we would notify the users as soon as possible with a scheduled date and time.

2. Match between system and the real world: The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.	Our app doesn't use any system oriented terms. We use plain English, so users can navigate through it with ease.
3. User control and freedom: Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.	We haven't implemented any "emergency exit" button because we already have a back button (arrow on your nav bar). So every time a user uses it, he will go back to the previous page. And if he wants to redo, he can go to the same page/menu.
4. Consistency and standards: Users should not have to wonder whether different words, situations, or actions	We are consistent with our icons and colors. Our buttons are obvious, so the user would know what is clickable and what is not.

mean the same thing. Follow platform conventions.	
5. Error prevention: Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.	We have eliminated all possible error-prone conditions, so the users can have a smooth experience.
6. Recognition rather than recall: Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible	We have a navigation bar with the 3 most important parts of our app : Home, Map and Profile. This way the user won't have to remember and follow a confusing hierarchy. With the click of a button they can go to different parts of the app, without having to remember names, because they are written next to the icons.

or easily retrievable whenever appropriate.	
7. Flexibility and efficiency of use: Accelerators—unseen by the novice user—may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.	We created the app, so that it rewards experienced users, who know how to navigate through the app, but also simple enough so inexperienced users can learn without issues.
8. Aesthetic and minimalist design: Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.	We strive not to have any unimportant information, as that can confuse our users. So every bit of information in our app, we have decided it’s important for the user and his overall user experience

9. Help users recognize, diagnose, and recover from errors: Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.	We have errors for the login for when the users don't use the correct format of an email, the following popup "Email address is badly formatted, please use @.com". We also have errors in the login/register when the text fields are empty, prompting the user to fill them. This way we are telling the user "Hey there is a problem, here is the solution"
10. Help and documentation: Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.	For documentation we can provide a simple user flow video, which explains in detail how you can use our app.