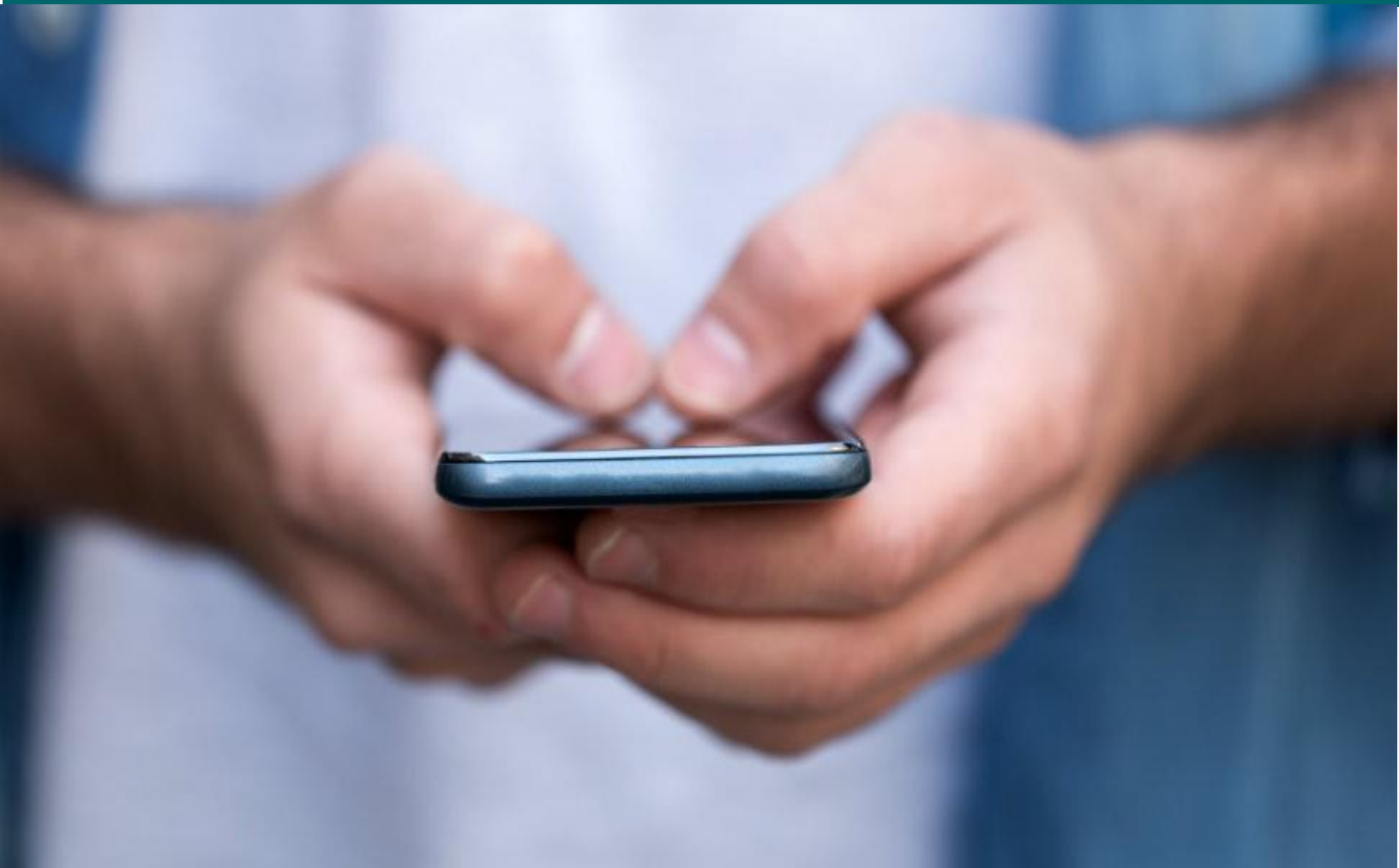


Smart Mobile Portfolio



Adam Mokhtar

3478335

SM41

Fontys university of applied science

Executive Summary

This portfolio provides general information about what I have done in the smart mobile specialization course including the progress and developments. As well showing the achieved goals of this course provided with some examples.

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Learned materials

User Experience Workshops

Most of the material learned was directly applied in the IronBike application.

Spaceteam

As a group of students in the UX class we were divided into teams to play the game Spaceteam. This game includes several buttons, switches and toggles, in order to finish each stage, the team needs to collaborate.

After we played the game, we were asked to make a game ourselves using the table, pen and paper. The new game should be similar to the Spaceteam in the collaboration aspect.

Video of our game : [here](#)

From the game we learned how to make the game more enjoyable with more difficult challenges and increasing the amount of interaction between the players.

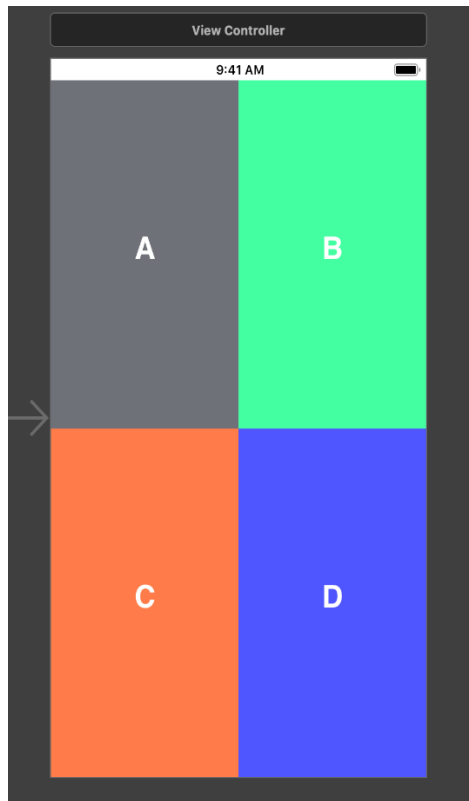


IOS development workshops

In each workshop we tried to learn new materials using a tutorial to create an app. All the created apps are at the Git lab, check this link https://git.fhict.nl/l400736/adam_mokhtar-gael_shema-sm41- under my name AdamMokhtar_Solo.

Soundboard

I created a soundboard app which contains several buttons and each button has a specific sound.



Learned how to work with the view controller and contacting the sounds with the buttons.

Parsing JSON

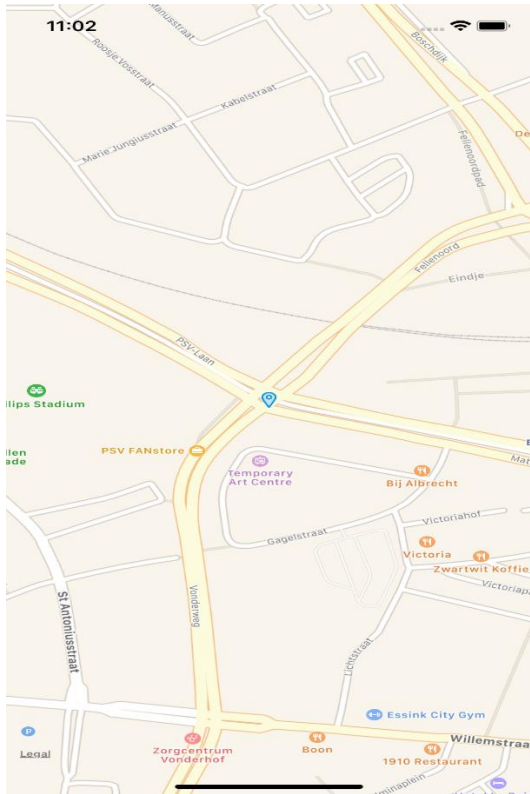
This app is to retrieve data from an existing JSON file.

```
[Parsing_JSON.Course(id: Optional(1), name:
Optional("Instagram Firebase"), link:
Optional("https://www.letsbuildthatapp
.com/course/instagram-firebase"), imageUrl:
Optional("https://letsbuildthatapp-videos
.s3-us-west-2.amazonaws
.com/04782e30-d72a-4917-9d7a-c862226e0a93")),
Parsing_JSON.Course(id: Optional(4), name:
Optional("Kindle Basic Training"), link:
Optional("https://www.letsbuildthatapp
.com/basic-training"), imageUrl:
Optional("https://letsbuildthatapp-videos
.s3-us-west-2.amazonaws
.com/a6180731-c077-46e7-88d5-4900514e06cf")),
Parsing_JSON.Course(id: nil, name:
Optional("Yelp"), link: nil, imageUrl: nil)]
```

Learned how to get a specific data from a json file.

Mapping

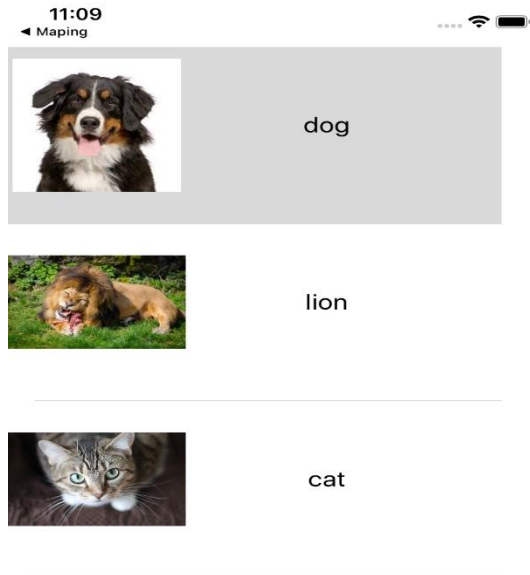
I created a mapping app to put on a customized pins.



Learned how to work with mapkit and getting the current location as well adding a customized annotation.

Custom Cell

Created an app that uses a custom table.



Learned how to use the table view cell as a customized cell with some pictures and labels.

IronBike

App description

IronBike is a renting bike application on the appStore that gives the ability for the user to rent several bikes with different methods of payment. In our app we have two different types of bikes (e-bike, normal bike) and each category has different bikes with different prices. Further, the subscription progress will be reliable and practical in use which includes the flexibility for the user to unsubscribe in short period.

Target Users

Our targets audience are mainly students, travelers and whoever need a bike for a short period. As a student having a bike with a fixable subscription is very handy specifically for the Foreigners they travel back to their country for short period and during that time they don't want to keep paying for their bikes.

As well, people who prefer to be global friendly a bike will always be a decent option, we will try to encourage them to use the bikes with putting the bikes in a traffic jam locations.

Finally, we will focus on the tourists to put some bikes close to the airports and the center stations because a lot of travelers want to visit specific places in the city and using the bike will be affordable and fast.

Reasons of using the app

- 1- Free to download.
- 2- Being healthy.
- 3- Being global friendly.
- 4- Good service.
- 5- Travel from a point to another in a short period.
- 6- Subscription flexibility.

Goals of the app

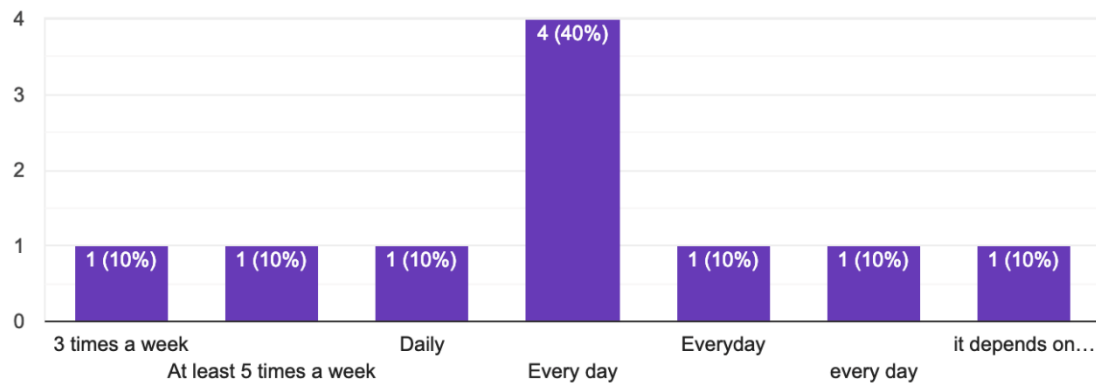
- 1- Encourage people to use natural sources.
- 2- Increase the amount of activity.
- 3- Giving the flexibility for the new students.
- 4- Change the habit of having a strict subscription.

Survey

According to a survey we conducted, most of our targeted users cycle every day to and from places, and they still preferred it to other forms of transportation.

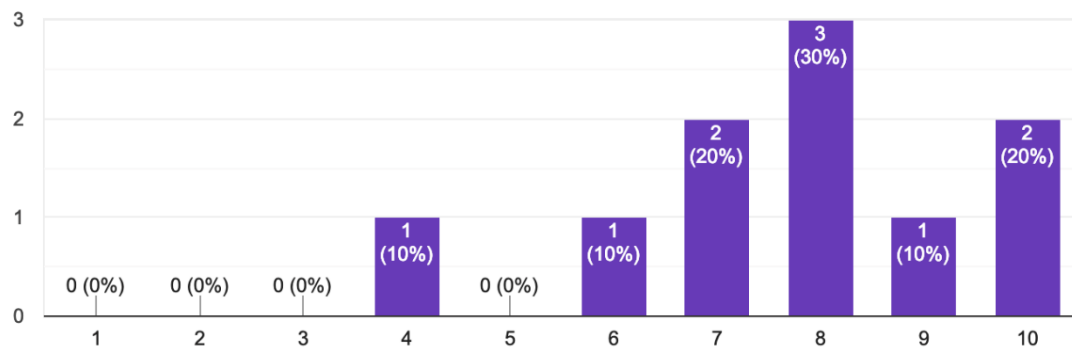
How often do you cycle?

10 responses



On a scale of 1-10 , how much do you prefer cycling to other forms of transport

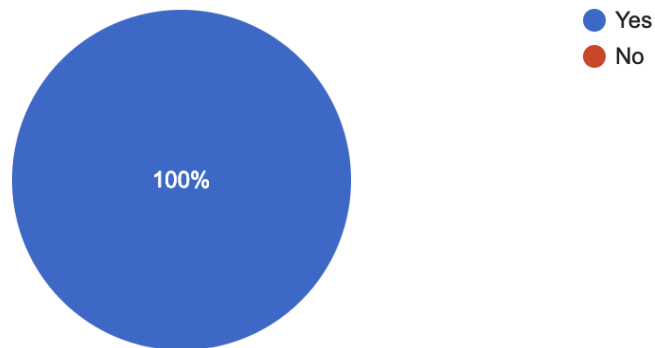
10 responses



One of the features we really wanted to focus on was also asked in the survey questions and much to our satisfaction it was very much in demand as can be seen below:

Do you prefer having a contract that includes subscription cancelling at any time ?

10 responses



Next came for us to ask what the users would like to see/use in our application that would be a deterrent for them to use our application.

What features do you want to see in the app?

9 responses

Subscription cancelling at any time
E-BIKES
the ability to see people in the same area who had rented a bike.
emergency service for fixing the bike at your location
?
Inform me about how many times the bike has been used before
A timer which counts and calculates the price of the rented bike per hour
Rental time
Request a bike maintenance

Personas

Allan Smith



"Biking is the best recipe to any moment in life, plus it's environmentally friendly and sporty."

Age: 21
Work: Full time students
Family: Single
Location: Eindhoven, Noord Brabant
Character: Kind

Goals

- Seamless access to transportation
- A convenient range of prices
- The possibility of subscription canceling at any time

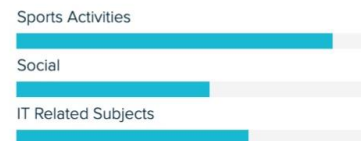
Frustrations

- Present companies offer high prices
- Difficulty in the possibility of subscription canceling at any time(You have to mention this at least 1 month prior)

Bio

Allan Smith is a 21-year-old international student from France, currently studying Software Engineering in Eindhoven. Allan really enjoys biking a lot as he once wanted to pursue a career in professional cycling. However, due to certain circumstances, he had to change course. Since he is a student, he would like to get a bike rental company that offers great prices for students and do not entail long subscription canceling periods.

Motivation



Jacob Howell

Friendly

Open minded

active

Risk-taker

Name: Jacob Howell
Age: 28
Work: IT Developer
Location: The Netherlands



"I want to be more global-friendly so I can keep enjoying my trips"

Motivations



Goals

- Travel across the world
- Enjoy the nature
- Paying as less as possible for the trips

Frustrations

- Air pollution
- Need to pay more than I should
- Whiting for a long time in the traffic

Bio

Jacob Howell is a 28 years old developer, who likes to enjoy his life with trips every few months. Jacob visited a lot of countries and each trip he learns new ways to pay as less as possible. Eventually, he started his interests in the global warming, so he tries to be as global-friendly as possible.

Brands



Use cases

- Case 1: Rent a bike

Actor: Customer.

Trigger: To rent a bike to the customer.

Goal: Rent a bike.

Precondition: The customer is in the home page.

MAIN SUCCESS SCENARIO:

1. The user presses on the rent bike button.
2. The system opens a new page.
3. The user choice between an E-bike or a normal bike on the top of the page.
4. Afterward the user choice one of the bikes in the list.
5. The system opens a new page with different payment methods.
6. The user choice a method.
7. The user fills in his payment credentials.
8. The system provides a map with different locations to get the bike.
9. The user choice a location.

EXTENSIONS:

- Case 2: Create an account

Actor: Customer.

Trigger: Create an account to get access to the application.

Goal: Create a new account.

Precondition: The customer is in the home page.

MAIN SUCCESS SCENARIO:

1. The user fills in some fields.
2. The system confirms the new account.

EXTENSIONS:

2a: The email already exists in the system.

1. The user needs to fill in a new email.

2b: The email already exists in the system.

1. The user choice to log in.
2. The system opens a new page.
3. The user fills in his information.

- Case 3: Return a bike

Actor: Customer.

Trigger: Return rented bike to the company.

Goal: Return bike.

Precondition: The customer is in the first page.

MAIN SUCCESS SCENARIO:

1. The user presses return bike button.
2. The system provides a page with rented bikes.
3. The user choice a bike to return.
4. The user presses the button done on the top corner.
5. The system shows a new page that includes the reason of returning the bike.
6. The user choice the reason.
7. The user presses the done button on the top corner.
8. The system provides a map with different locations to return the bike.
9. The user choice a location.

EXTENSIONS:

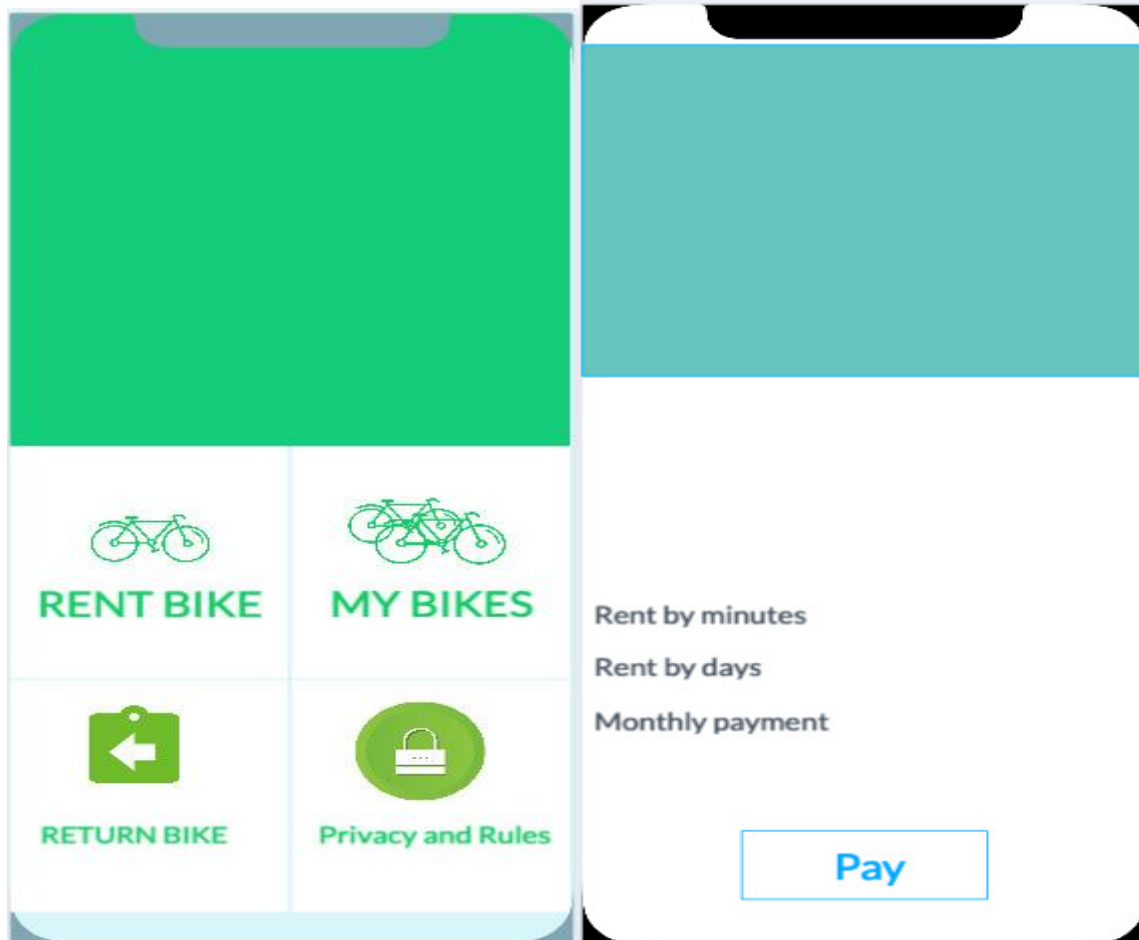
1a: the user doesn't have any bikes

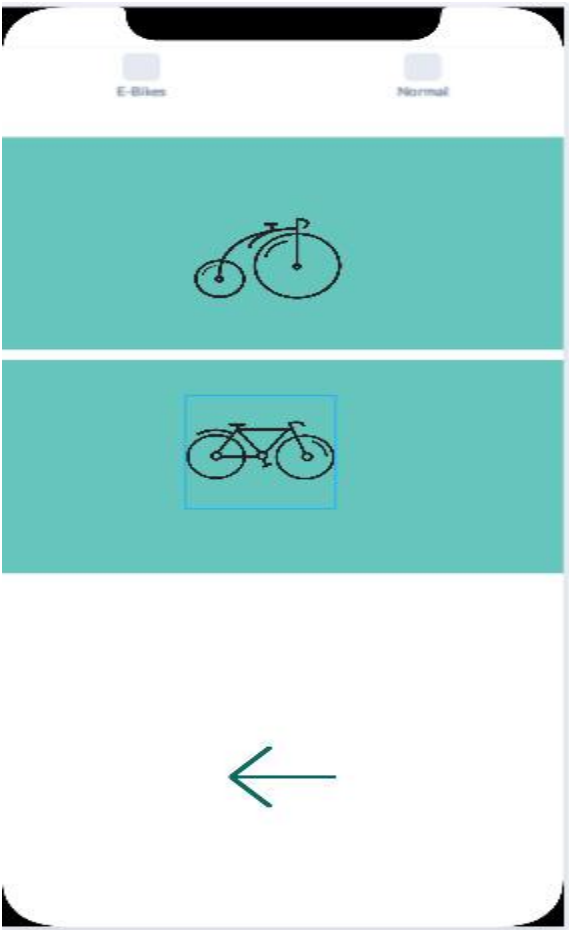
1. The button won't work.

3a: The user wants to return more than one bike.

1. The user choices more than one bike.
2. The system shows a new page that includes the reason of returning each bike separately.

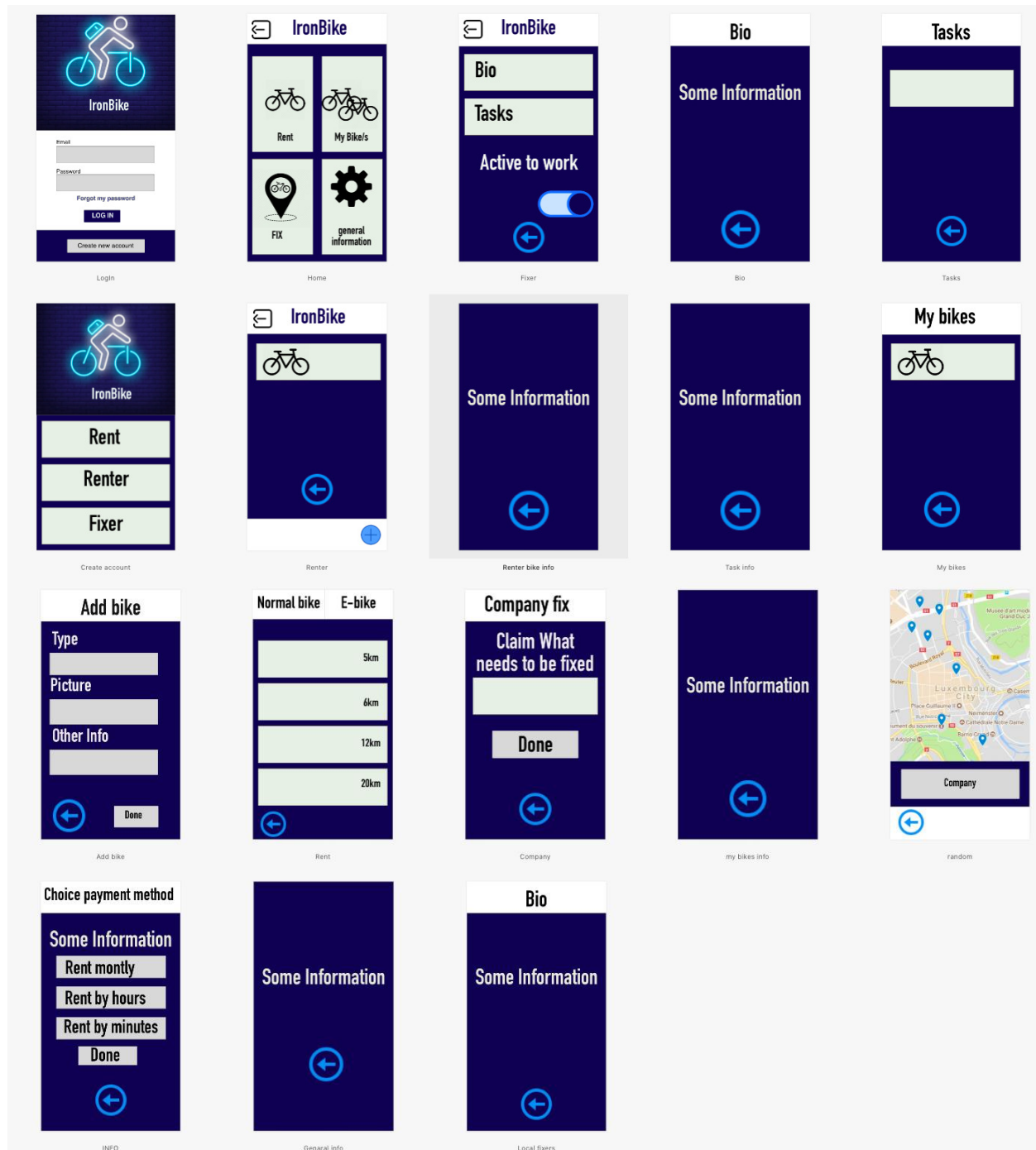
Wireframe





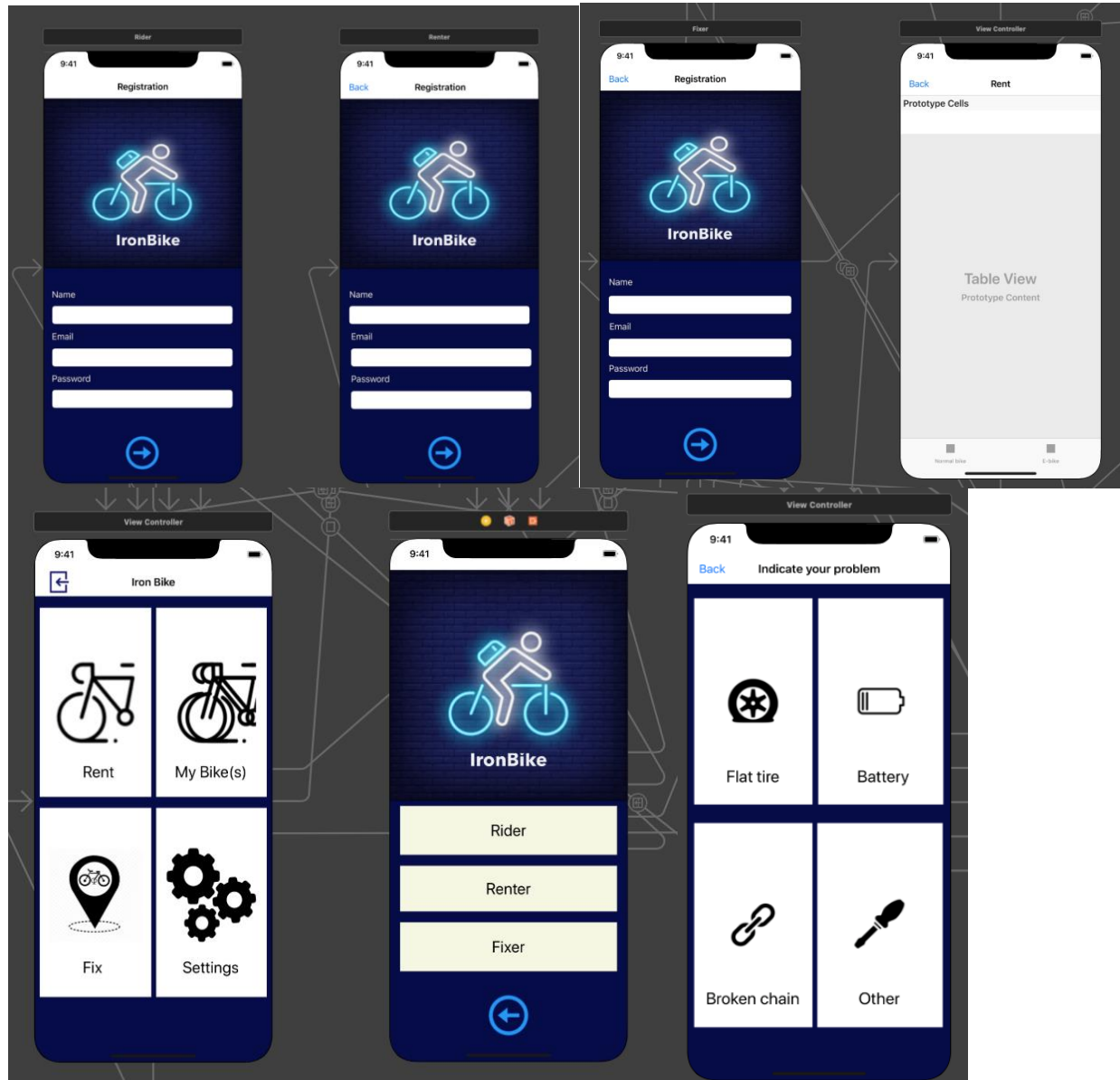
Version 1

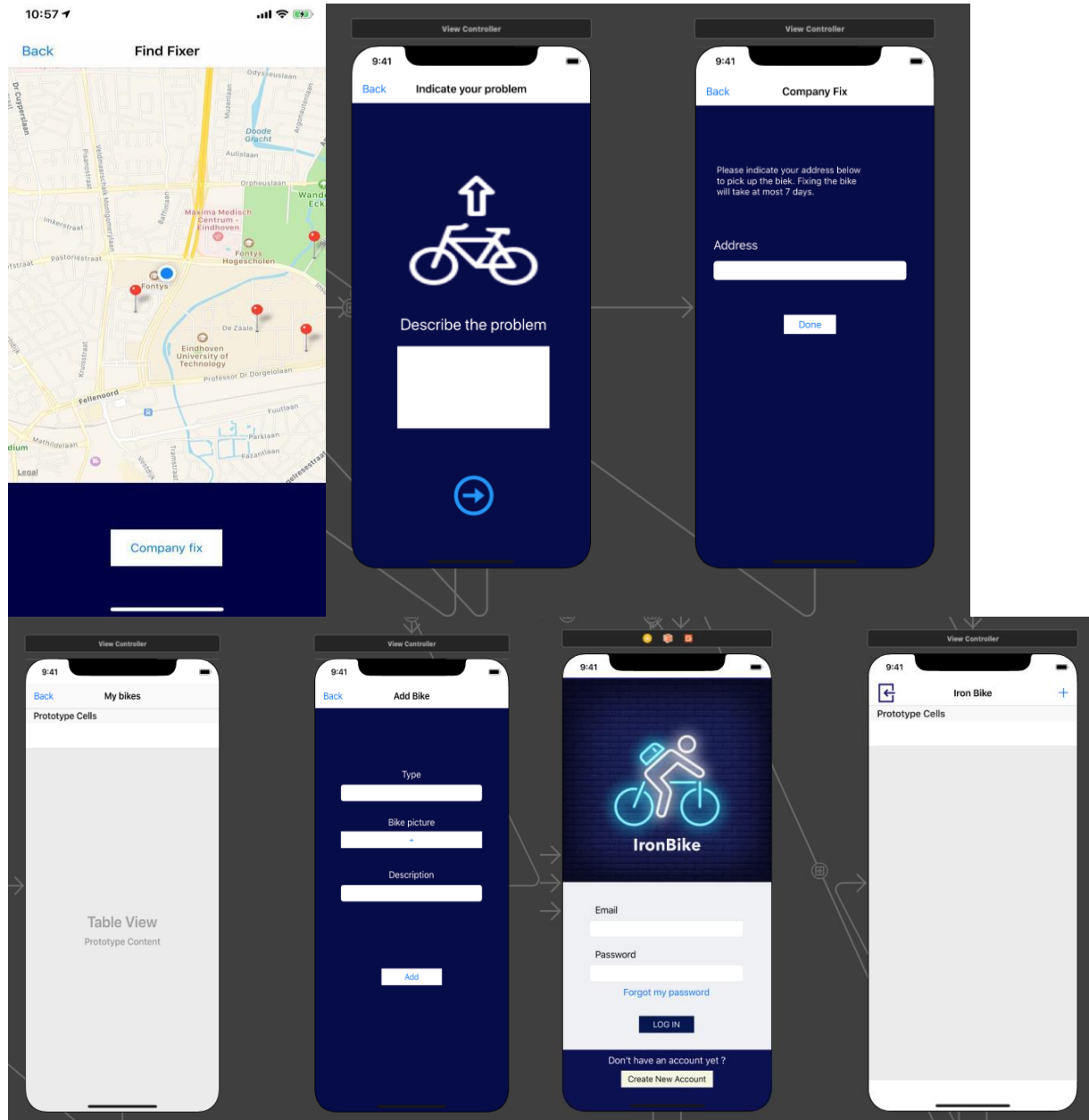
This is the first design we applied for the application.

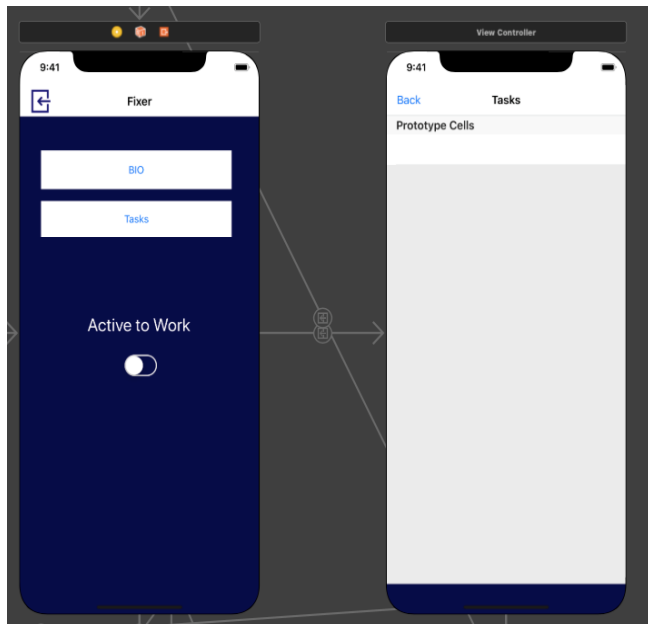


Version 2

After the feedback that we got from the user experience teacher we were advised to follow the apple guideline. So we adjusted the whole design as below.







Digital prototype

<https://9ow4cl.axshare.com>

Usability testing

1. Try to login with the already existing account.
2. Try to rent a bike.
3. Try to see all your rented bikes.
4. Try to find a fixer for a problem on your bike (you can choose any).
5. Try to log out.
6. Try to register as a renter.
7. Try to add a bike.
8. Try to log out.
9. Try to register as a fixer.
10. Try to see your tasks.
11. Try to log out of the application.

	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	Task 10	Task 11
Score (1-3)	3	2	2	3	3	2	3	3	2	3	3

- 3:** User was able to perform the task quickly and with no issues
2: User was able to complete the task but struggled to do so
1: User was unable to complete the task

Questions Related to the Tasks:

1. What did you feel when you saw the app logo?
Why?

It's good and I liked the neon to it and the colors marry each other well.

2. What do you like most about the app?

The fact that you can use the map to find the nearest fixer.

3. How could the app improve?

I would like to see more intuitiveness in the finding a rent option. So select a bike and directly fix it.

4. Tell us about how you felt when you were looking for fixers.

It was very pleasing.

5. Tell us about how you felt when you were looking for bikes to rent.

Again, the same problem, I would like to see more details on the bike to be rented

6. Would you like to use the app again?
Why?

Yes, I would...Mainly because of the fixing options for my bikes since I constantly have problems with it

7. Would you recommend this app to your friends
Why?

Yes I very much would, but I would only recommend it to friends with bikes.

Problems:

1. Did you face any other problems with the functionalities of the application? If so please explain.

Settings don't work other than that It's very straightforward and I like it.

Feedback:

1. Do you have any positive/negative feedback regarding the application in general? If so please write your feedback below.

Not really, I really like this application.

Voice record of the usability test: [Here](#)