SKATRIXX

Design document

URBANSPORTS
PERFORMANCE CENTRE

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# Tabel of contents

Introduction

The below document contains information regarding the design process of the current project on Skatrixx. The project focuses on a "attachment" placed on the lower perimeter of any skateboard, allowing data to be recorded, such as speed, height and rotation. The use of the aforementioned data would be accessible to the skater possessing the skateboard through an application which connects with the attachment on the board. The information displayed on the application helps the user revise and furthermore note the areas which would require improvement, resulting in a general amelioration of the user on the sport of skateboarding.

Paper prototype

Throughout the early stages of our design thinking process, accumulated notes which were completed form the previous intern were handed to our group. Alongside the given notes
a number of Hi-Fi wireframes was handed to our group. Based on the early brainstorming session our group conducted, paper prototypes were drawn in consideration with the aforementioned wireframes, resulting in a design which would meet both ours and the clients expectations.

Home Page

Skatetrixx
My skates

Stats

10   200kg
avg/m's   avg/force

31
per sec
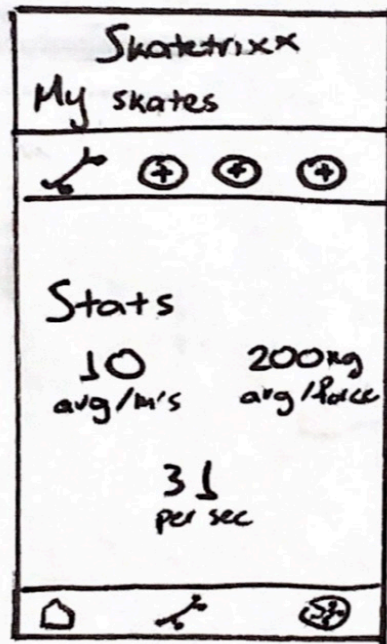
Scrollable
with an
events button
or even calendar

Observing the paper prototype, we start analyzing the initial design by the main page of the prototype, "Home" . The goal
of the home page was to display in an non obstructing manner the representation of the skateboard, while leaving most of the open space presented to us for the more useful information, such as the general statistics accumulated over the period of time that the user had the attachment under the board of his skateboard. Furthermore, for a generally easier to reach navigation bar, we decided that the placement of the bar should be located at the bottom of the page.

Skateboard Page

Skatetrixx ☰

Info

Trick Replay
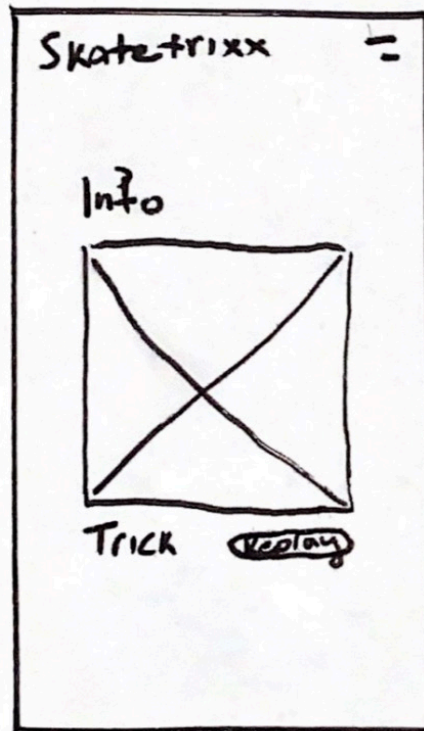
Analyzing the page containing the live preview of the skateboard
in action, key notes can be taken regarding the presentation of the skateboard.
A large proportion of the display is dedicated to the representation of the board,
thus leaving empty spaces on both the top and bottom parts of the page for
additional information to be displayed, which would be in correspondence to the
later stages of the project which would focus on what information the "Skate-
board Tricks" page should contain. Suggestions initially were given on display-
ing the name of the trick performed, together with a button which would allow
the user to replay the action performed.

Adobe XD prototype

Foundation

Our Adobe-Xd design is based on the paper prototype that we made. We also held the previous high-fi prototypes (adobe-Xd) in the back of our minds. We used this prototype made as an internship project by a student because this prototype has a lot of research behind it. We didn't see the urge to do this all over again and change it.

Colors

We based the colors on the previous prototypes. We wanted to give an urban feeling to the application so based on that we used the main colors black and red.

#CF2121

This red is used mainly for highlighting and back-grounding (the most important parts of the page) because it is a bright color the user's attention will be pulled to this part of the page first.

#666464

This gray is used for (input) fields and secondary text. A color that is not too bright but also not too dark. It will let the user know there is something but it is not the most important thing on the page.

#FFFFFF

White is used for titles and larger pieces of texts, we also used it for the tab bar because it is a bright color that is noticed quickly.

#000000

Black is used for backgrounding and primary text, this is a standard color that lets other content stand out more.
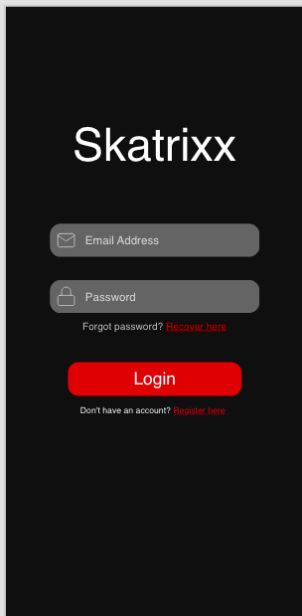
Fonts, Icons and the navigation bar

We have chosen to not use the font from the previous adobe-Xd designs, we have chosen something similar with something that fits the urban style better. We ended up with the font named **"Malgun Gothic"**. This font is slightly less rounded, this makes it feel tougher and more urban than the old font.

For the icons, we used mostly the same as the old prototype because it clearly tells what it means, and in that way, we don't have to make and search for new icons. We had some icons we had to implement by ourselves due to our concept being different. These icons we got from the internet, we chose them based on how clearly they tell what their purpose is and how good they fit the rest of our design.

We took over the navbar from the previous design. We changed the icons to fit our concept and changed the rounded border. The navbar has the color white to pull the attention of the user but keeps the main focus on the rest of the page (red coloring). We made sure the navigation bar is easily usable and understandable by using the right combination of fitting icons, sizing, spacing, and colors.

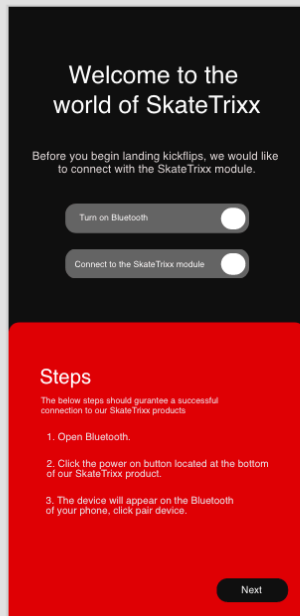## Login Page

Skatrixx

Email Address

Password

Forgot password? Recover here

Login

Don't have an account? Register here

Connection Page

Welcome to the world of SkateTrixx

Before you begin landing kickflips, we would like to connect with the SkateTrixx module.

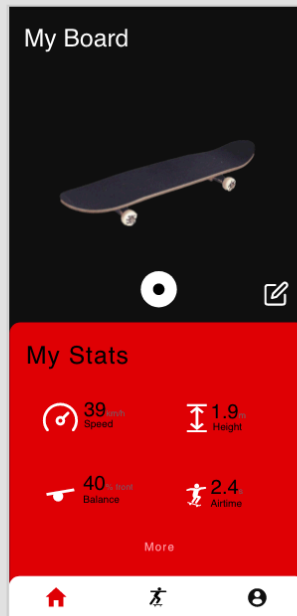Turn on Bluetooth

Connect to the SkateTrixx module

Steps

The below steps should gurantee a successful connection to our SkateTrixx products

1. Open Bluetooth.

2. Click the power on button located at the bottom of our SkateTrixx product.

3. The device will appear on the Bluetooth of your phone, click pair device.

Next

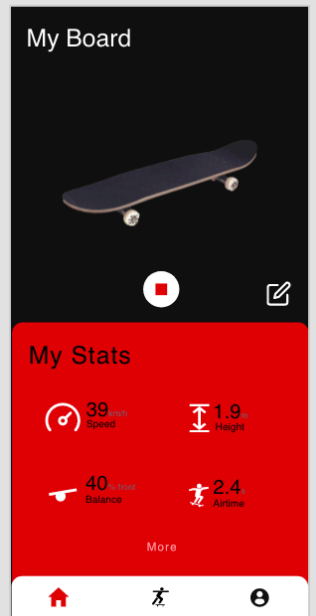## Insight 1 – 1

My Board

My Stats

39 km/h
Speed

1.9 feet
Height

40 % front
Balance

2.4 s
Airtime

More

Insight 1 – 3

My Board

My Stats

39 km/h
Speed

1.9 feet
Height

40 % front
Balance
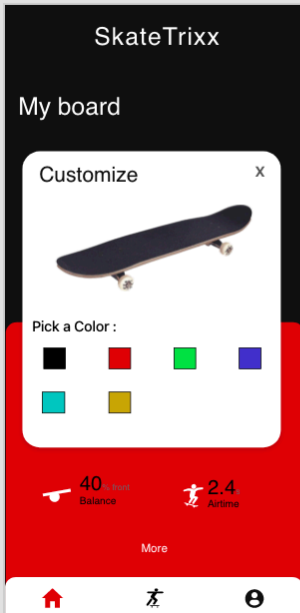
2.4 s
Airtime

More

Insight 1 – 2

SkateTrixx

My board

Customize   X

Pick a Color :

40 % front
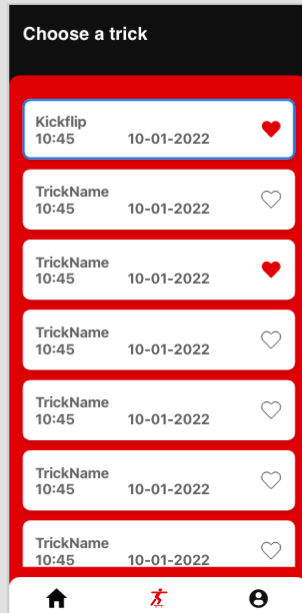Balance

2.4 s
Airtime

More

Login - 1 – 3

Choose a trick

Kickflip
10:45   10-01-2022   ♥

TrickName
10:45   10-01-2022   ♡

TrickName
10:45   10-01-2022   ♥

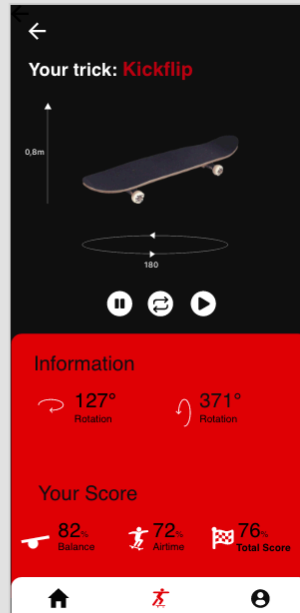TrickName
10:45   10-01-2022   ♡

TrickName
10:45   10-01-2022   ♡

TrickName
10:45   10-01-2022   ♡

TrickName
10:45   10-01-2022   ♡

Login - 1 – 2

Your trick: Kickflip

0,8m

180

Information

127°
Rotation
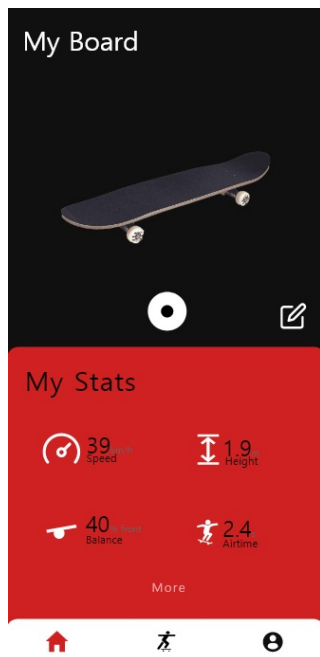
371°
Rotation

Your Score

82 %
Balance

72 %
Airtime

76 %
Total Score

7

Design document Front-end

After we had made our Adobe-Xd designs there was one step left to do inside the design process. This step was to code the front-end from our Adobe-Xd design with Html, CSS, and JavaScript we also need to make it a PWA to make it a functional application.


Main / Home page

This screen is going to be the starting page of the application when launched. Beneath it shows the average stats of the tricks you have done. Additionally, the skateboard can be seen moving and also visualized based on the sensor data gathered from the real skateboard.

There also is a record button that will record your skate session and record the tricks you have done. You can later watch the tricks with the stats back in a list on another page.

List page

On this page you can see the tricks you have done and recorded. Visually we show a function to add favorites. We didn't make this functional, because it isn't a core element of our application. The list will show the actual recordings you made, this part is functional. Once you record something on the home screen this list will update and show your recordings.
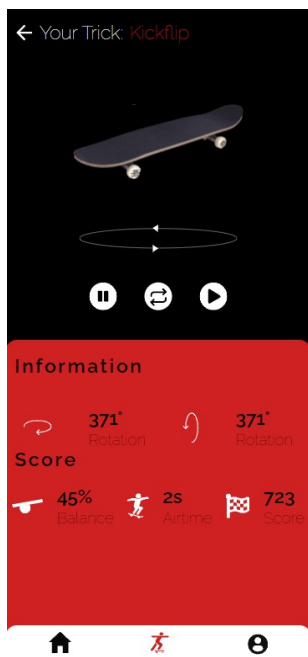
Trick page

Inside the trick page, you can find the trick recording that you have selected on the list page. On this page, the user can watch the recording and additionally pause and play it. The functions are scarce due to the limitation of time. On the visual side, everything that is a must-have is on the page. Once we want to add new functions (should haves) we can add them easily to the page. For example; slow-motion, time bar, and timestamps.

On the bottom part of the page, you can see the stats of the trick. This is hardcoded because this was not the main purpose of our project. The visualization is.