Requirements And User Experience

DIT 045

Assignment 3

20/12/2017

The Team Imagine Dragon

Team Members:

1. George Sarkisian
2. Daniel Jansson
3. Mohammed Dergham

Problem Domain:

IBike

Number of pages in the assignment:

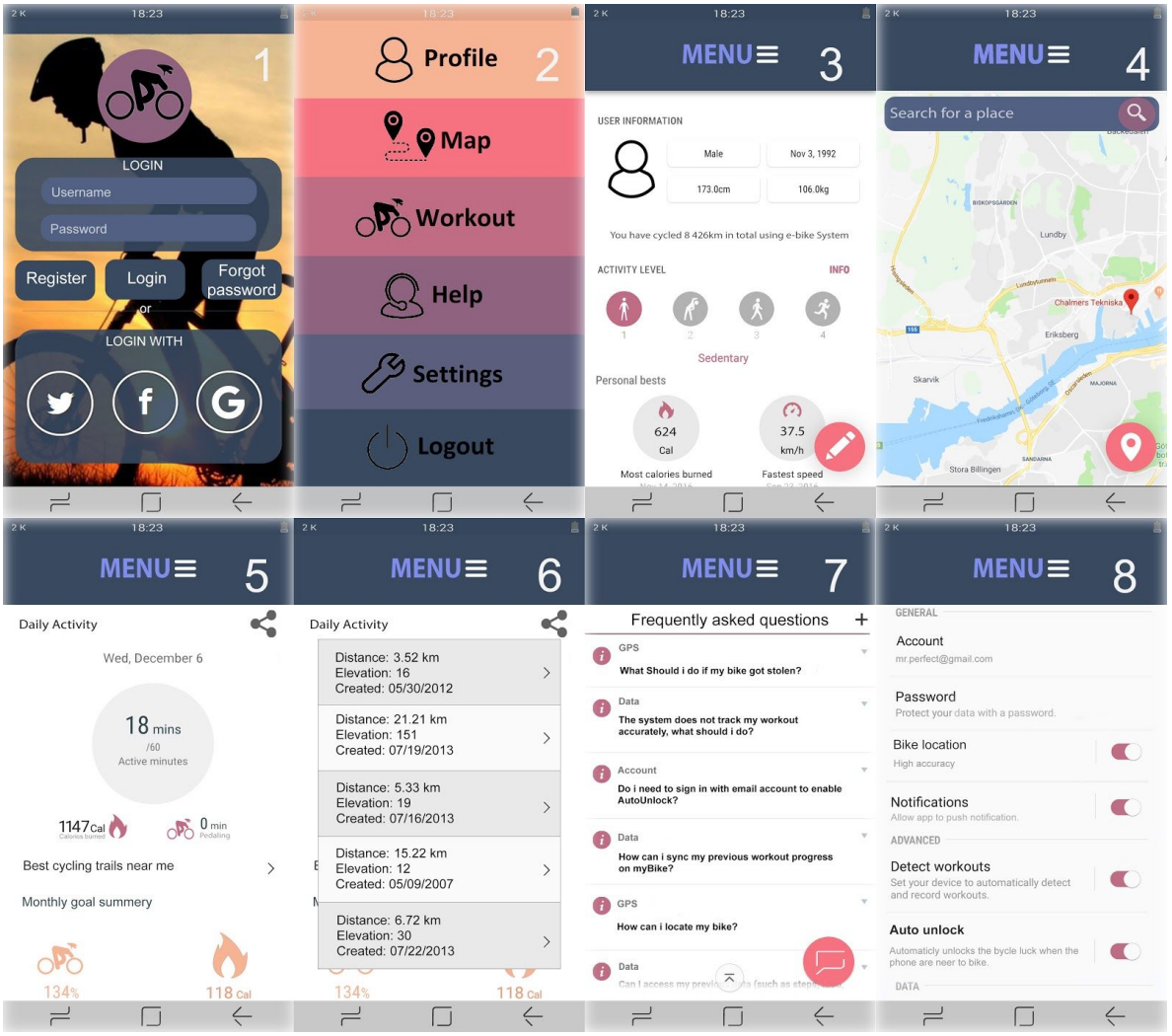
pages

13

Part 1: Final UX Design:

1a: UI prototypes:

You can see our all prototype in the zip file attached with this document.



Unspecified buttons:

In screen 3, we didn't implement the floating button on the corner that can edit all personal information from username, wight, bike id, hight & birthday in a list form. we implemented clicking on weight and gender to edit as samples for all weight, gender, date of birth and height.

In screen 4, we didn't implement the floating GPS button on the corner that supposed to give the user more accurate location of the bike. Because it's hard to implement on the prototype.

In screen 7, we didn't implement an answer for every single questions, since the question is not base on real user questions and there is no answers for them.

In screen 8, we didn't implement account and password buttons, since it is prototype and there is no real registered user that need to change or see his account information and password.

Patterns:

In the screen 1 we have few patterns, such as center stage, visual framework and text clear button.

We used center stage pattern, because we wanted to put most important content of the page in the middle which is login, to make it easy for the user to understand what to do to continue.

We used visual framework pattern in color and font in all of our prototype and all of screens because user will be able to navigate easily and they don't have to figure out every single time they change the page.

We used text clear button pattern, because we didn't have space at the same time we wanted to allow the user to input the username and password.

In the screen 2 we have two patterns. one window drilldown pattern and visual framework pattern.

We used one window drilldown pattern,because we had a constrained space and to show every option in menu with single line with image, and everytime user press on the image or the line the system will show full content of that option, in this way we kept the UI simple and clean.

We used visual framework pattern.(same reason as above).

In the screen 3 we have few patterns,such as diagonal balance, escape hatch,visual framework and pyramid.

We used diagonal balance pattern, because we wanted to have buttons and at the same time we wanted to have balanced look in our design and put most important button on lower part of the screen, in this screen to edit all personal information at once.

We used escape hatch pattern,because we didn't want to give the user feeling that he is trapped in any way.

We used pyramid pattern,because we wanted to simplify and improve user experience by giving him possibility to go to the menu wherever he was in one click.

In the screen 4 we have few patterns, such as center stage , escape hatch,visual framework , pyramid ,diagonal balance and text clear button.

We used center stage pattern, because we wanted to put most important content of the page in the middle which is map and location.

We used escape hatch pattern.(same reason as above).

We used visual framework pattern (same reason as above).

We used pyramid pattern. (same reason as above).

We used text clear button pattern, because we didn't have space at the same time we wanted to allow the user to input the location he wants to go.

In the screen 5 we have few patterns, such as center stage , escape hatch,visual framework and pyramid.

We used center stage pattern, to put most important information(workout time and intensity"calories burned") in the middle to make it easier to user to notice.

We used escape hatch pattern. (same reason as above)

We used visual framework pattern. (same reason as above)

We used pyramid pattern. (same reason as above)

In the screen 6 we have few patterns, such as list inlay, visual framework and row striping pattern.

We used list inlay pattern,because we wanted to show a list of roads in a single window and giving user these ability to choose the road he wants by clicking on it to show the road on map.

We used row striping pattern, because we wanted to make it easy to the user to read every line.

We used visual framework pattern. (same reason as above)

In the screen 7 we have few patterns, such as list inlay, escape hatch, diagonal balance ,pyramid and visual framework.

We used list inlay pattern,because we wanted to show a list of questions in a single window and if he want to get the answer of specific question he can press on it to get.

We used escape hatch pattern. (same reason as above)

We used diagonal balance pattern, because we wanted to have a floating button that in case the user did not find the answer he was looking for he can always simple can click on the button and contact to customer support.

We used pyramid pattern. (same reason as above)

We used visual framework pattern. (same reason as above)

In the screen 8 we have few patterns, such as escape hatch,pyramid and visual framework.

We used escape hatch pattern. (same reason as above)

We used pyramid pattern. (same reason as above)

We used visual framework pattern. (same reason as above)

1b: Mapping to Requirements:

in screen 1:

- The system should allow the user to retrieve his password by his/her email.(We have provided to user special button when press on it it will take an new screen to write email ”please check the prototype”).
- The system should allow the user to login using social media.(We gave the user ability to login using social media with just on click).

in screen 2:

- The system shall provide online help ”customer support”.(We have provided the system interface with a clear pattern for the customer support (help), so the user have help to get in to the customer support .
- The system should have an GPS .(system interface has a clear and unique pattern for the GPS , the user can access to real time navigation by clicking Map.

- Using the functions in the system should not be complicated.(we have provided the system with clear easy pattern , every icon present an option and it has a name describe more about the option)

in screen 3:

- The system should have a GPS system .(we have provided the system interface with a clear map , the map display routes and its has a search bar so the user enter his/her destination .)
- The system should display to the user the best routes for exercise . (we have provided the system interface with sample and easy maps ,display the best roads for exercise .)
- The system shall allow the user to locate his/her bike . (we have provided the system interface with map ,the map display route and locate the bike.)

in screen 4:

- The system should be able to calculate the intensity of the workout.(the system will show how much calories user has burned during workout , which indicates the workout intensity)
- The system should be able to calculate the workout time.(the system show how many minutes he has been working out, and if he was meeting his goal)
- The system should let the user to ability to share workout progress and training with friends and families.(the system provide ability to share daily workout summary on social media with just on click.)
- The system should be ability to give suggestion from the best roads to workout near user.(the system show all the road near the user with different kilometers and different intensity. please check to prototype for better understanding)

in screen 5:

- The system shall have FAQ's. (we have provided the system interface with underline sentences , every sentence is one of the frequently asked question.)
- The Owner should be able to alert the customer service if the bike gets stolen.(we have provided the system interface with a clear float button so the user can easy access to it and send any alert to the customer service .)

- The system should allow the user connect to developers to improve the system.(we have provided the system interface with a box to write feedback and send it to the customer service .)

in screen 6:

- The bike should be able to recognize when a registered users phone and or smart-watch is close to it and unlock itself.(by enabling both bike location and phone location and turning on the auto unlock feature , the system unlocks the should bike)

Part 2: Usability Evaluation:

2a: Test Users:

Volunteers(who were we test users)

Group Name	#of group Members	Time	Place
1.BalanceItWell	3 members	13/12/2017	Lindholmen - library
2.ForLoop	3 members	13/12/2017	Lindholmen - Målgal
3.sparkling ice ninjas	2 members	13/12/2017	Lindholmen - Målgal
4.blue swede	3 members	14/12/2017	Lindholmen - Målgal

Volunteered(who we were test users for)

Group Name	Time	Place
1.For Loop	13/12/2017	Lindholmen - Målgal
2.sparkling ice ninjas	13/12/2017	Lindholmen - Målgal
3.blue swede	14/12/2017	Lindholmen - Målgal
4.Balance ItWell	18/12/2017	Lindholmen - 4th floor, lunch room.

2b: Test Tasks:

the system and the bike has GPS.

the system should help the users of the bike in training, finding bicycle roads and navigation.

Task 1:You want to use the app to go to a party,search the address you want to go. after the party was finished you were drunk and can't remember where you parked your bike, try to locate your bike using GPS.

Task 2:You are an athlete and you always try to push yourself to become better, check your today's workout , and check if you reach your goal last month, and don’t forget to share it with your friends ; p.

Task 3:You want to change your personal information since you have been training for past 2 months and you lost some weight. try to change your weight.
since you were training for a while now you want to find more road with different kilometers and different intensity try to find this roads by using our app.

Task 4:You are a workout frick, and you found out that tracker of the system is not accurate and you can’t find out why, try to get help.
you also found out that the system does another issue try to connect with customer support.

task 5:The system in our app has functionality to unlock the bike by GPS location , try to enable that function, and enable auto unlock

2c: Usability Questionnaire:

Questions	
1.It was simple to use this system.	
2.I am satisfied with how easy it is to use this system.	
3.I was able to complete the tasks and scenarios quickly using this system.	
4.I felt comfortable using this system.	
5.It was easy to learn to use this system.	
6.I believe I could improve myself using this system.	
7.Whenever I made a mistake using the system, I could recover easily and quickly.	
8.The information (such as online help, FAQ, customer support) provided with this system was clear.	
9.The information was effective in helping me complete the tasks and scenarios.	
10.The organization of information on the system screens was not clear.	
11.The interface of this system was not pleasant.	
12.I liked using the interface of this system.	
13.This system has all the functions and capabilities I expect it to have.	
14.Overall, I am satisfied with this system.	

2d: Measurement Targets:

Tasks	Duration	Errors/Defects
task 1	80% of the users should do it in 2 min.	4.Medium problem
task 2	90% of the users should do it in 1 min.	5.Minor problem
task 3	80% of the users should do it in 3 min.	4.Medium problem
task 4	90% of the users should do it in 2 min.	5.Minor problem
task 5	90% of the users should do it in 1 min.	5.Minor problem

Questions	measurement targets
1.It was simple to use this system.	90% of user should provide score above 4
2.I am satisfied with how easy it is to use this system.	70% of us.er should provide score above 4
3.I was able to complete the tasks and scenarios quickly using this system.	60& of user should provide score 5
4.I felt comfortable using this system.	90% of user should provide score above 4
5.It was easy to learn to use this system.	80% of user should provide score above 4
6.I believe I could improve myself using this system.	70% of user should provide score above 3
7.Whenever I made a mistake using the system, I could recover easily and quickly.	60% of user should provide score above 4
8.The information (such as online help, FAQ, customer support) provided with this system was clear.	90% of user should provide score 5
9.The information was effective in helping me complete the tasks and scenarios.	85% of user should provide score above 4
10.The organization of information on the system screens was not clear.	80% of user should provide score under 3
11.The interface of this system was not pleasant.	90% of user should provide under 2
12.I liked using the interface of this system.	90% of the user should provide above 4
13.This system has all the functions and capabilities I expect it to have.	60% of the user should provide above 4
14.Overall, I am satisfied with this system.	75% of the user should provide above 4

2e: User Test Execution:

By signing below I ”the tester” declare that i did the user test for team imagine dragons on their app Mybike with domain problem Ibike

Name	Group name & test date	signature
Mohammed Hassan	BalanceItWell 13/12/2017	
Majed Dalain	BalanceItWell 13/12/2017	
Mohammed Jawad Mofti	BalanceItWell 13/12/2017	
Ranim Khojah	ForLoop Team 13/12/2017	
Mohammad Zreik	ForLoop Team 13/12/2017	
M Nazeeh Alhosary	ForLoop Team 13/12/2017	
Heba Allah Abbas	Sparkling ice ninjas 13/12/2017	
Albin Gustafson	Blue Swede 14/12/2017	

Patrik Gardsten	Blue Swede 14/12/2017	
Fredrik Salmi	Blue Swede 14/12/2017	

2f: Analysis:

targets met:

targets not met:

Tasks	average time team1	defects/ suggestions team1	average time team2	defects/suggestions team2	average time team3	defects/suggestions team3	average time team4	defects/ suggestions team4	AVERAGE TIME
task 1	103.33 seconds	took a lot of time to figure out the bike location button	80 seconds	took a lot of time to figure out the bike location button	120 seconds	couldn't find the bike location	57 seconds		1:30 min
task 2	52.33 seconds		54 seconds		160 seconds	wanted more information about monthly workout summary	51.33 seconds		1:19 min
task 3	80 seconds		90 seconds	ERROR! couldn't find best roads for training!!	112 seconds	ERROR! couldn't find best roads for training!!	56 seconds		1:24 min
task 4	38.33 seconds		39 seconds		60 seconds		50.66 seconds		0:46 min
task 5	39.66 seconds		32 seconds		30 seconds		28 seconds		0:32 min

Questions	team1 average	team2 average	team3 average	team4 average	AVERAGE
1.It was simple to use this system.	4.33	4.33	4	4.66	4.33
2.I am satisfied with how easy it is to use this system.	4.66	3.33	5	4.33	4.33
3.I was able to complete the tasks and scenarios quickly using this system.	4	4	3.66	3.66	3.83
4.I felt comfortable using this system.	4.66	4.66	4	4.33	4.41
5.It was easy to learn to use this system.	4.33	3.66	5	4.33	4.33
6.I believe I could improve myself using this system.	4.33	5	5	3.66	4.49
7.Whenever I made a mistake using the system, I could recover easily and quickly.	4.66	5	3.66	4.66	4.49
8.The information (such as online help, FAQ, customer support) provided with this system was clear.	5	5	5	5	5
9.The information was effective in helping me complete the tasks and scenarios.	3.33	5	5	3.66	4.24
10.The organization of information on the system screens was not clear.	1.66	1	2	1.66	1.58
11.The interface of this system was not pleasant.	1.66	1	1.66	1.33	1.41
12.I liked using the interface of this system.	4.33	5	5	4.33	4.66
13.This system has all the functions and capabilities I expect it to have.	3.33	5	4.33	5	4.415
14.Overall, I am satisfied with this system.	4.33	4.33	4	4.66	4.33

summarized list of qualitative observation confusions and interesting findings:

- all the users found our app design beautiful and easy to use.
- we found out the all the users could understand and memorize the app layout and patterns such as escape hatch and pyramid pattern and they were really happy to have those.
- about all of the users had difficulties to understand location button in map screen is actually location for the bike not the location for the user.
- few of the users thinks that workout data and workout history was not user friendly.
- one user thinks that gender should not be limited to male and female and she suggested to not have gender.
- few of the users had time to find “best roads near me” function, they usually went directly to the map first and after they couldn't found there they started to search in app.
- base on the questionnaire, data we have collected and the observations that we did to the testers, we found out that we had to simplify more out app to make it more usable to all kinds of users

2g: UI Update:

base on our user test and data that we have collected, we decided to do the following updates in our system the make the system more easier to use:

- We will change the map layout:
  - We will add one more floating button on the other corner of the screen that indicates the bike. if pressing on the bike icon it will show the bike’s location and if pressing on the GPS icon it will show the user’s location.
    We wanted to do this because we believe this will solve our problem that users had when testing our app to locate the bike.
    By adding one more floating button it will make more clear for the user which button is what and in the same time they will be able to see their and theirs bike location.
  - We will add a shortcut to the “best workout roads near me” function in the map screen. most likely, when user clicks to search icon it will show in the button part of the table in highlighted clickable line like “*searching for roads to workout...*” that will take them to the “best workout roads near me” in workout.
    We believe this will solve our other problem that we saw in user testing.
    From our observation to the users we saw that some of the users they clicked on the map to search for “best workout roads near me” function.
    In this way we will have “best workout roads near me” function in both maps and workout screen and it will be linked together.
- We will change gender tab in profile and the signup form from Male & Female to Male, Female & Neither.
  In this way we think that we will make our user more satisfied and at the same time this will make our app gender friendly which is one of our previous requirements.

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Third Assignment

Team Imagine Dragons

Group Contribution Form

Each group member is asked to print and sign their name and state their contribution to the overall work.

Individual Name	Contribution	Signature
George Sarkisian	**UI Prototypes – Mapping to Requirements – Test Users – Test Tasks – Measurement Targets – User Test Execution – Analysis – UI Update.**	
Daniel Jansson	**UI Prototypes – Mapping to Requirements – UI Update.**	
Mohammed Dergham	**Test Users – Test Tasks – Usability Questionnaire – Measurement Targets – User Test Execution.**	

P.S.: Daniel Jansson could not able to join the team in user testing in week 50 for personal reasons.

Best Regards

Team Imagine Dragons