LimeHelmet

Helmet Rental Kiosk

Introducing face detection API technology

Anh Mai-Summer 2018

1-CREATIVE BRIEF

Client

LimeBike is a bicycle-sharing company launched in June 2017 based in San Mateo, California. It operates dockless bicycle-sharing systems in several cities and college campuses across the United States.

Limebike's mission is to provide a sustainable solution to the first and last mile transportation problem by helping people move around their cities in an affordable and convenient way while eliminating their carbon footprint.

LimeHelmet kiosk launch with the goal of encouraging more users to use helmets when biking. Moreover, the kiosk is where biker can rent their helmets with LimeBike by using face detection technology.
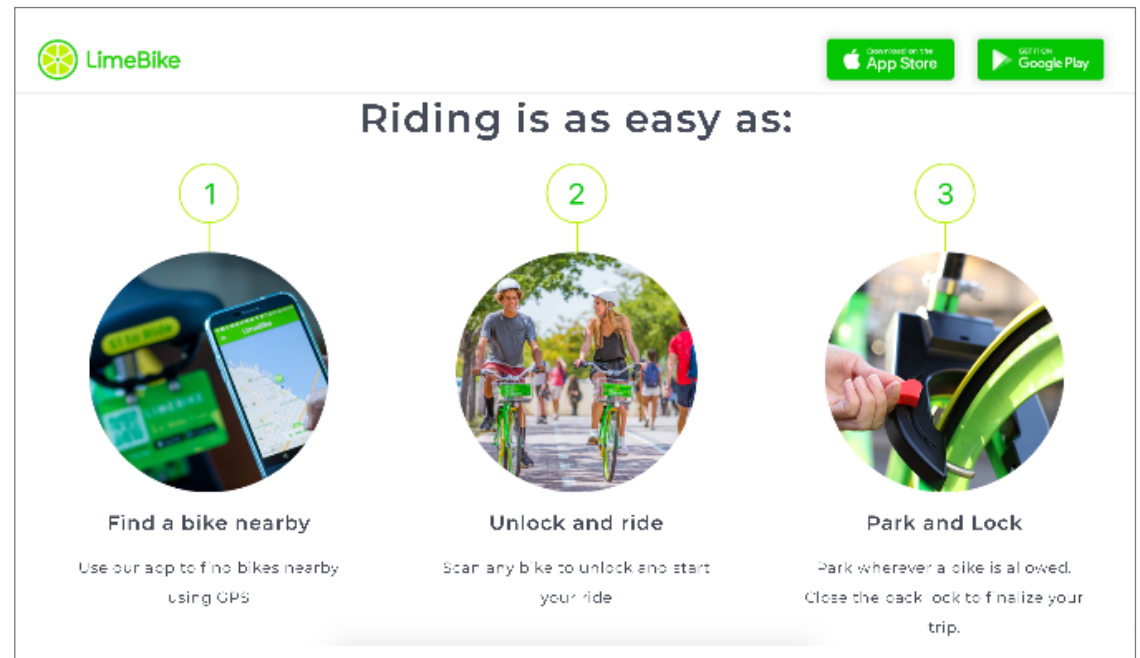
1-CREATIVE BRIEF

Purpose

For the bike helmet to protect you, it needs to fit accurately. By using the face detection technology, the kiosk will be able to measure biker's head within seconds. It will take the biker's head measurements then give the appropriate helmet size for them.

Client Expectation

-The design is simple and easy to use for bikers
-Increase the use of helmets when cycling from 3/20 in Feb to 15/20 bikers in Feb 2018.
-Increasing the revenues from 500 millions in Jan to 1.1 billions in Aug 2018.

Target Audiences

-LimeBiker users
-Tourists
-Cyclists aged 18 - 45
-Urban areas
-Health concerned

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Solutions

Develop the kiosk that is simple and easy to use. LimeHelmet will provide a rental helmet kiosk for LimeBike users. An automated vending machine that will dispense helmets for a small fee will also apart of the project.

The kiosk design will improve the lack of sanitation from competitors. Following each rental, LimeHelmet will sanitize and inspect each helmet before handing it to users. Users have an option to keep track on cleaning processes before they get the helmet on their hands.

Limehelmet also ensures that each kiosk will remains continually stocked with enough helmets to meet the community's need.

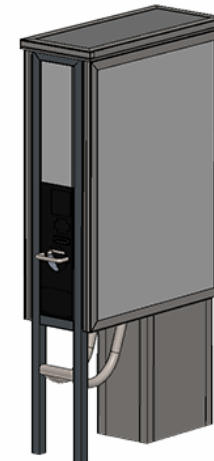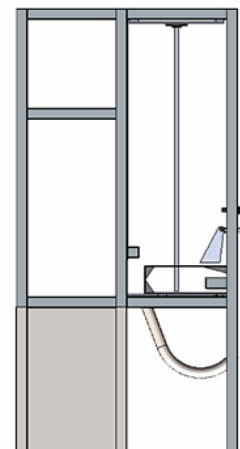# 2 - COMPETITIVE ANALYSIS

HelmetHub

Features

- City Maps
- User manual
- Payment instruction
- Solar power
- Real-time analytics
- Each machine can hold 36 helmets.
- Touch screen system to help deploy the safety gear.
- Sent to the company's headquarters to be cleaned and sanitized before the next customer.

Design

- Simple color scheme
- Effective use of illustrators
- Large screen display
- Helmet tray display

2 - COMPETITIVE ANALYSIS

MelBourneBikeShare

Features

- Refrigerator Display
- User manual
- Payment instruction
- Each machine can hold 30 helmets.
- Returned at 7-Eleven stores for cleaning, disinfection and lining replacement.

Design

- Bright color scheme
- Transparent machine design
- Large screen display

3 - FEATURES

Instruction

- Provide clear step by step instructions for users.
- LimBike user required (There will be an option to signup for LimeBike account)

Measure your size

- Camera Scanning
- Visual direction instructons
- Option to Re-do
- Giving the best size

Rental Review

- Information about the size, the rental period

Payment

- Payment process before ready to go

Confirmation Page
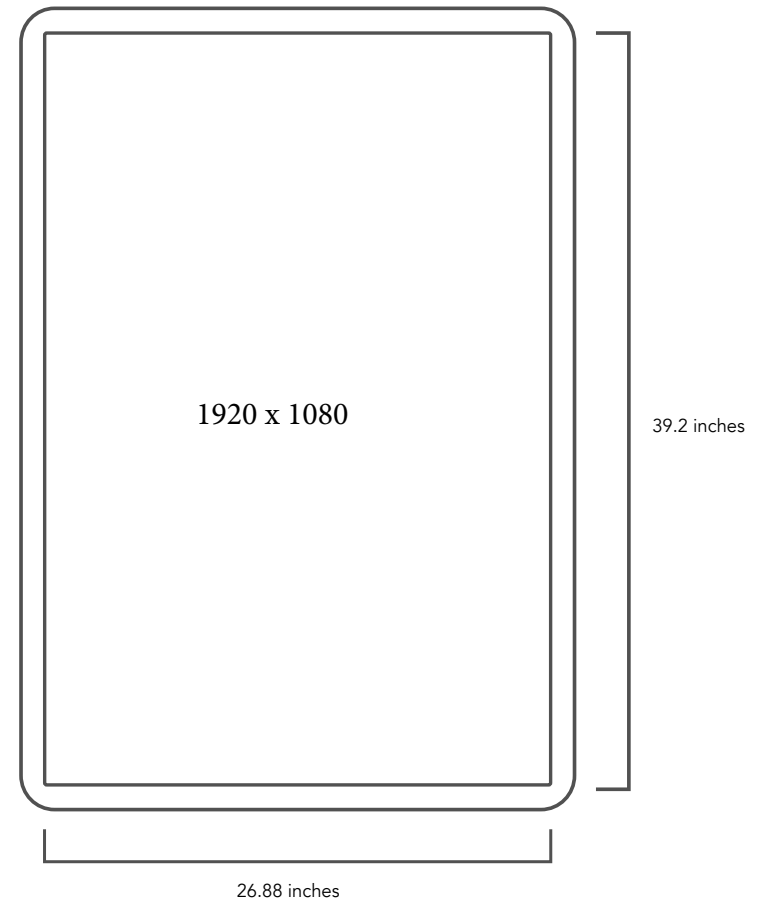
- Confirmation rental
- LimeHelmet location search

4 - INSPIRATIONS
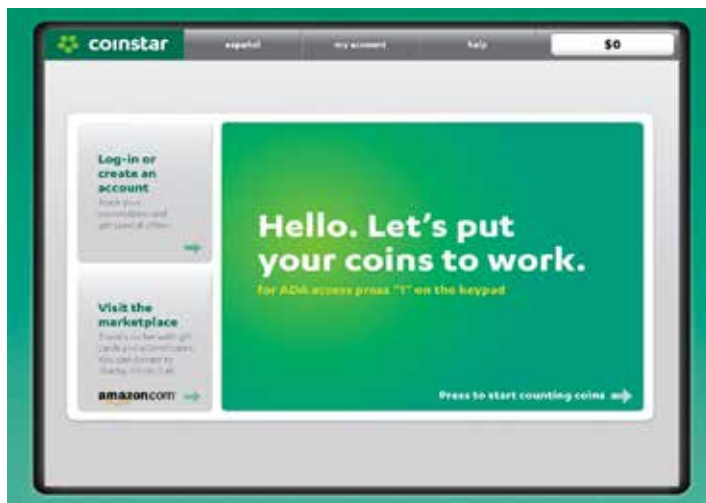
5 - KIOSK DIMENSIONS

Touch screen kiosks including all of the following:

- **Touch Screen Kiosk Monitor Sizes:** 42 inches

- **Aspect Ratio:** 16:09

- **Dimensions:** 38.39" x 22.63" x 3.46"

- **Active Area:** 36.53" x 20.55"

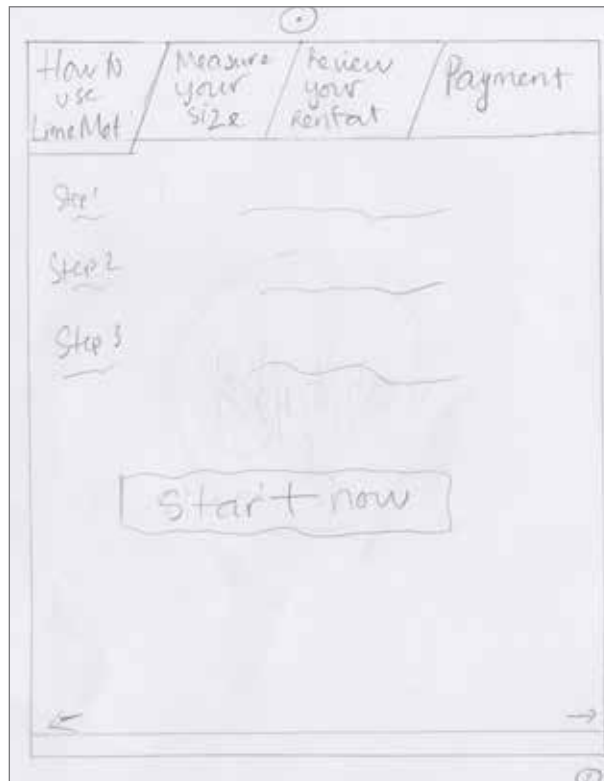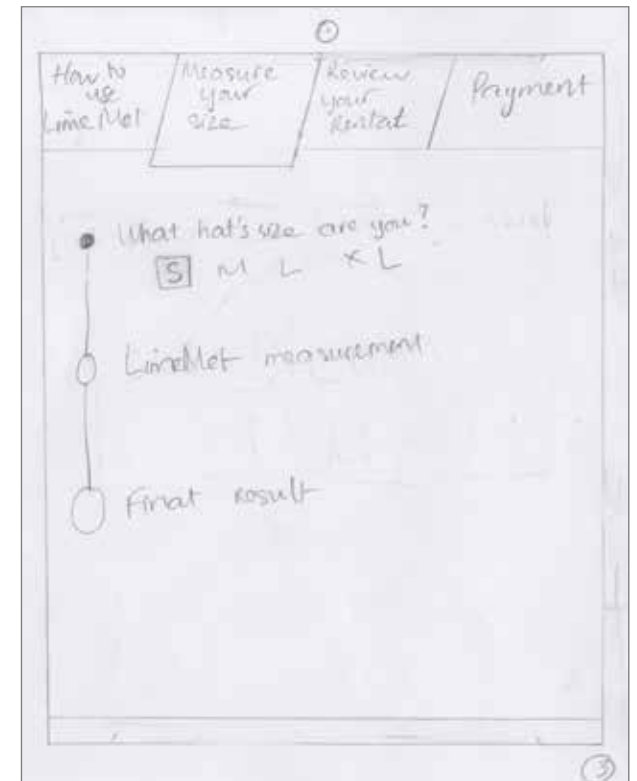- **Resolution:** 1920x1080

- **Touch Glass:** 4mm

1920 x 1080

39.2 inches

26.88 inches

6 - USER FLOW


```
                          ┌─────────────┐
                          │ Loading Page│
                          └──────┬──────┘
                                 │
                                 ▼
                          ┌─────────────┐      ┌──────────┐
                          │ SignUp/SignIn├─────►│  SignIn  │
                          └──────┬──────┘      └──────────┘
                                 │              ┌──────────┐
                                 │         ─────►│  SignUp  │
                                 │              └──────────┘
```

How to use LimeHelmet	Measuring your size	Review your rental	Payment
Instruction Steps	Scanning size	Summary of a rental	Payment process
	Scanning result		Confirmation Page

Saved card

Add new card
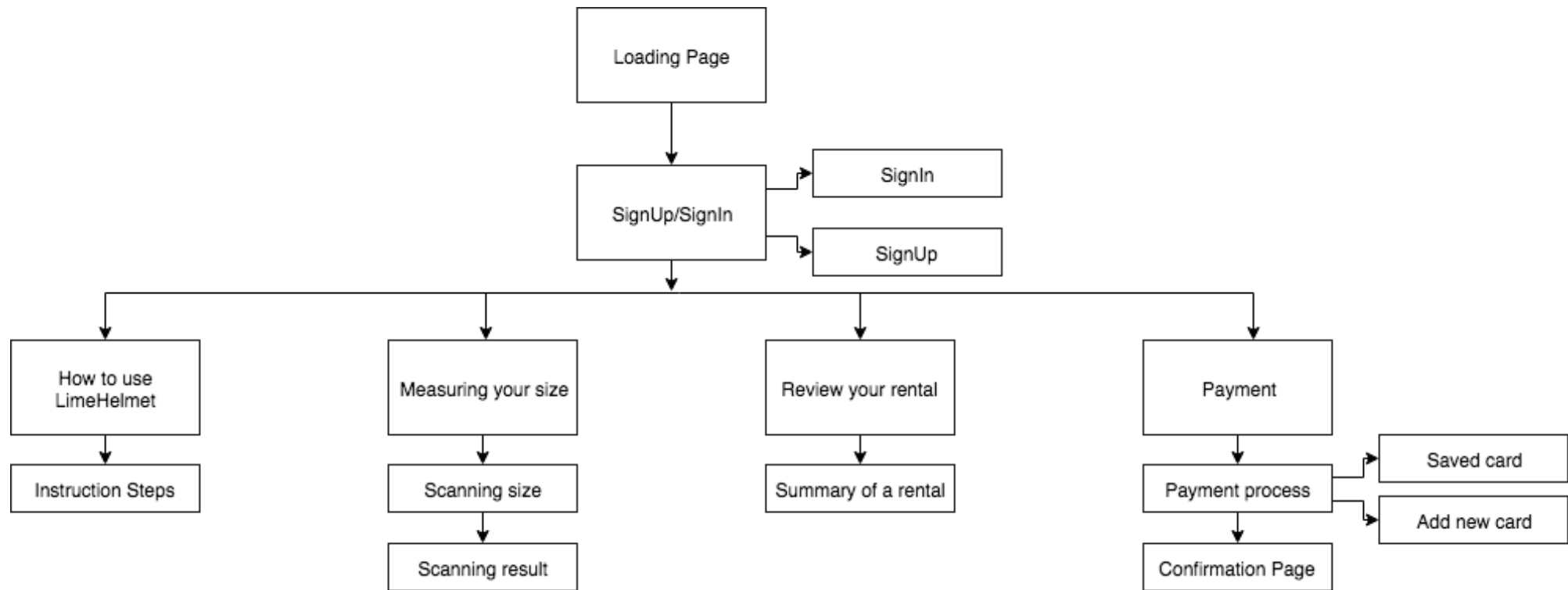
7 - SKETCHES

Landing Page

Instruction Page

Measurement Page

7 - SKETCHES
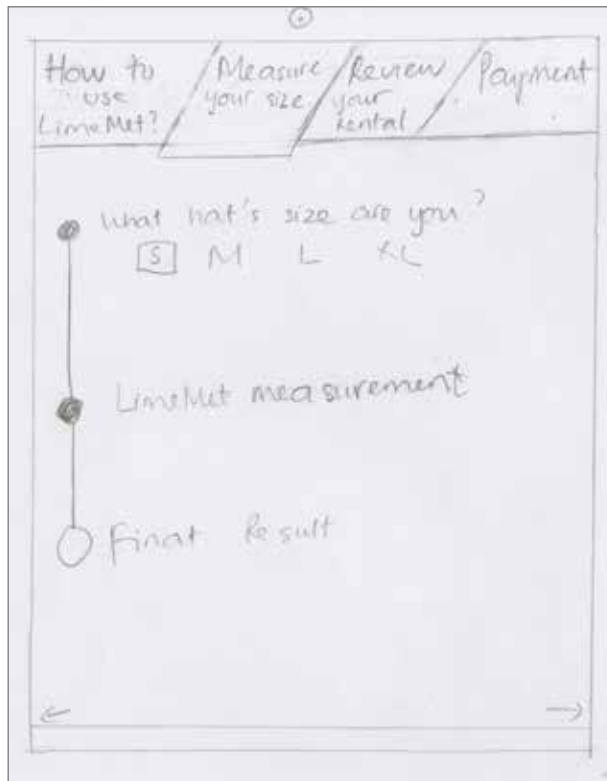
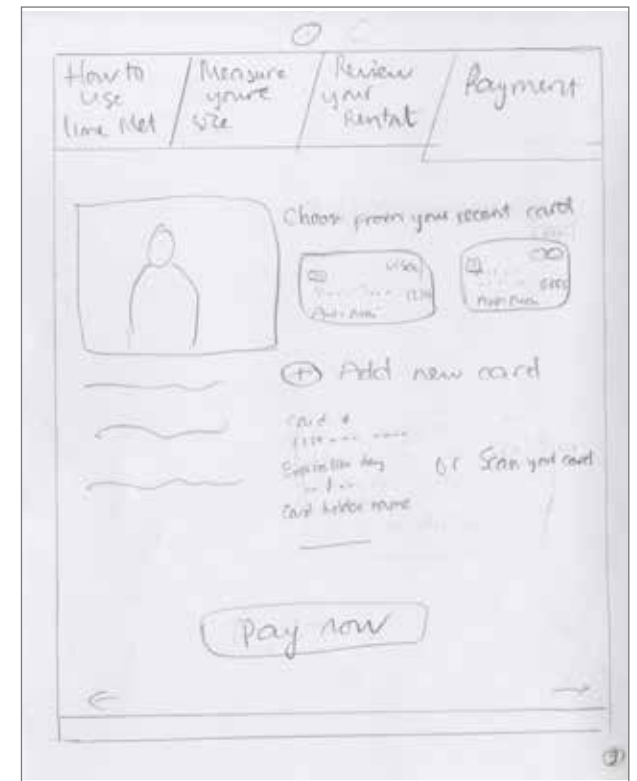Measurement Page #2

Measurement Page #3
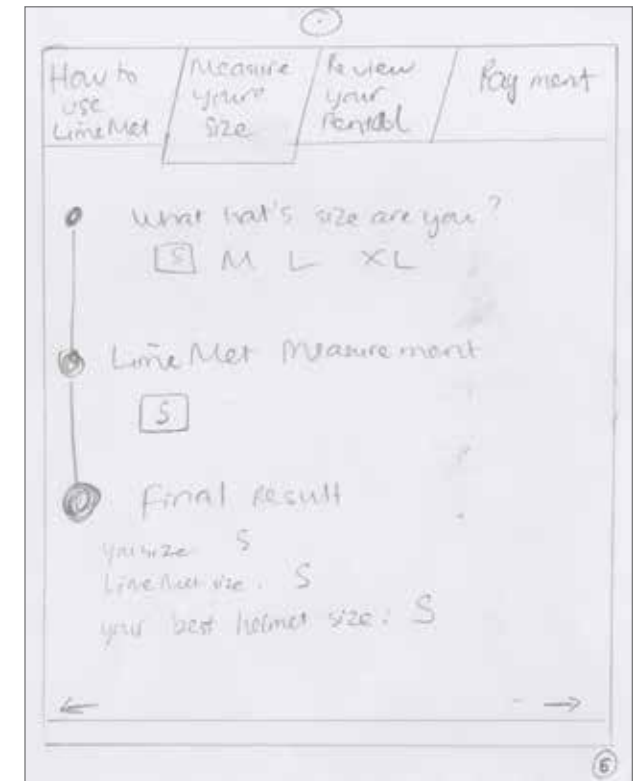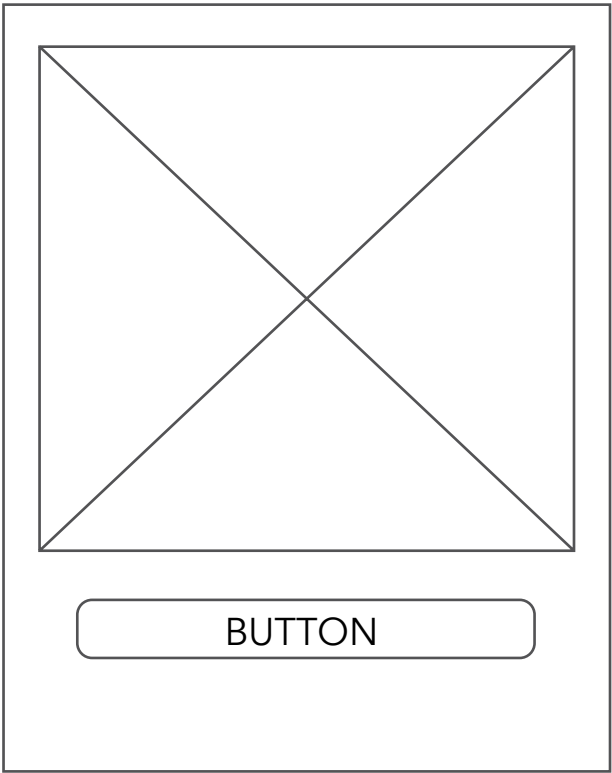

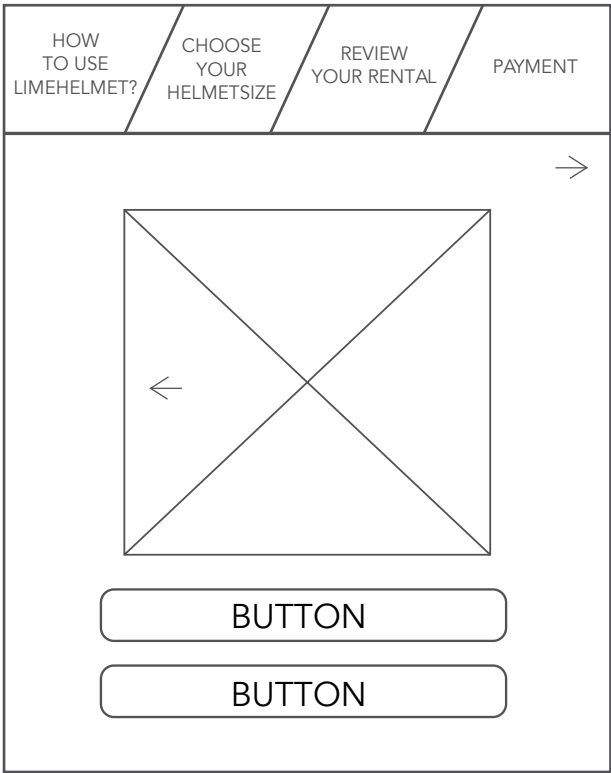Measurement Page #4
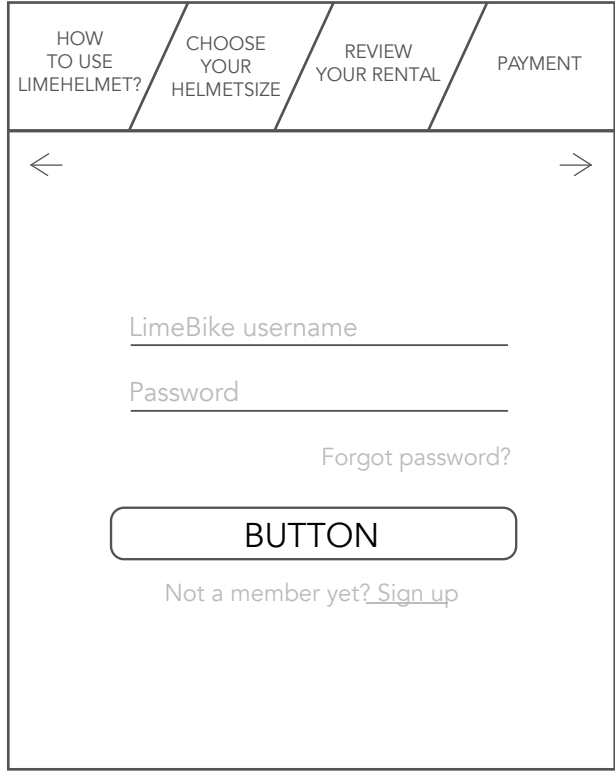
7 - SKETCHES
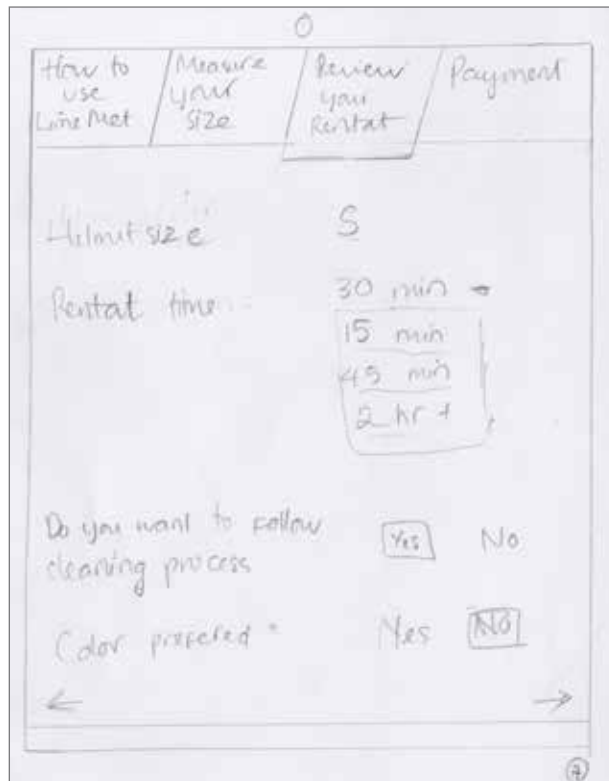
Review Page
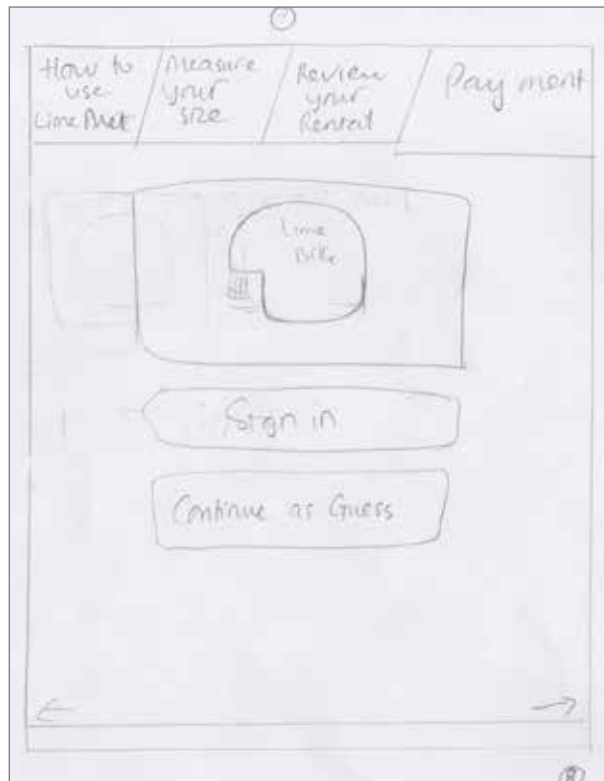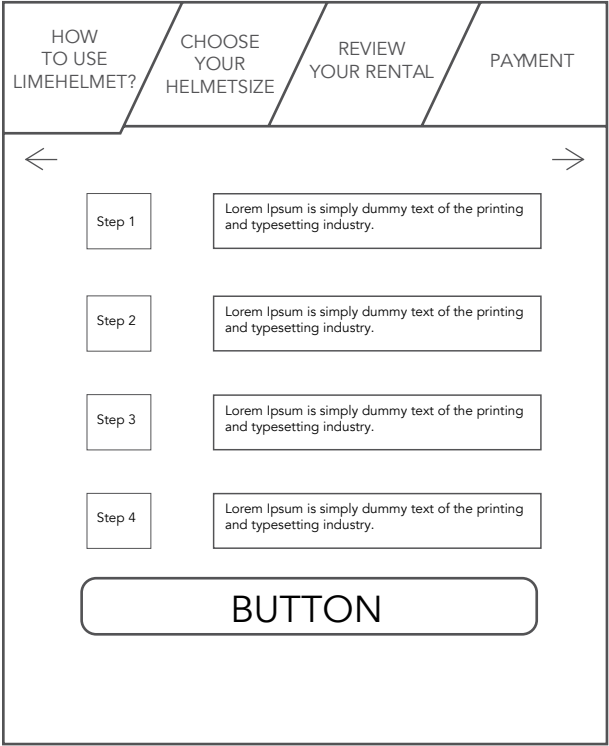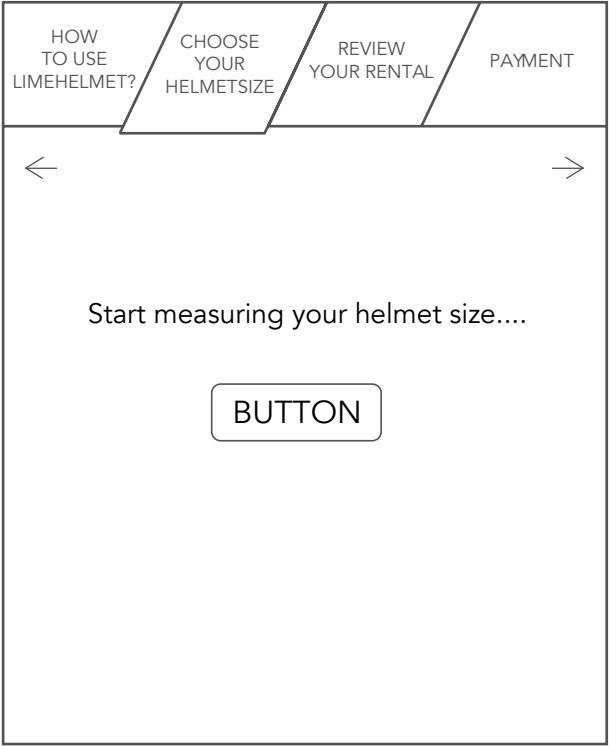

SignIn Page

Payment Page

8 - WIREFRAME

Landing Page

HOW TO USE LIMEHELMET? | CHOOSE YOUR HELMETSIZE | REVIEW YOUR RENTAL | PAYMENT

BUTTON

BUTTON

SignIn Page

HOW TO USE LIMEHELMET? | CHOOSE YOUR HELMETSIZE | REVIEW YOUR RENTAL | PAYMENT

LimeBike username

Password

Forgot password?

BUTTON

Not a member yet? Sign up

SignIn Page

8 - WIREFRAME

Instruction Page

HOW TO USE LIMEHELMET?	CHOOSE YOUR HELMETSIZE	REVIEW YOUR RENTAL	PAYMENT

← →

Step 1	Lorem Ipsum is simply dummy text of the printing and typesetting industry.
Step 2	Lorem Ipsum is simply dummy text of the printing and typesetting industry.
Step 3	Lorem Ipsum is simply dummy text of the printing and typesetting industry.
Step 4	Lorem Ipsum is simply dummy text of the printing and typesetting industry.

BUTTON

Measurement Page

HOW TO USE LIMEHELMET?	CHOOSE YOUR HELMETSIZE	REVIEW YOUR RENTAL	PAYMENT

← →

Start measuring your helmet size....

BUTTON

Scanning Page

HOW TO USE LIMEHELMET?	CHOOSE YOUR HELMETSIZE	REVIEW YOUR RENTAL	PAYMENT

← →

ACCEPT   RE-SCAN

Instruction Page   **Measurement Page**   **Scanning Page**

8 - WIREFRAME

Result Page

HOW TO USE LIMEHELMET? | CHOOSE YOUR HELMETSIZE | REVIEW YOUR RENTAL | PAYMENT

← →

Your helmet size is: RESULT

CANCEL

Review Page

HOW TO USE LIMEHELMET? | CHOOSE YOUR HELMETSIZE | REVIEW YOUR RENTAL | PAYMENT

← →

Your helmet size is: EDIT

Estimated rental time: pay as I go ▼

BUTTON

Payment Page

HOW TO USE LIMEHELMET? | CHOOSE YOUR HELMETSIZE | REVIEW YOUR RENTAL | PAYMENT

← →

Transaction number
123123
$5
per 30 mins

Select payment

VISA xxxxxx1234

⊕ Add a new card
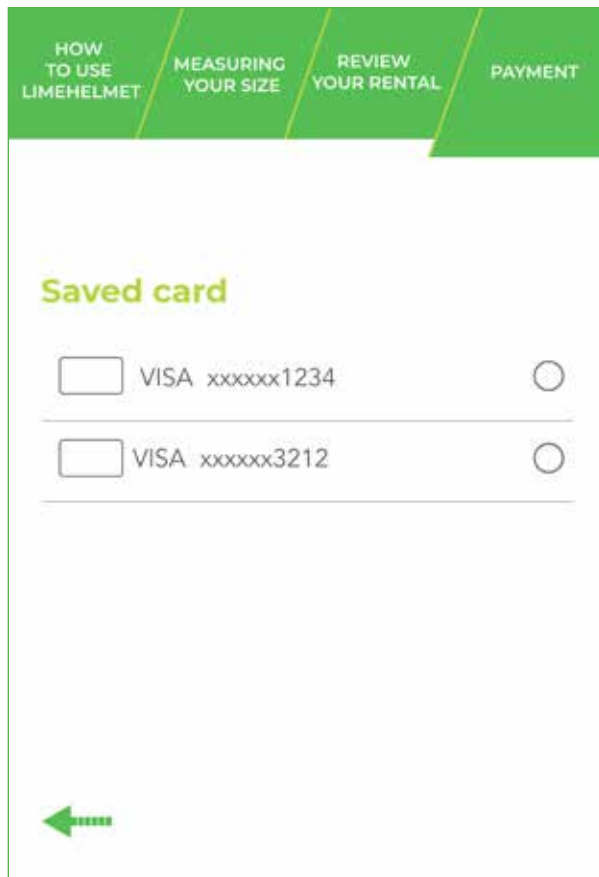
━ Insert your debit/credit

Transaction history +

BUTTON

8 - WIREFRAME

HOW TO USE LIMEHELMET?	CHOOSE YOUR HELMETSIZE	REVIEW YOUR RENTAL	PAYMENT

VISA ◉◉ AMERICAN EXPRESS DISCOVER

Card Number
---- ---- ---- ----
Card Holder Nam e

Expiration Day   CVV
--/--

BUTTON

Add a new card Page

HOW TO USE LIMEHELMET?	CHOOSE YOUR HELMETSIZE	REVIEW YOUR RENTAL	PAYMENT

Processing

BUTTON

Processing Page

HOW TO USE LIMEHELMET?	CHOOSE YOUR HELMETSIZE	REVIEW YOUR RENTAL	PAYMENT

SUCCESS!

It our pleasure to offer you our product

BUTTON

BUTTON

Confirmation Page

8 - WIREFRAME
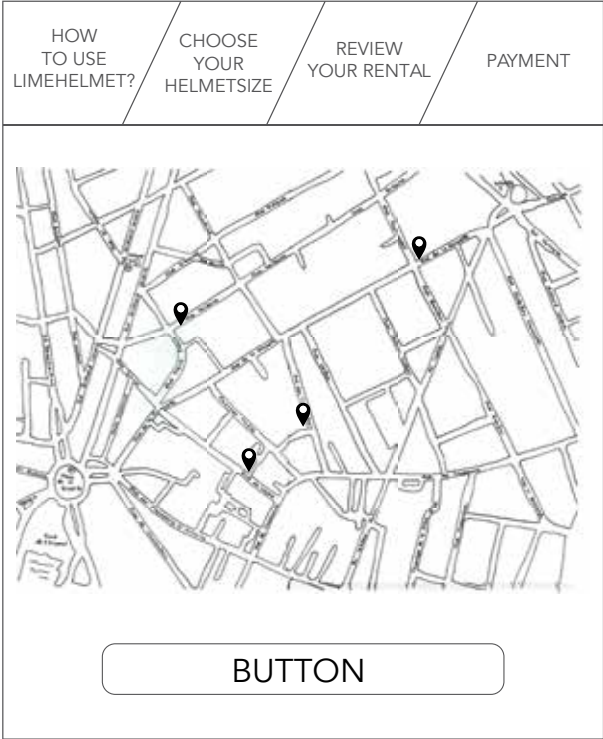
Location Page
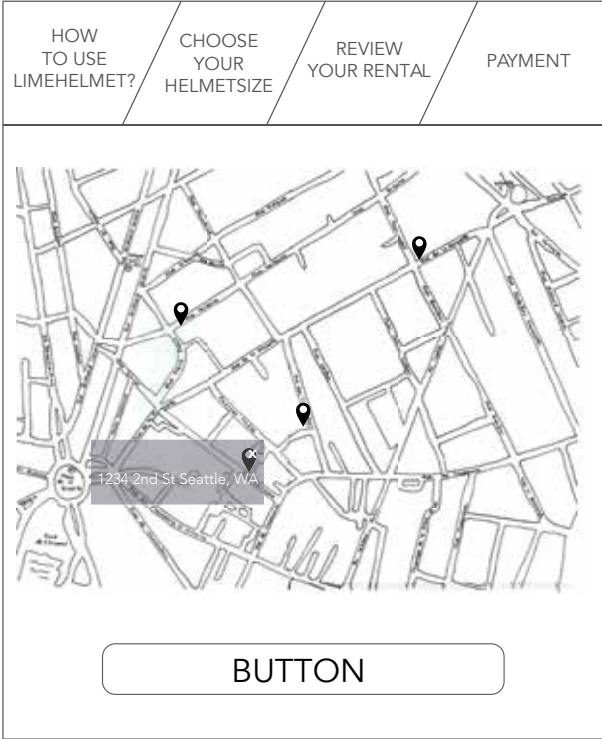
Location Selected Page

9 - USABILITY TESTING

The usability test mainly focused on the following perspectives:

- Overall user flow
- The interaction between users and functions
- Time-consuming (How long does it take users to figure out)
- Effectiveness of navigation
- Overall design criteria (icons, text, layout..)

Participant Qualifications

- Aged 18-35
- Safety preferred
- Existing LimeBike users for updating testing and new potential users.
- Biking more than two times per week

Tasks

- *You are a new user who is bike with LimeBike and going to rent a helmet in the LimeHelmet kiosk.*
    - You want to know how to use LimeHelmet.
- *Choose the helmet size that suits you best*
    - Follow the direction when measuring your head.
- *Review your rental*
    - You want to rent your helmet for 30 mins.
- *Payment*
    - Pay with your saved card

9 - USABILITY TESTING

I tested six users. Here are the paper testing results:

- All of them suggested removing the "measure your hat size" section since LimeHelmet already gives a measurement.
- The colors are very consistent and associated with LimeBike brand
- The user flow was smooth and simple
- The navigation arrows should be bigger for users to see and interact with the big screen like the kiosk.
- One user suggested having "Pay as you go" added into rental time to give them more flexibility.
- Four users were concerned about the payment process, they asked for more options to choose from.

Changes

- Add some missing features as suggested by the usability test.
- Move the " SignIn" page to the first, since becoming a Limebike user is required.
- There should be a confirmation page after done with renting.
- Makes navigation buttons bigger and move it to the bottom of the screen for users easy to navigate.
- Other details as suggested by usability testing.
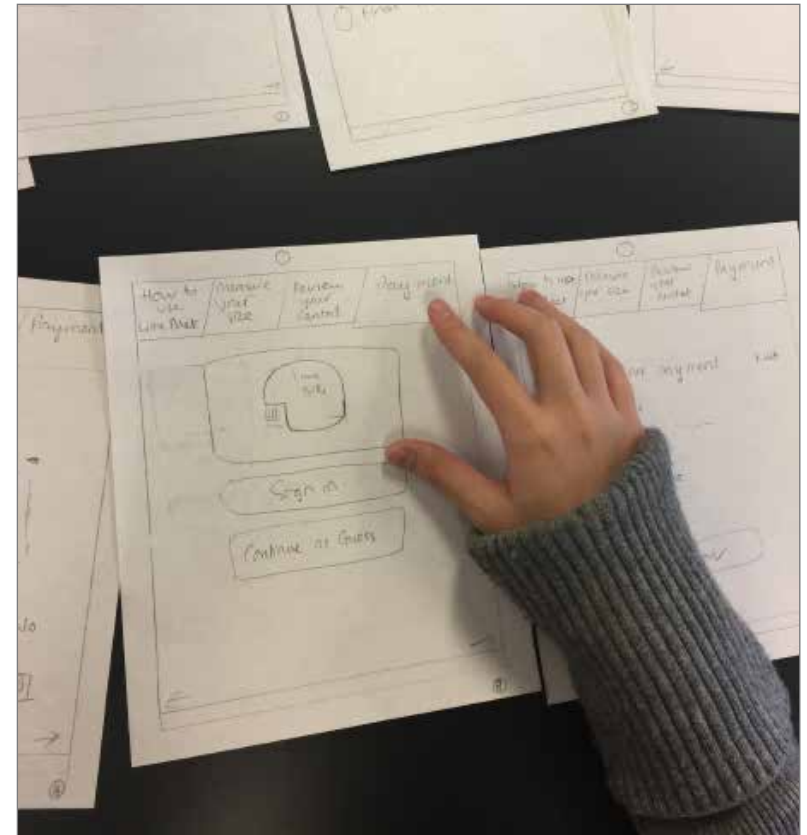
10 - STYLE GUIDE

TYPOGRAPHY

Title   **Montserrat, sans-serif, 48px**

Sub-Title   **Montserrat, sans-serif , 24px**

Header   Montserrat, sans-serif, 18px

COLOR PALETTE

#454a57	#add136	#4bb749

BUTTON AND ICON

10 - STYLE GUIDE

BUTTON AND ICON STATUS

BUTTON	BUTTON	BUTTON
Resting	Disable	Active(Click)

INPUT

Username	Username
Resting	Active

Username	Username
Jessica ✓	Required
SuccessfulE	rror
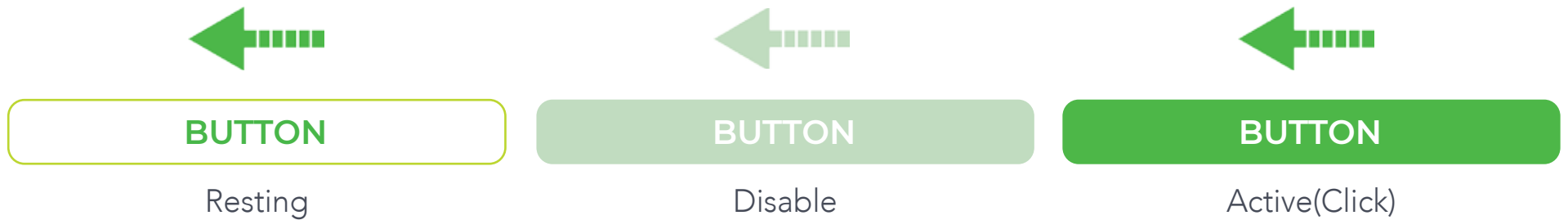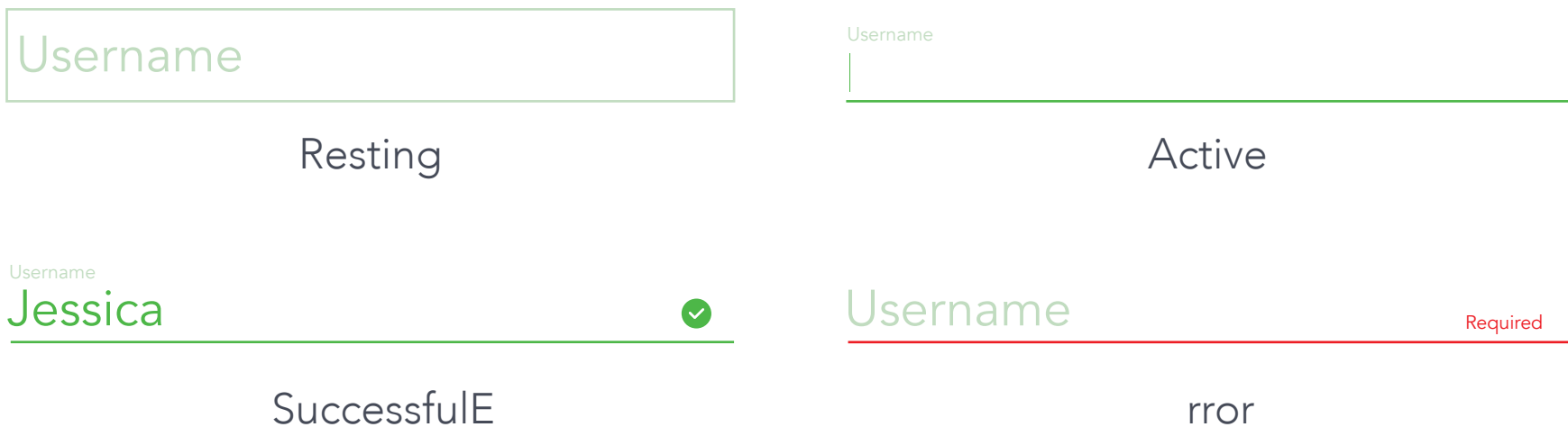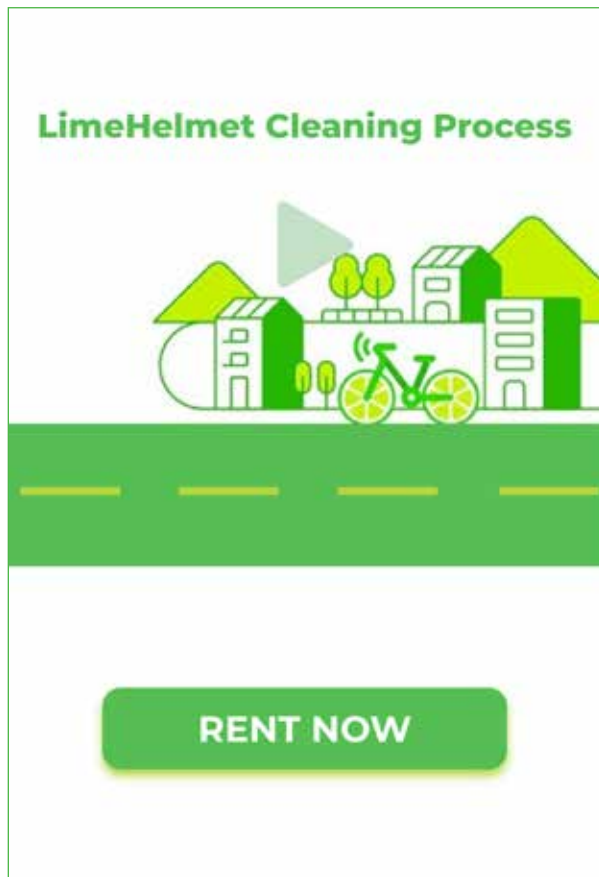
11 - FINAL DESIGN

Landing Page

SignIn / SignUp Page
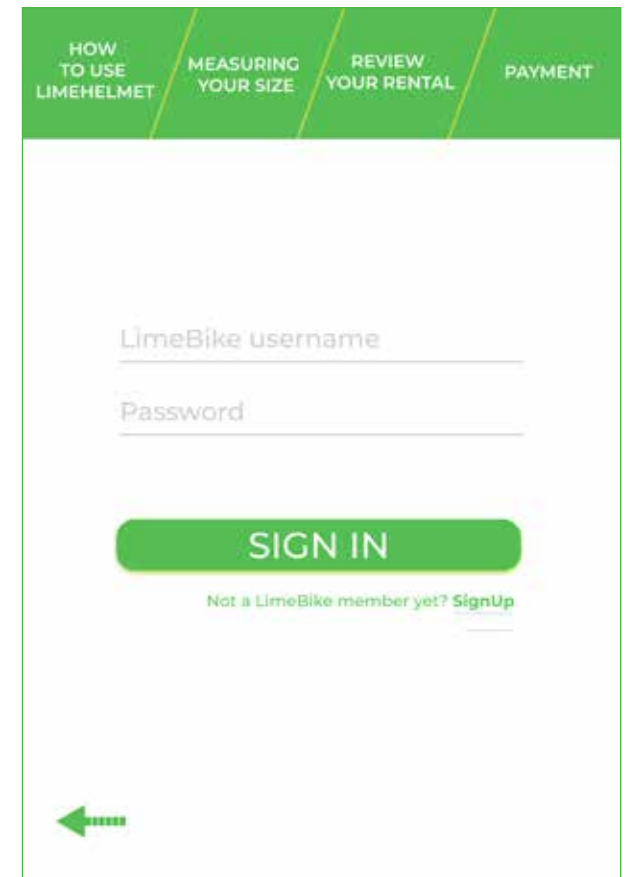
SignIn Page

11 - FINAL DESIGN

SignUp Page

Instruction Page

Measurement Page
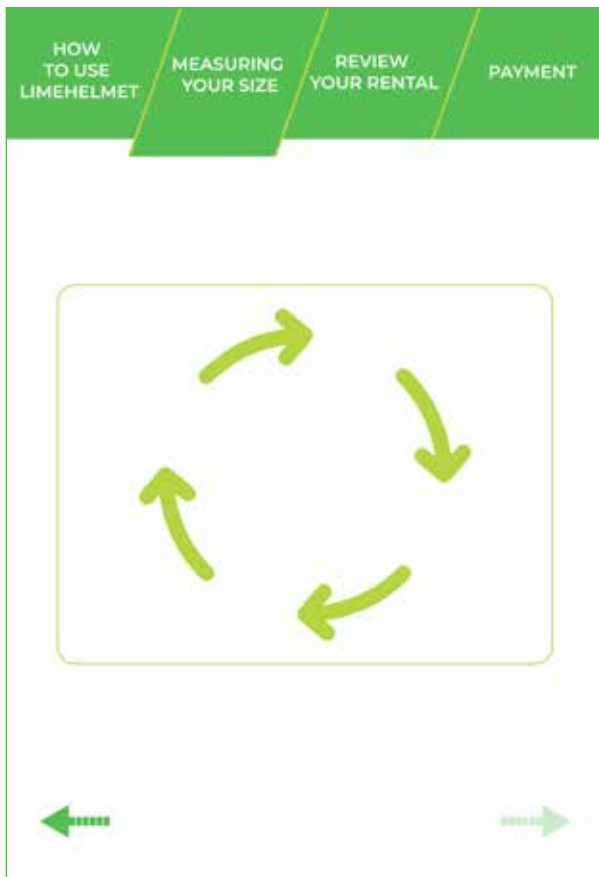
11 - FINAL DESIGN

Scanning Page
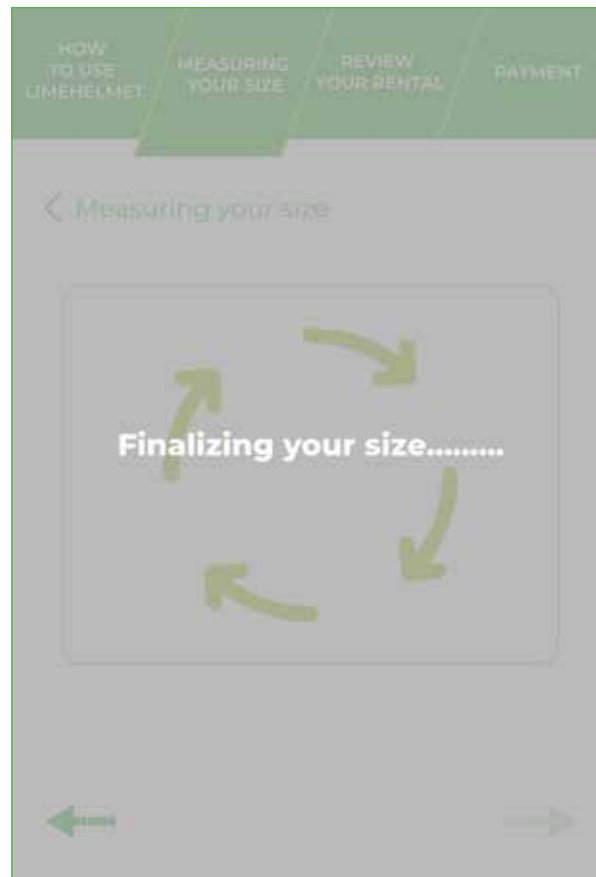
Finalizing Page
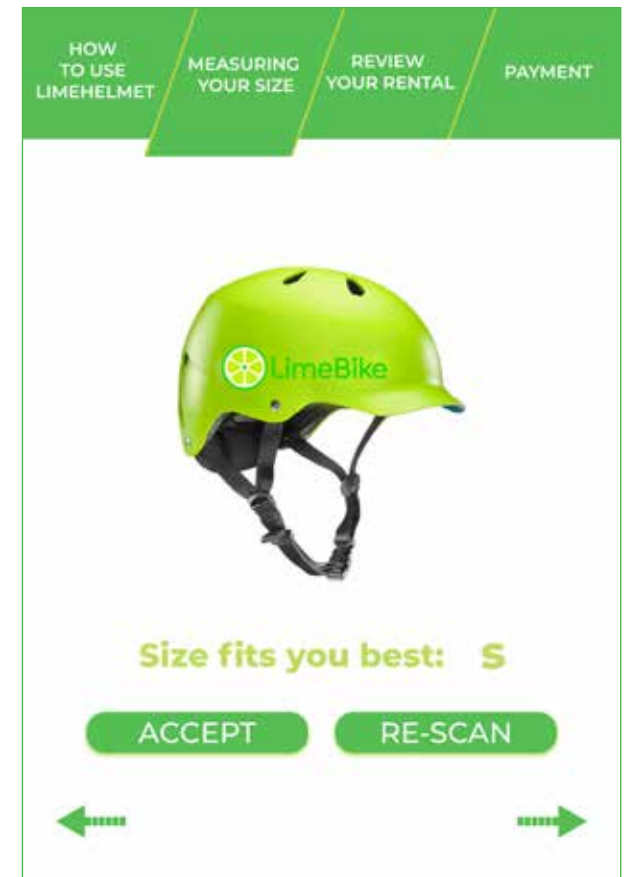
Measuring Result Page

11 - FINAL DESIGN

Review Page

Review Page Selected

Payment Page

11 - FINAL DESIGN

| HOW TO USE LIMEHELMET | MEASURING YOUR SIZE | REVIEW YOUR RENTAL | PAYMENT |

Saved card

☐ VISA xxxxxx1234 ◯

☐ VISA xxxxxx3212 ◯

| HOW TO USE LIMEHELMET | MEASURING YOUR SIZE | REVIEW YOUR RENTAL | PAYMENT |

Add new card

VISA ◐ AMERICAN EXPRESS DISCOVER

Card Number

Card Holder Name

Expiration Day   CVV
--/--

ADD

| HOW TO USE LIMEHELMET | MEASURING YOUR SIZE | REVIEW YOUR RENTAL | PAYMENT |

Transaction history

Lime Helmet kiosk #1 at 1st Ave   5$
**** **** **** 3212
30 rental time

Lime Helmet kiosk #32 at Weslake Center   20$
**** **** **** 3212
two hours rental time

Lime Helmet kiosk #8 at Boren Ave   - -$
**** **** **** 3212
in using

Save Card Page   Add New Card Page   Transaction History Page
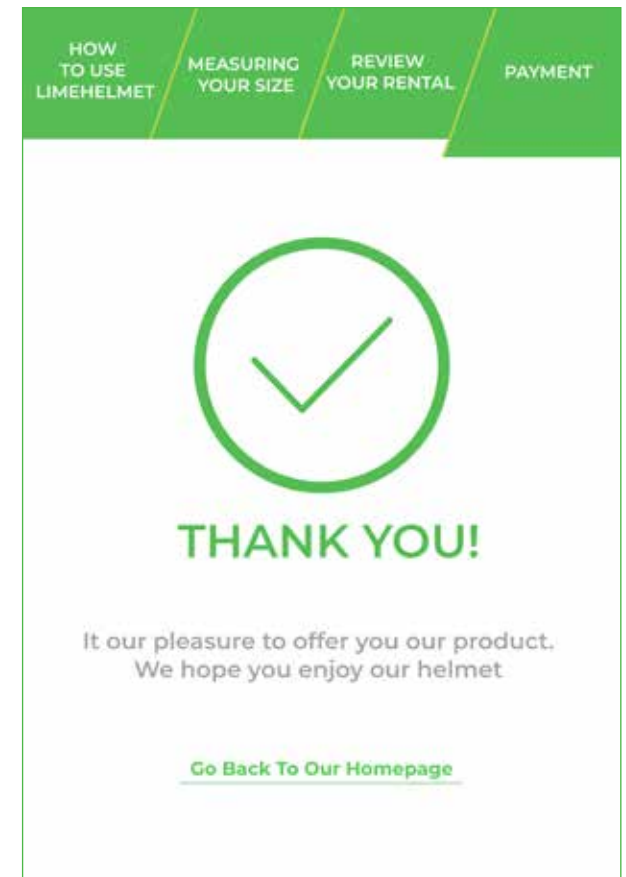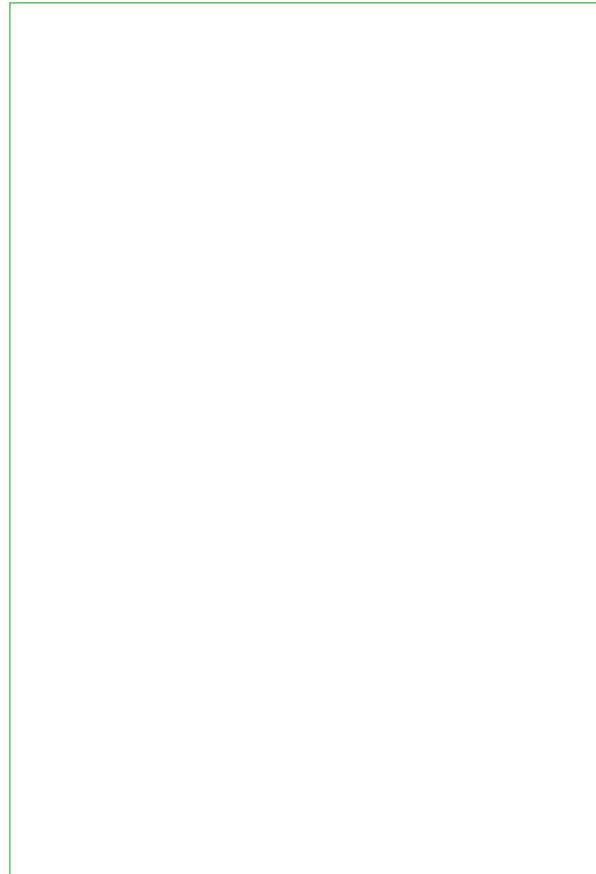
11 - FINAL DESIGN
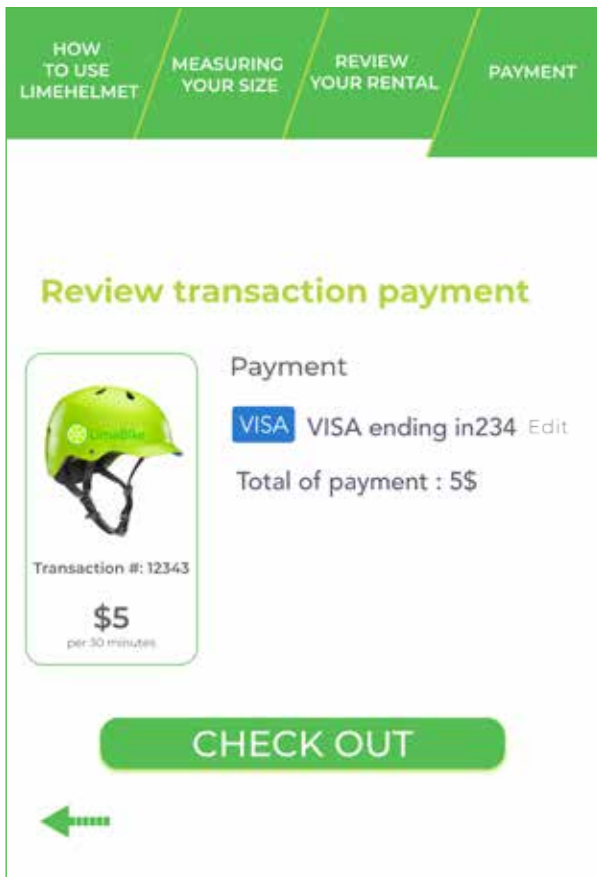
Review Page
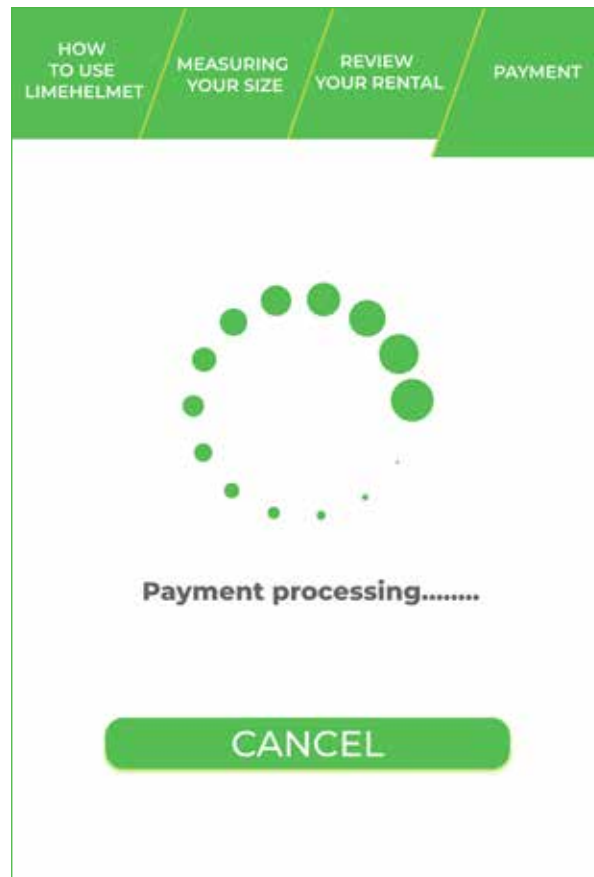
Processing Page

Confirmation Page

12 - INTERACTIVE PROTOTYPING

https://xd.adobe.com/view/02844ae1-04cb-44c9-58ab-d1b7552397e2-74b5/