

User Experience Design

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P144646

MDes/BA [Hons) Product Design

Beginning Group Work

designingwith
people.org

Home

People

Activities

Methods

Ethics

Contribute

Activities Introduction

Bathing

Health Management

Meal Preparation

Home Maintenance

Working at Home

Working outside the Home

Digital Communication

Community Mobility

Activities in context

Activities

One of the key ways to get started in designing with people is to explore their daily activities – the tasks and rituals that are part of their everyday lives. This section presents insights, interactions and inspiration for how people live, related to eight Instrumental Activities of Daily Living (IADLs).

Each activity is described from different perspectives for designers via an essay pooling user insights, still images, video clips, user quotes and case studies.

All data is drawn from a wide range of people-centred and inclusive design projects undertaken by the Helen Hamlyn Centre for Design over a ten-year period.

The activities of daily living are grouped under four main themes: Personal Care, Household, Work & Money and Communication.

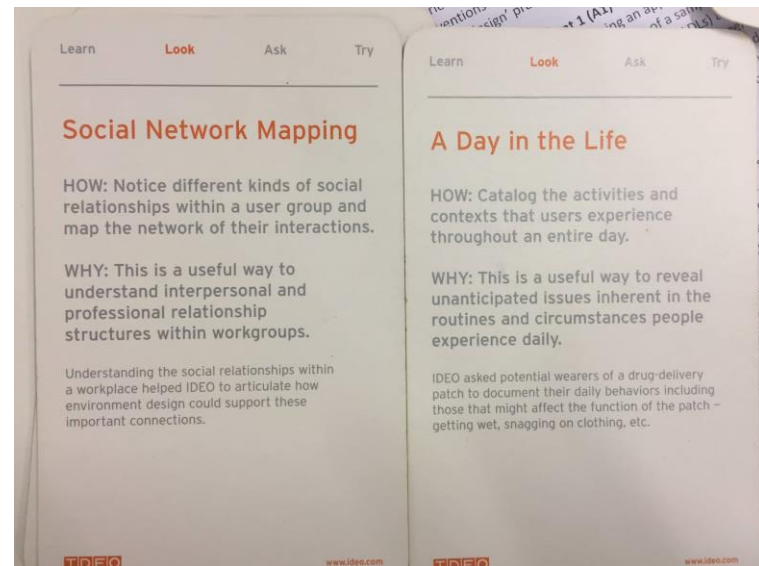
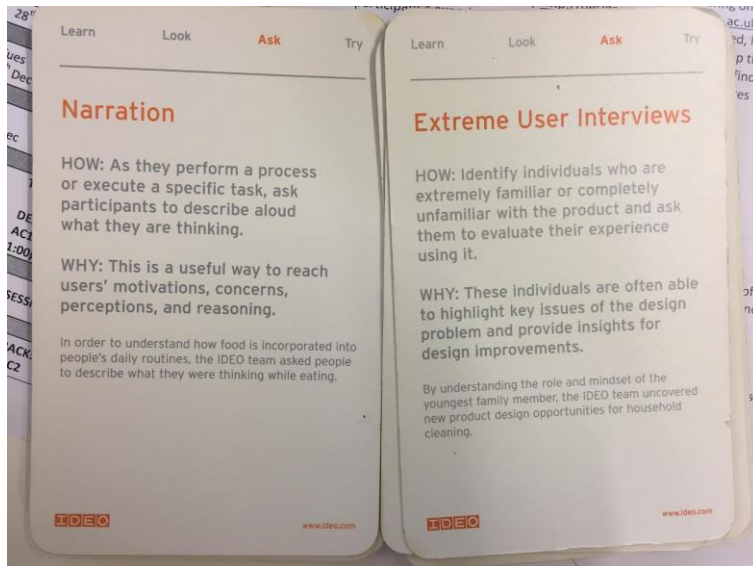
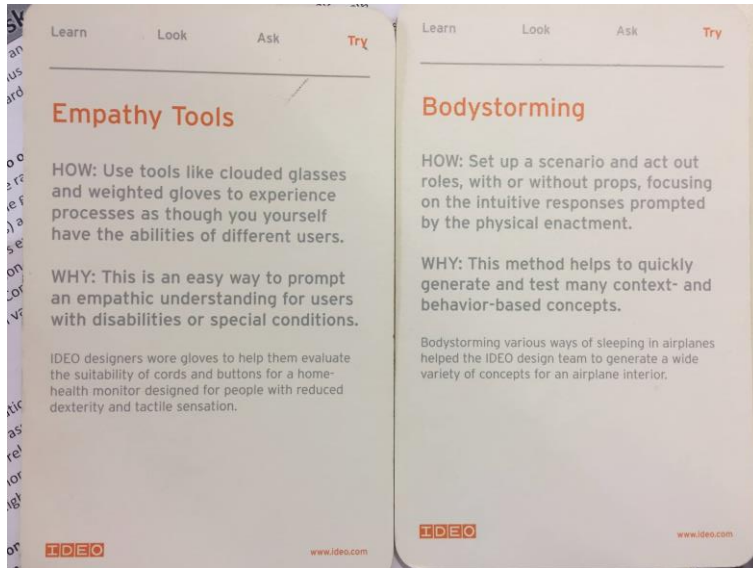
Personal Care	Household	Work & Money	Communication
Bathing 	Meal Preparation 	Working at Home 	Digital Communication 
Health Management 	Home Maintenance 	Work outside the Home 	Community Mobility 

How people perform activities can also be affected by the context of use. According to i~design3 research partner, Loughborough Design School, the four main contextual factors are: understanding the person, the nature of tasks, physical environment and social environment. Read more on how context affects the ability to carry out activities [here](#)

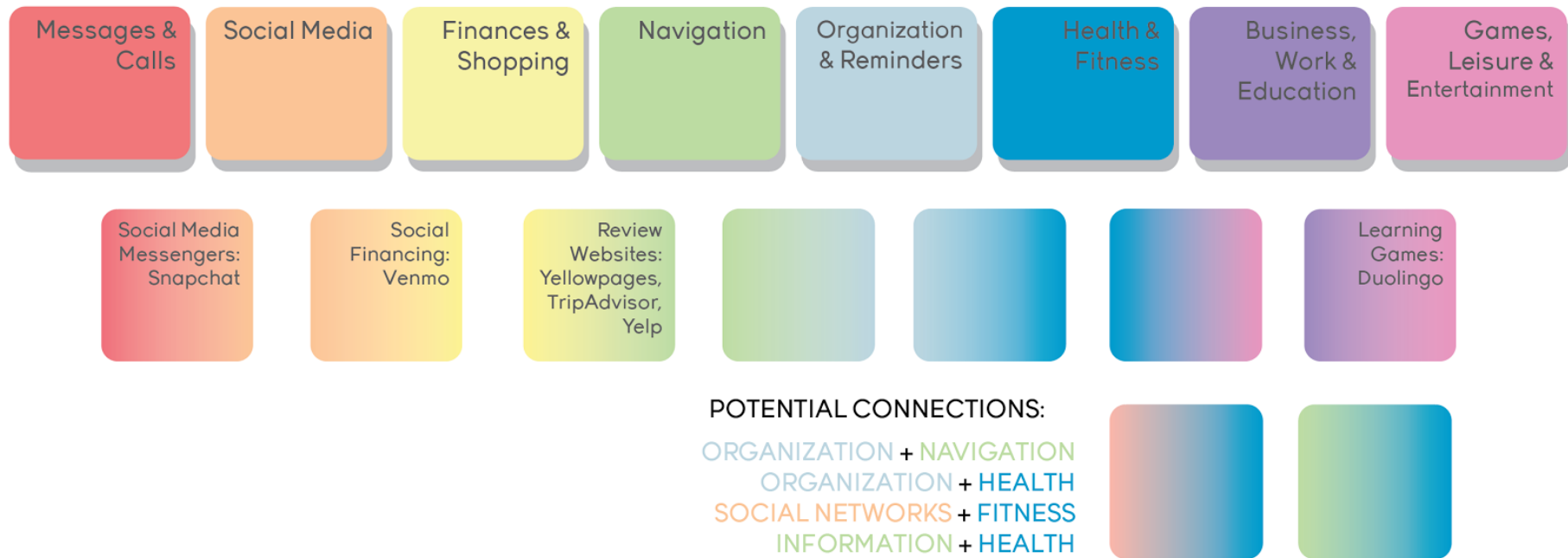
To begin this project we were set the task to look at this website designingwithpeople.org and out of these 8 areas select one. The one that I selected was digital communication. We were then placed in groups and once in our group we set the task of beginning our group research.

Research Techniques

To begin our group work we looked at a set of cards with variable research techniques. Thought this projects research I will be using a vary of these techniques.



Areas of Digital Communication



Creating A Questionnaire

1. Personal Identifiers

Age	
Gender	
Country of Residence	
Nationality	
Ethnicity	
Occupation	
Do you have any disabilities? If so, what are they?	

To understand the public's relation with digital communication we set the task of creating a questionnaire. After setting it up using SurveyMonkey as a group we decided to publish the questionnaire by using Facebook. We then knew that the people undergoing the survey understand digital technology and would have a wide age range due to Facebook growing in popularity of age.

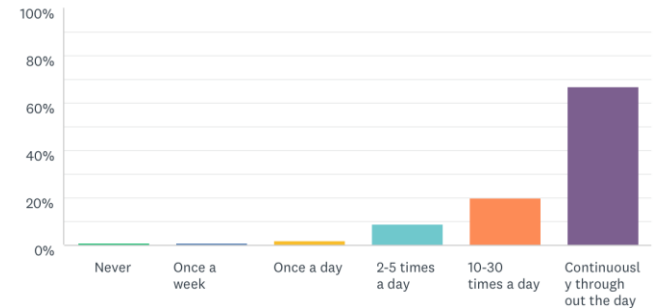
2. Which digital communication devices do you own?



- ☐ iPhone
- ☐ Samsung Smartphone
- ☐ Other Smartphone
- ☐ Mobile phone, not considered a smartphone
- ☐ Laptop
- ☐ Tablet
- ☐ Desktop Computer
- ☐ Gaming Console
- ☐ Smart Watches
- ☐ Fitness Watches
- ☐ Home Automation System (Example: Alexa)
- ☐ Other (please specify)

How often do you use your smartphone or mobile device?

Answered: 100 Skipped: 0

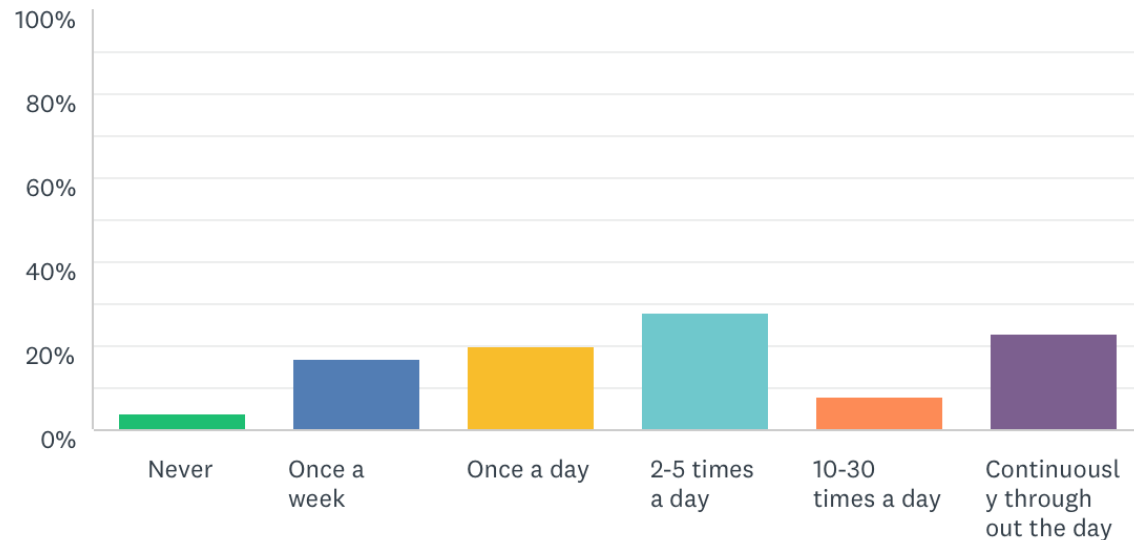


3. How often do you use your smartphone or mobile device?

- ☐ Never
- ☐ Once a week
- ☐ Once a day
- ☐ 2-5 times a day
- ☐ 10-30 times a day
- ☐ Continuously through out the day

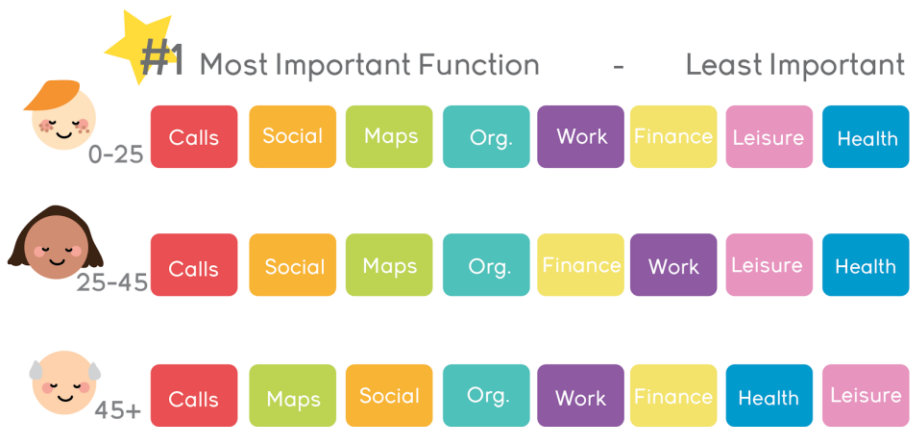
How often do you use your laptop or desktop computer?

Answered: 100 Skipped: 0



4. When using your smartphone or mobile device, how important are the following functions? 

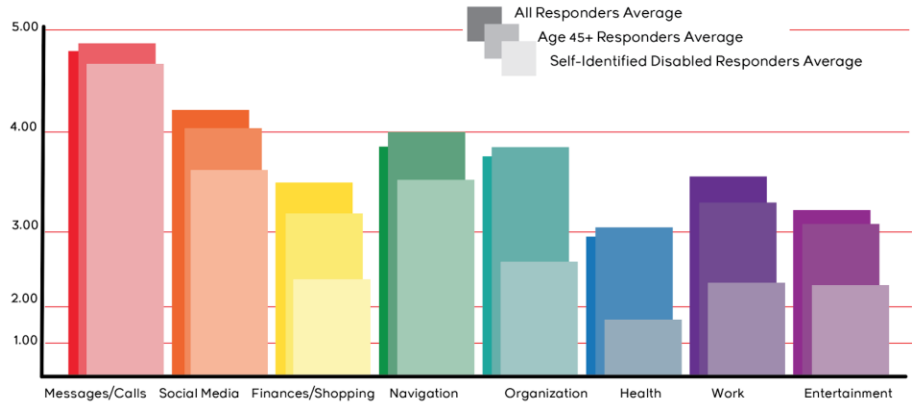
	1 (Least Important)	2	3	4	5 (Most Important)
Messages/Calls	☐	☐	☐	☐	☐
Social Networks/Media Sharing	☐	☐	☐	☐	☐
Finances/Shopping	☐	☐	☐	☐	☐
Navigation/Information	☐	☐	☐	☐	☐
Organization/Reminders	☐	☐	☐	☐	☐
Health/Fitness	☐	☐	☐	☐	☐
Games/Entertainment	☐	☐	☐	☐	☐
Business/Education	☐	☐	☐	☐	☐



7. When using your smartphone or mobile device, which function is the easiest to use? 

	1 (Most Difficult)	2	3	4	5 (Least Difficult)
Messages/Calls	☐	☐	☐	☐	☐
Social Networks/Media Sharing	☐	☐	☐	☐	☐
Finances/Shopping	☐	☐	☐	☐	☐
Navigation/Information	☐	☐	☐	☐	☐
Organization/Reminders	☐	☐	☐	☐	☐
Games/Entertainment	☐	☐	☐	☐	☐
Business/Education	☐	☐	☐	☐	☐

Usability of Smartphone Functions

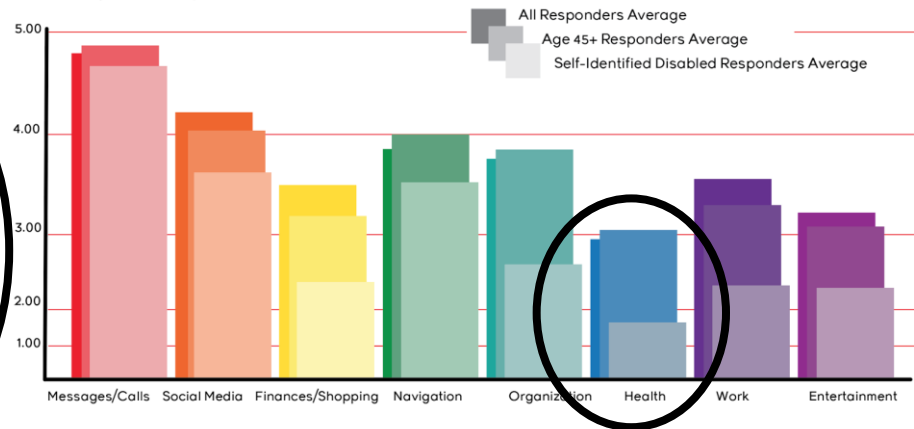


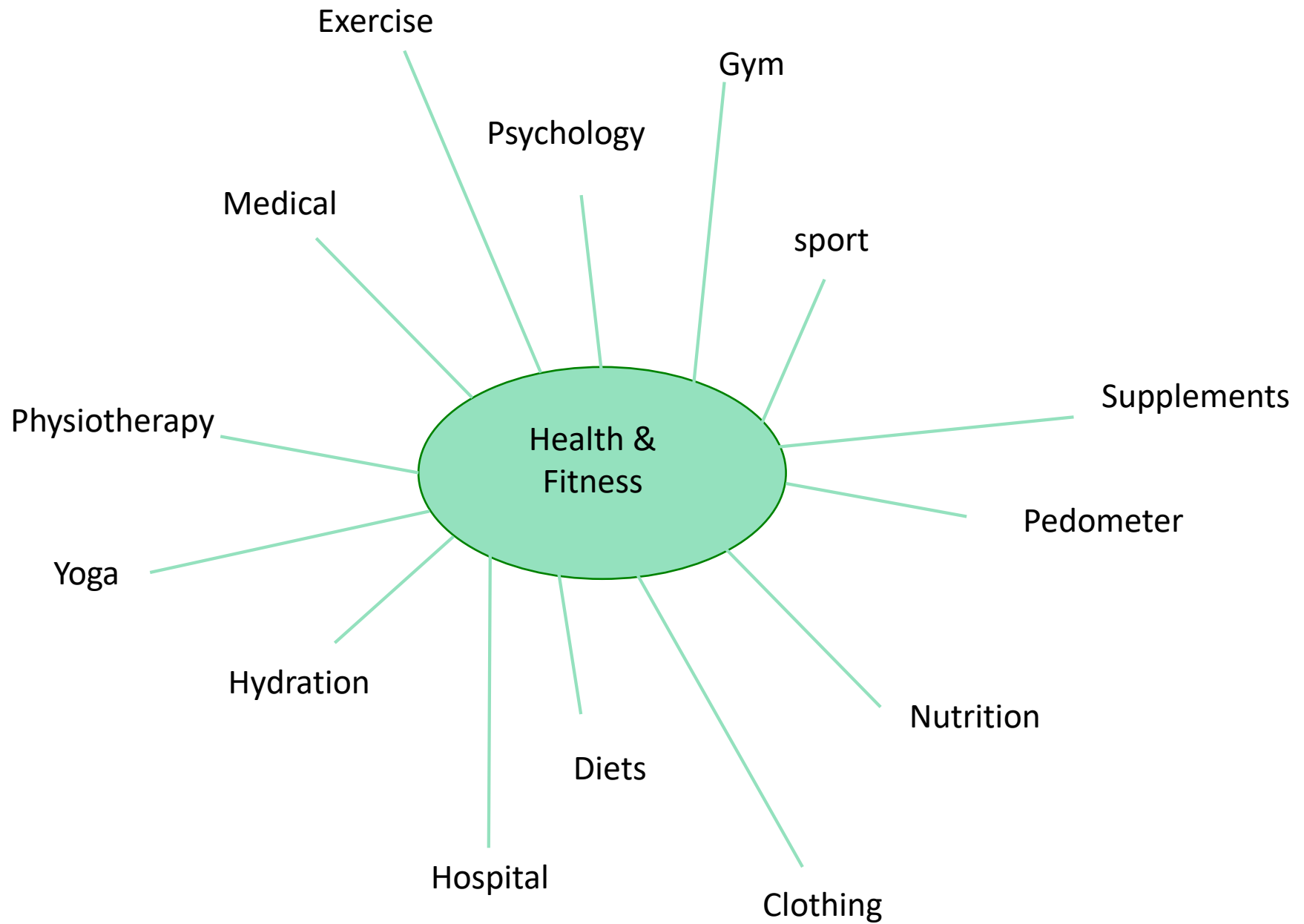
Findings

After conducting the questionnaire research in our group once the results came in we could analyse them in our own way. What caught my eye was that health and fitness was low in how important it was to each user. However it was also the lowest in function of easiest to use. Due to it being low in ease of use this can affect how we use it and how important it can become to us. Therefore I aim to design an app that is related to a health and fitness section that is easy to use. With it being easier to use I will attempt for it to become a more important aspect in our lives as human beings.



Usability of Smartphone Functions

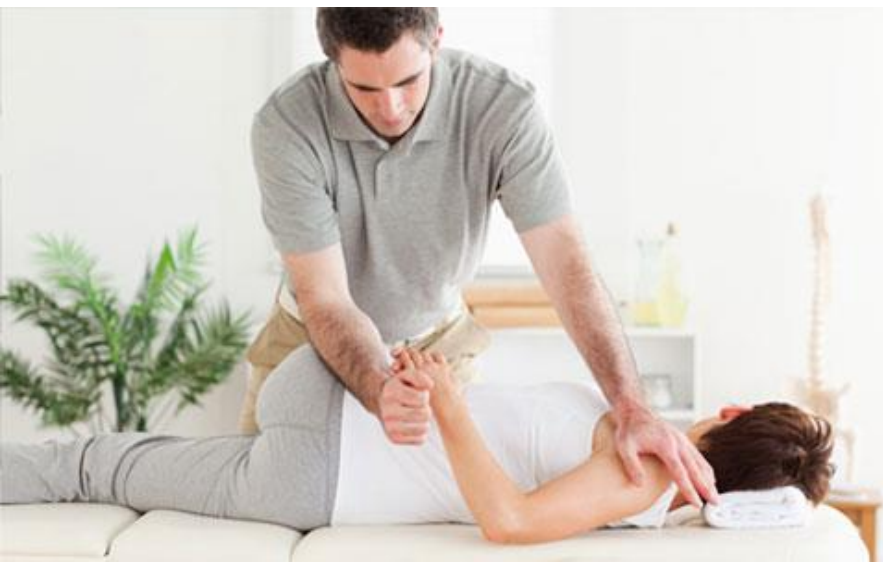




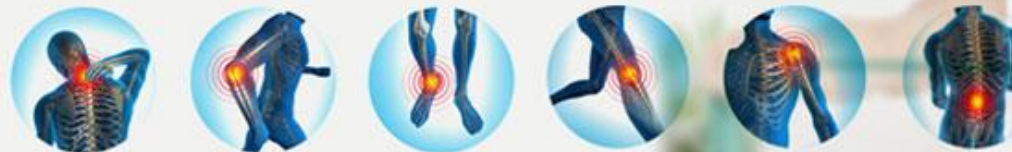
Physiotherapy

After evaluating each aspect of health and fitness, there is one clear gap in the market that hasn't been fully fulfilled yet. Physiotherapy is something that every 1 in 3 will need. From top class sports stars to your grand dad everyone has the possibility of needing to see a physiotherapist. With the help of doctors and physiotherapists these wrongs can be amended back to health.

There are currently a limited number of apps that are related to physiotherapy available on the app store. There is obviously a current gap due to the lack of apps available. My aim is to talk to a physiotherapist and discuss what is needed to help their job and the patients recovery become easier in any way using digital communication.



PHYSIOTHERAPY



Talking To A Physiotherapist



To understand issues that can occur in the physiotherapy departments I visited my local hospitals physiotherapy department. Talking to Ffion one of the physiotherapist in the hospital I could gather more knowledge about what issues she personally encounters with her patients.

Q. How long have you been a physio therapist?

A. 6 years

Q. How many patients do you see each day?

A. 13 a day

Q. How often do you see each patient?

A. Fortnightly

Q. Do the majority of your patients need regular stretches or exercises

A. Yes

Q. Do you have any contact with your patients outside of appointments?

A. Not really no

Q. Would you like a way to keep up to date with your patients progress outside of appointments?

A. Yes definitely

Q. What would you like to be updated with?

A. If they're regularly remembering their exercise and stretches

Q. So patients often forget to stretch? Is there anything else they forget?

A. Yes 50% of the problem is they forget to stretch and patients also forget about appointments sometimes

User Group

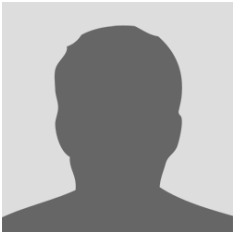


Name: Alysa Granger

Age: 35

Injury: Damaged Tendon in left knee

Brief description: Alysa is a married mother of two, works for the council and regularly goes running. Alysa damaged her tendon while running one evening and has been having physiotherapy for 3 months.



Name: Daniel Madge

Age: 28

Injury: Torch chilis

Brief description: Daniel is a married father of a new born baby. Daniel runs his own building company and plays rugby for his local team. Daniel was playing one day where his foot got caught in the ground while getting tackled and torn his Achilles. He has been having physiotherapy for 5 weeks.



Name: Albert Davies

Age: 68

Injury: Damaged knee

Brief description: Albert is married with 3 children and 6 grandchildren. Albert is a retired engineer who after working for 45 years has been having issues with his knees. Albert has been having physiotherapy for 5 months and is currently on the waiting list for the podiatrist.



Name: Georgia Evans

Age: 46

Injury: Dislocated Shoulder

Brief Description: Georgia is a divorced mother of two. Georgia works as a shop manager at Asda for the last 12 years. She dislocated her shoulder by falling down the stairs at home, she then required surgery on the shoulder and has been having physiotherapy for a month.

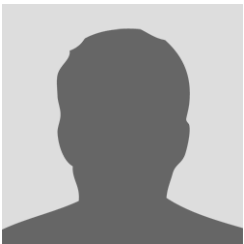


Name: Ashleigh Howells

Age: 21

Injury: broken elbow

Brief description: Ashleigh is a student at university who studies sports management. Ashleigh is on the women's hockey team where she was playing and fell breaking her elbow and requiring surgery. Ashleigh has been having physiotherapy for 6 weeks.



Name: Callum Morris

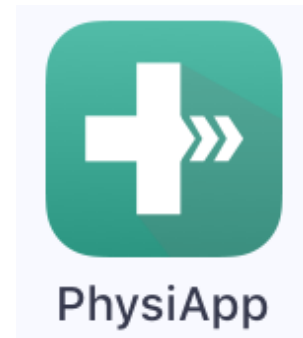
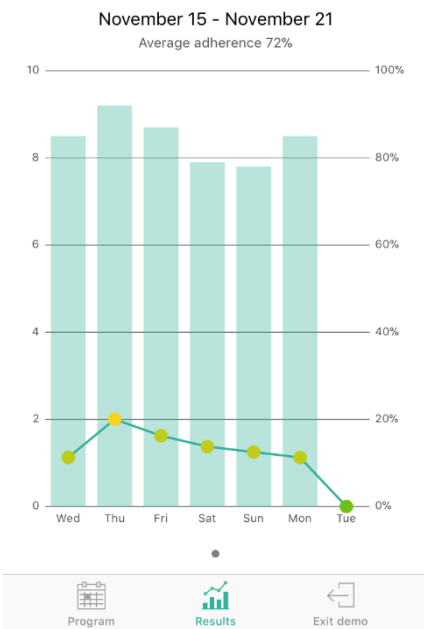
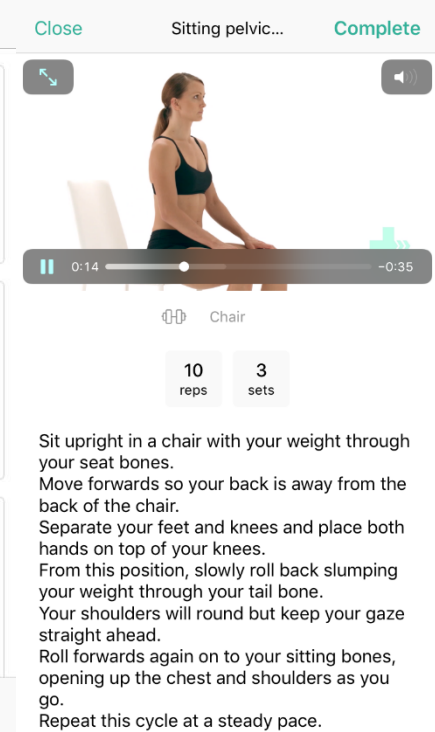
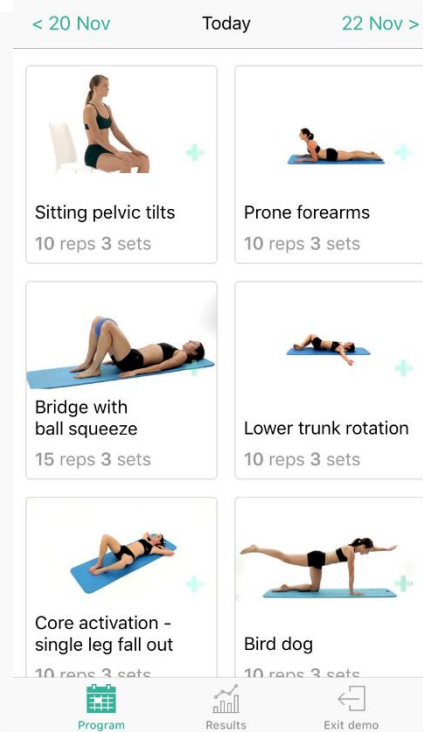
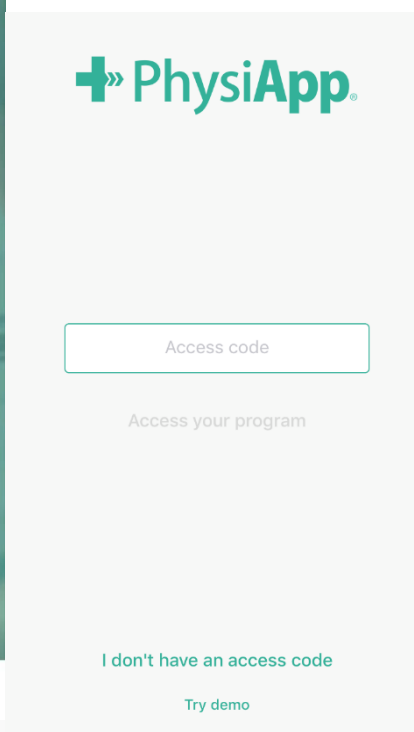
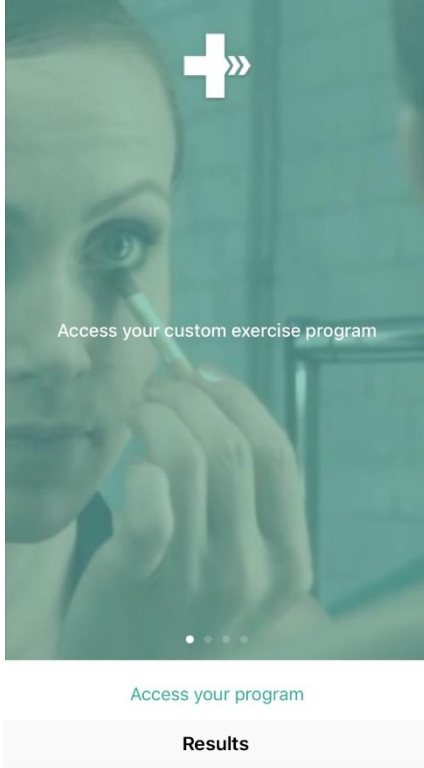
Age: 52

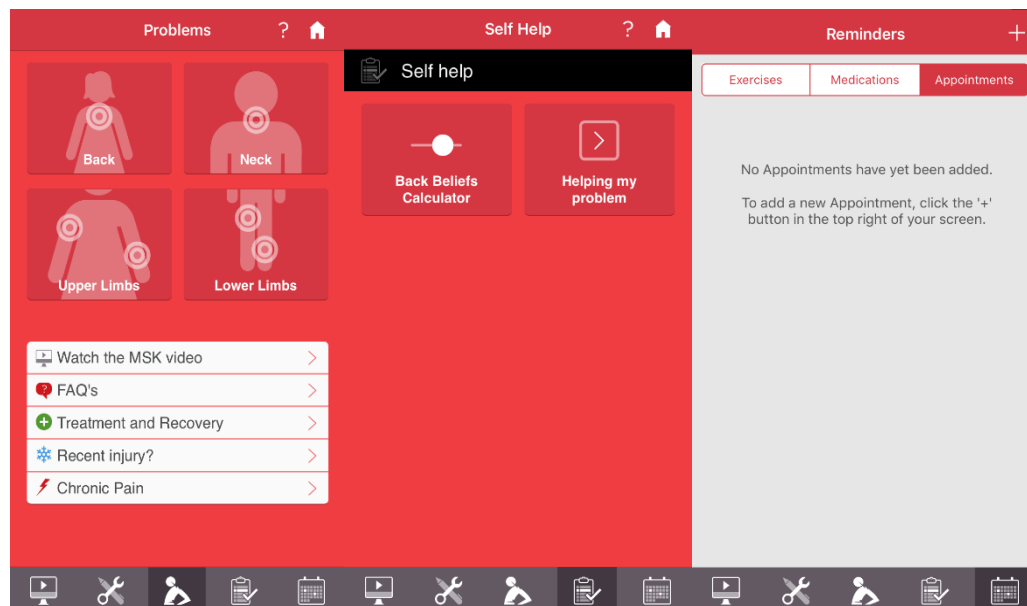
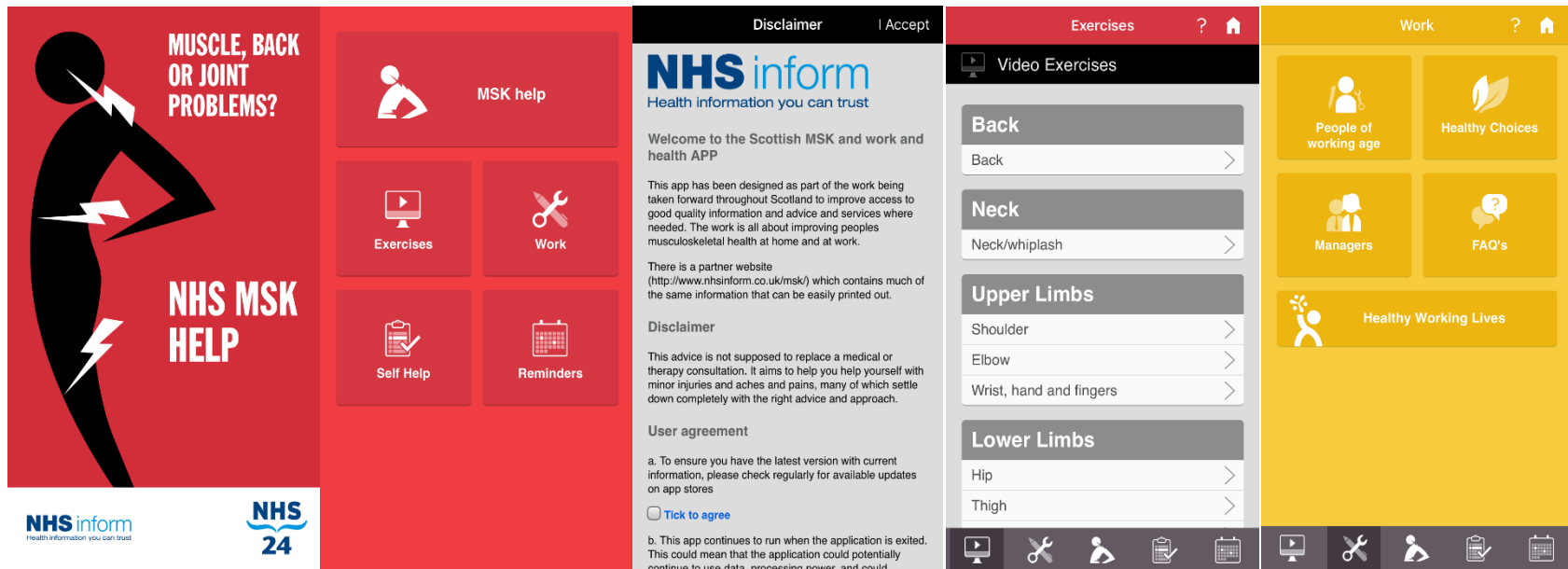
Injury: Slipped disk in back

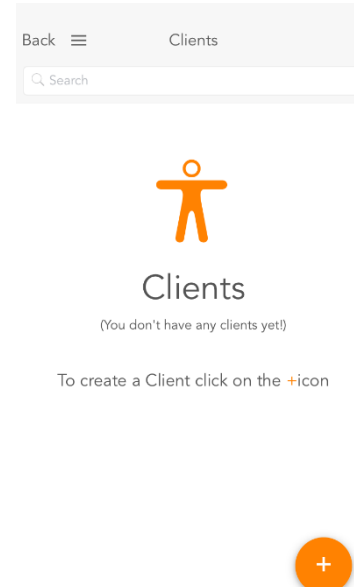
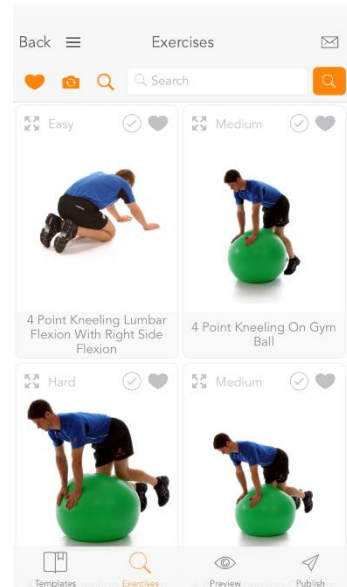
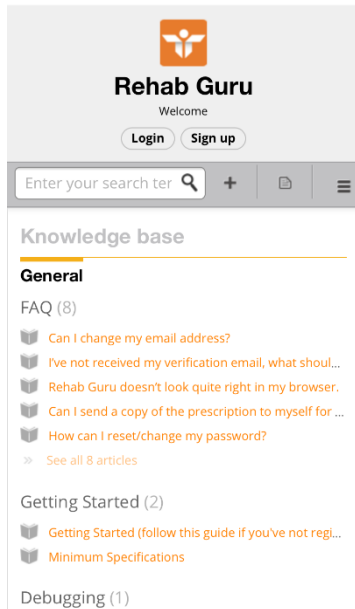
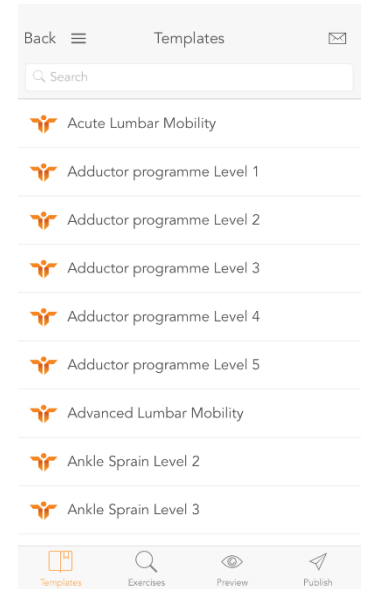
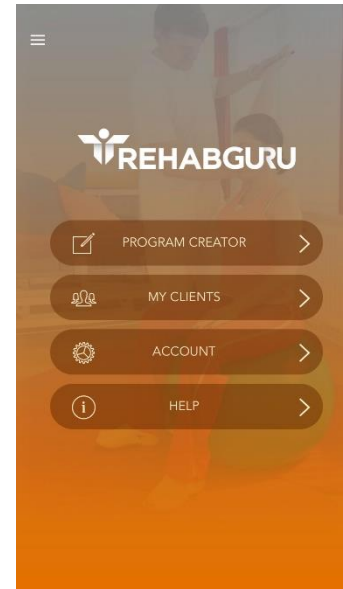
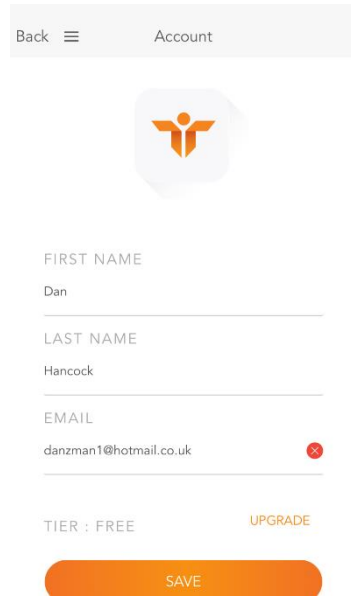
Callum is married with one child. Callum is a carpenter when after years of working gathered a back pain where it was found he had a slipped disk in his back and has been in physiotherapy for 6 months.

Testing Apps

Having the opinions of a physiotherapist and determined that the functions that would be included in an app would be reminders, exercise tutorials, how to keep up with the patients progress and an easier way to be contacted. It was time to look at the applications that do some of the tasks, I couldn't just evaluate them myself therefore I'd need to create a users group that currently have physiotherapy. I asked 6 people who are currently having physiotherapy to rate 5 apps that currently exist on the market evaluating the layouts, colours and the shapes and imagery which give the app a full effect.







Pocket Physio



Exercises



Reminders



Information



Contact

[Learn more about Pocket Physio](#)



Exercises



Reminders



Information



Contact

[Back](#)

Reminders

Your Reminder



Add new reminder



Exercises



Reminders



Information



Contact

[Back](#)

Exercises



Knee exercises



Hip exercises



Foot exercises



Hand exercises



Exercises



Reminders



Information



Contact

[Back](#)

Information

Walking with a frame



Walking with crutches



Walking upstairs



Walking downstairs



Walking programme



Breathing exercises



Pain management



Improving circulation



Dressing



Bathing & showering



Car transfers



Exercises



Reminders



Information



Contact

[Back](#)

Knee exercises



Self assessment



Pre-surgery



Post surgery (to four weeks)



Exercises (from four weeks)



Advanced exercises (from six weeks)



Exercises



Reminders



Information



Contact



evaluation



1



2



3



4

Each user rated the specific topics needed with a very good, good, bad or very bad. I did not add a middle option due to the fact that people will just select that as an easy option. Each feeling has a number rating where 1 is the lowest and 4 is the highest.



Physiotherap...

App 1



PhysiApp

App 2



MSK help

App 3



Rehab Guru

App 4

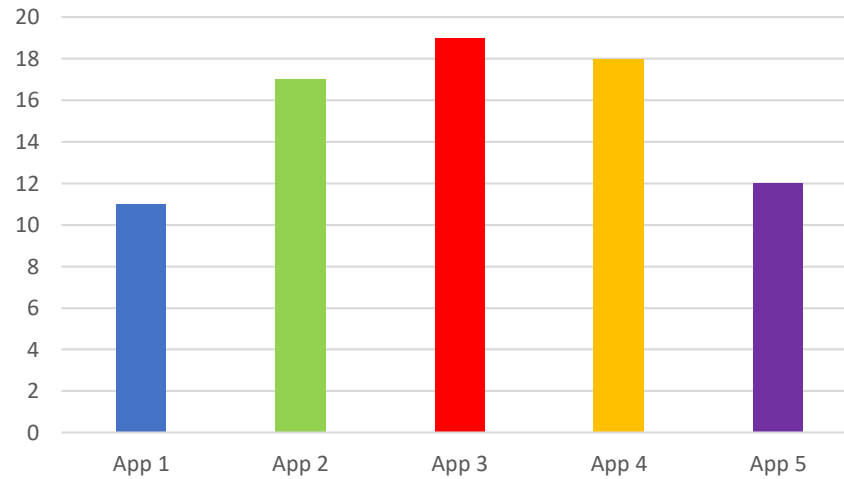


PocketPhysio

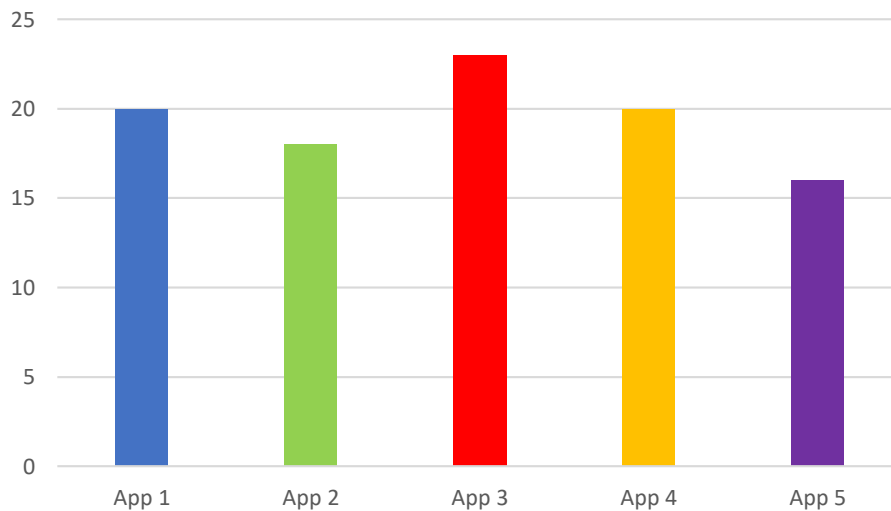
App 5

User Group Results

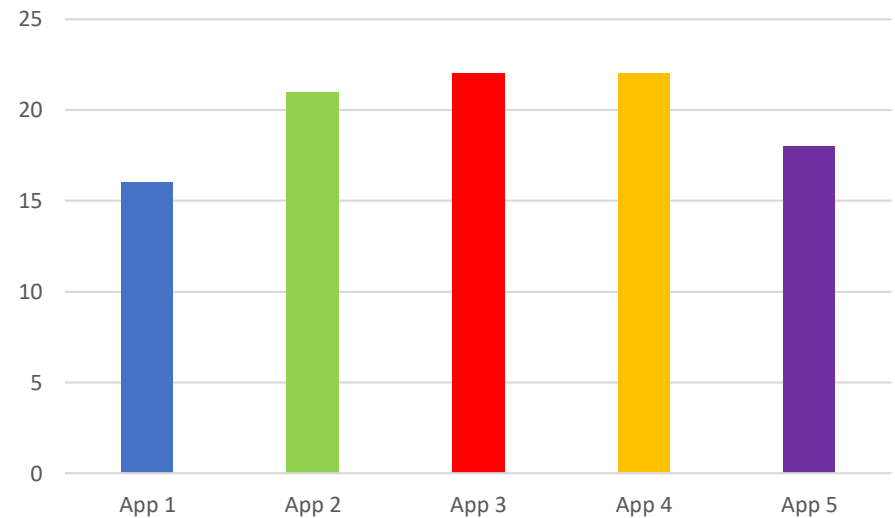
Colour Scheme



Shapes And Imagery



Layout



Colour Psychology

Designing a physiotherapy app there are a lot of different user experiences to analyse and research. One experience to look into is the visual experience. Colour psychology creates a great effect to the users experience. Being in physiotherapy is a long journey sometimes psychology tough. Therefore a visual experience of colour psychology is vital as the correct colour can motivate and lift the patient to carry on down the road of recovery. In a list below is what psychological effects different colours have on people. This information was published by a website named art therapy where they also gave a brief description of colour psychology below

What is Colour Psychology?

The psychology of colour is based on the mental and emotional effects colours have on sighted people in all facets of life. There are some very subjective pieces to colour psychology as well as some more accepted and proven elements. Keep in mind, that there will also be variations in interpretation, meaning, and perception between different cultures.

Color Psychology: The Color Brown

- 🕒 reliability
- 🕒 stability
- 🕒 friendship
- 🕒 sadness
- 🕒 warmth
- 🕒 comfort
- 🕒 security
- 🕒 natural
- 🕒 organic
- 🕒 mourning (in some cultures/societies)

Color Psychology: The Color Grey

- 🕒 neutral
- 🕒 timeless
- 🕒 practical

Color Psychology: The Color Pink

- 🕒 romance
- 🕒 love
- 🕒 gentle
- 🕒 calming
- 🕒 agitation

Color Psychology: The Color White

- 🕒 purity
- 🕒 innocence
- 🕒 cleanliness
- 🕒 sense of space
- 🕒 neutrality
- 🕒 mourning (in some cultures/societies)

Color Psychology: The Color Purple

- 🕒 royalty
- 🕒 wealth
- 🕒 sophistication
- 🕒 wisdom
- 🕒 exotic
- 🕒 spiritual
- 🕒 prosperity
- 🕒 respect
- 🕒 mystery

Color Psychology: The Color Black

- 🕒 authority
- 🕒 power
- 🕒 strength
- 🕒 evil
- 🕒 intelligence
- 🕒 thinning / slimming
- 🕒 death or mourning

Color Psychology: The Color Green

- 🕒 natural
- 🕒 cool
- 🕒 growth
- 🕒 money
- 🕒 health
- 🕒 envy
- 🕒 tranquility
- 🕒 harmony
- 🕒 calmness
- 🕒 fertility

Color Psychology: The Color Orange

- ⌚ happy
- ⌚ energetic
- ⌚ excitement
- ⌚ enthusiasm
- ⌚ warmth
- ⌚ wealth prosperity
- ⌚ sophistication
- ⌚ change
- ⌚ stimulation

Color Psychology: The Color Blue

- ⌚ calmness
- ⌚ serenity
- ⌚ cold
- ⌚ uncaring
- ⌚ wisdom
- ⌚ loyalty
- ⌚ truth
- ⌚ focused
- ⌚ un-appetizing

Color Psychology: The Color Yellow

- 🕒 happiness
- 🕒 laughter
- 🕒 cheery
- 🕒 warmth
- 🕒 optimism
- 🕒 hunger
- 🕒 intensity
- 🕒 frustration
- 🕒 anger
- 🕒 attention-getting

Color Psychology: The Color Black

- 🕒 authority
- 🕒 power
- 🕒 strength
- 🕒 evil
- 🕒 intelligence
- 🕒 thinning / slimming
- 🕒 death or mourning

Color Psychology: The Color Red

- 🕒 love
- 🕒 romance
- 🕒 gentle
- 🕒 warmth
- 🕒 comfort
- 🕒 energy
- 🕒 excitement
- 🕒 intensity
- 🕒 life
- 🕒 blood

Understanding Texts

Another visual experience for the user would be the text in the app. Due to this being an app that can benefit all ages the text must be clear and easily understandable to even a person who is partially cited. I selected the most popular and clearest texts available. To test these texts I had to understand a partially cited users experience. Therefore I typed out a different sentence in each text and Jac one of my colleagues placed on a blindfold that was thin enough to produce a partially cited experience and asked him to read out the sentences to evaluate which text would be best. This would be using an empathy research technique from the cards.

Times New Roman

Helvetica

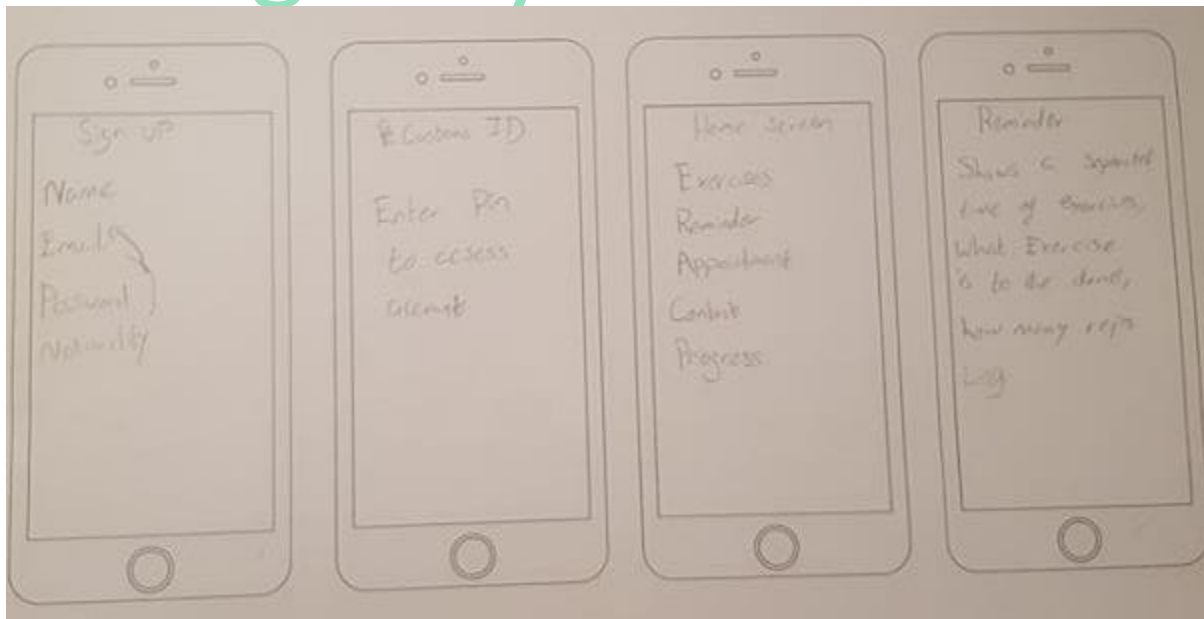
Garamond

Calibri

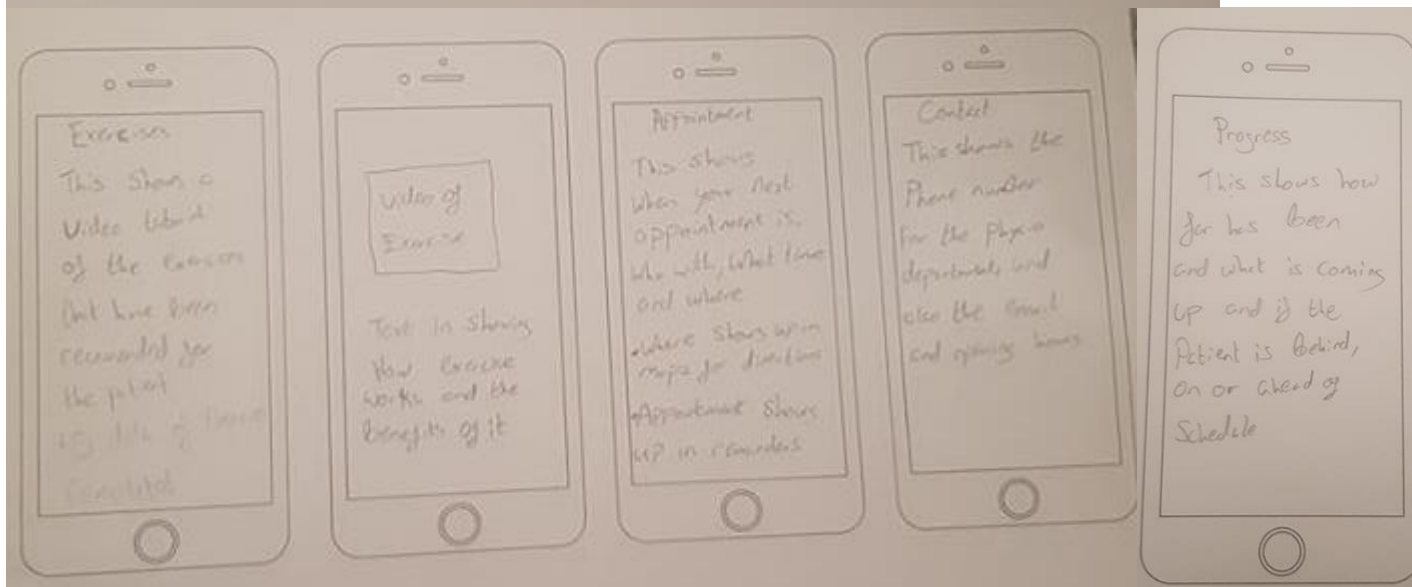
Arial



Design Layout



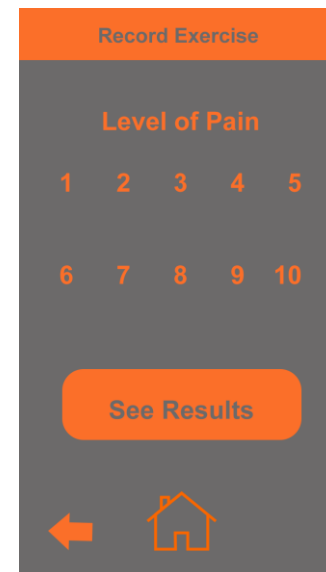
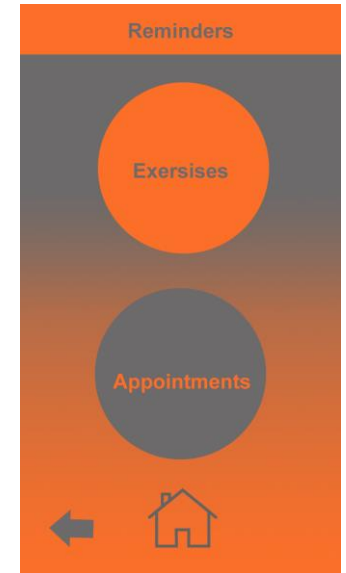
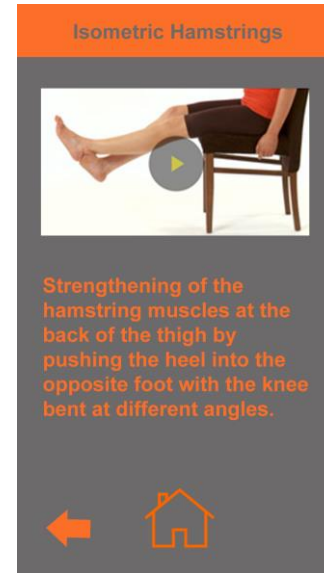
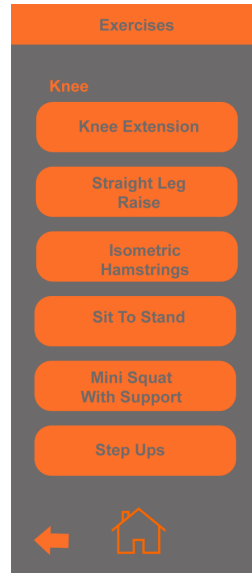
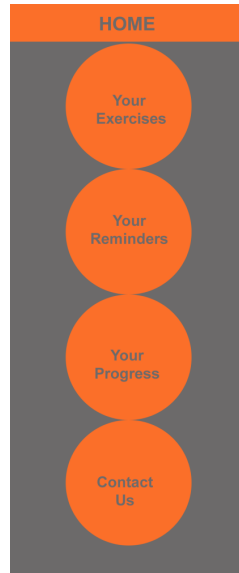
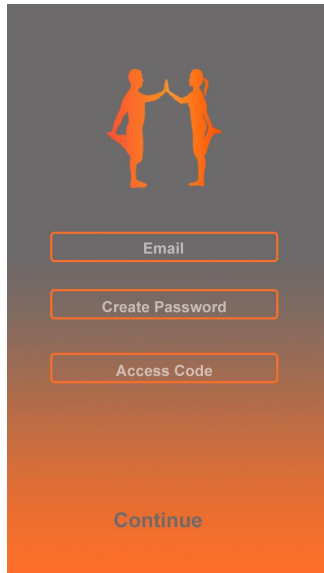
To begin designing the apps I wrote down what I'd want to have on each screen of the app on printed out templates of mobile phones.

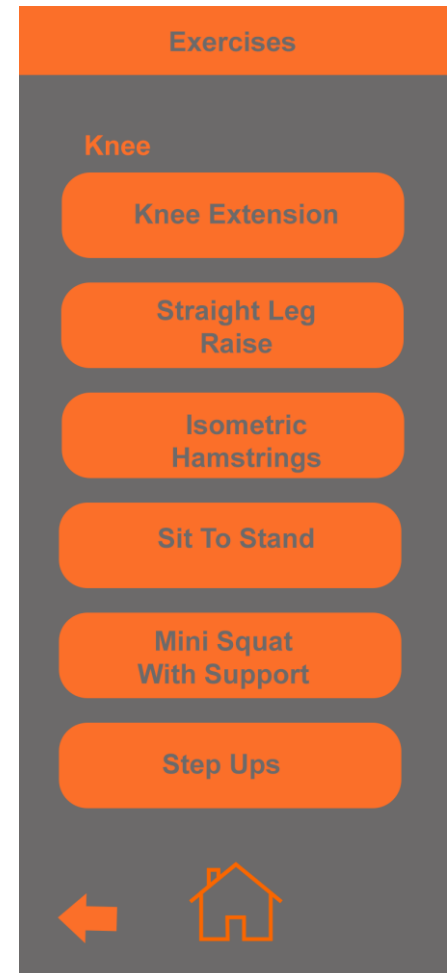
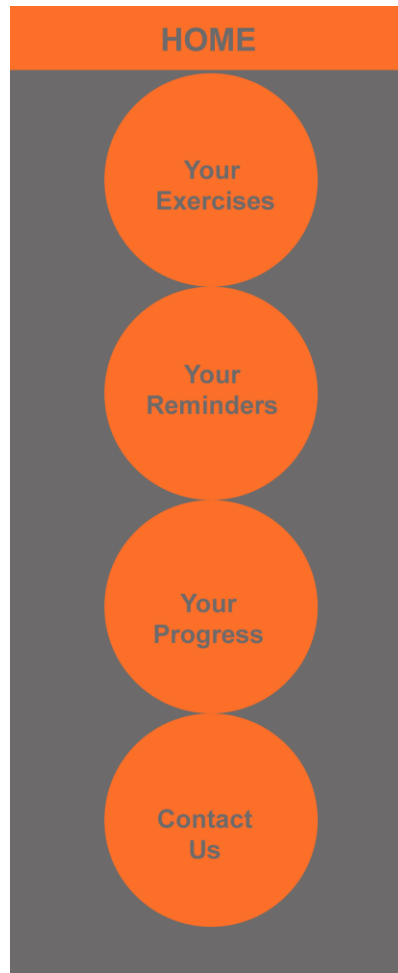
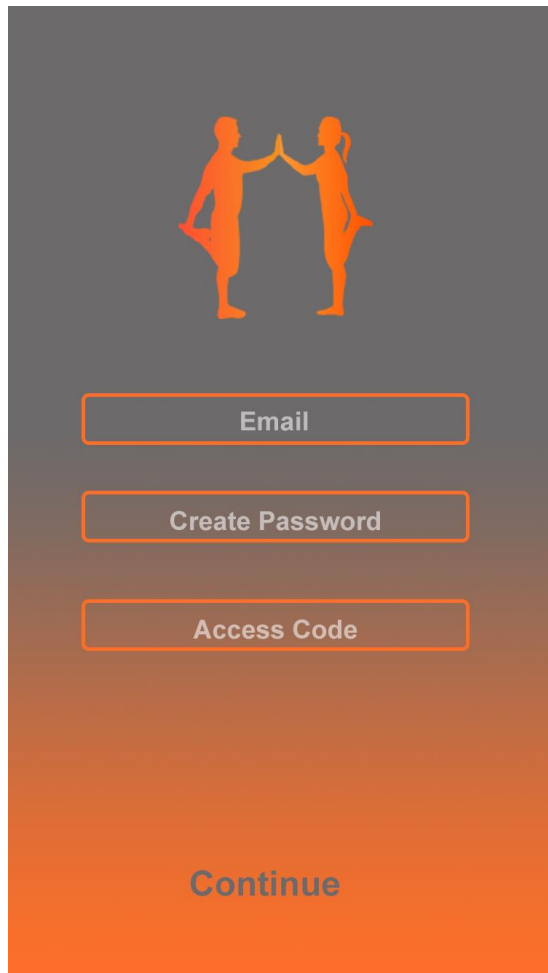


App Prototypes

The task of this project was to create three different prototypes of the products. The layout of the app and what was wanted was pre determined to meet the clients needs. I then firstly showed the users the layout of the app and if any changes were needed. But the difference between the three prototypes was the visual effects of the apps. In each app there are 3 different colours, shapes, home tabs, manoeuvring through the app and page title. This would be the extreme user interview technique from the cards.

App Design Layout







Email

Create Password

Access Code

Continue

Home

Your
Exercises



Your
Reminders



Your
Progress



Contact
Us

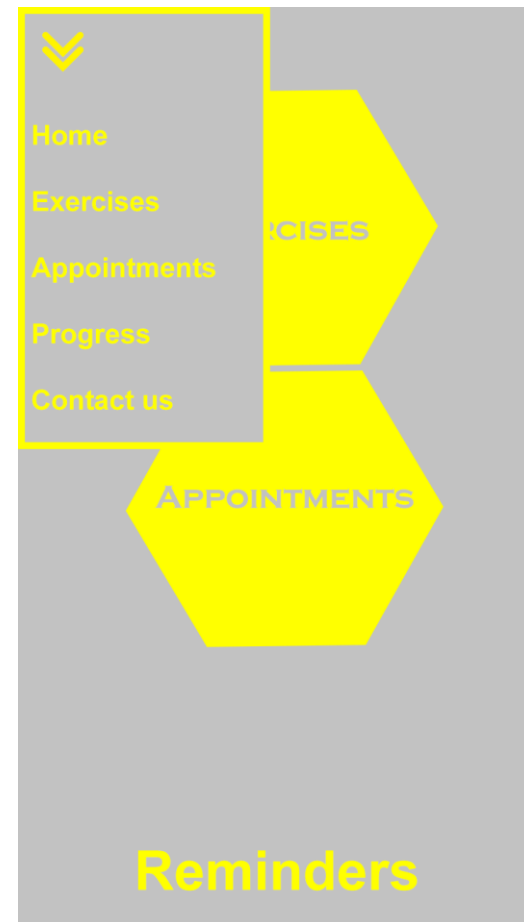
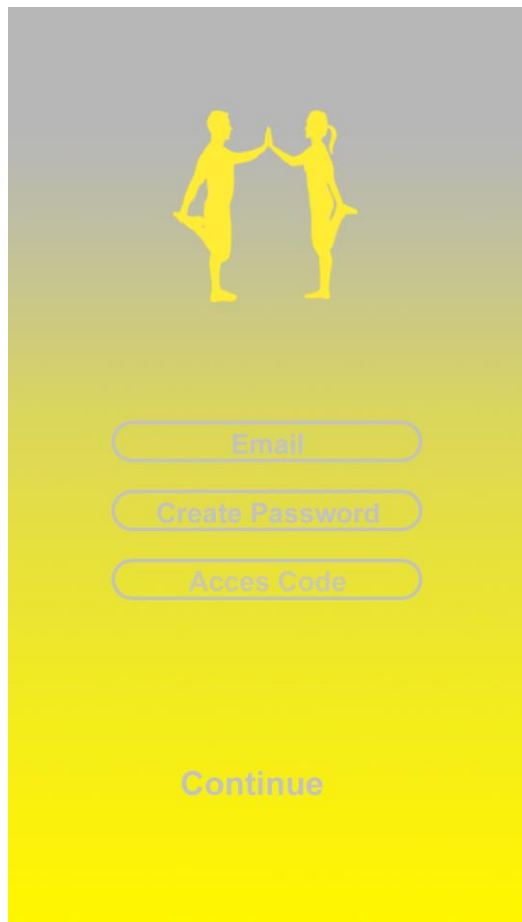


Reminders

Exercises

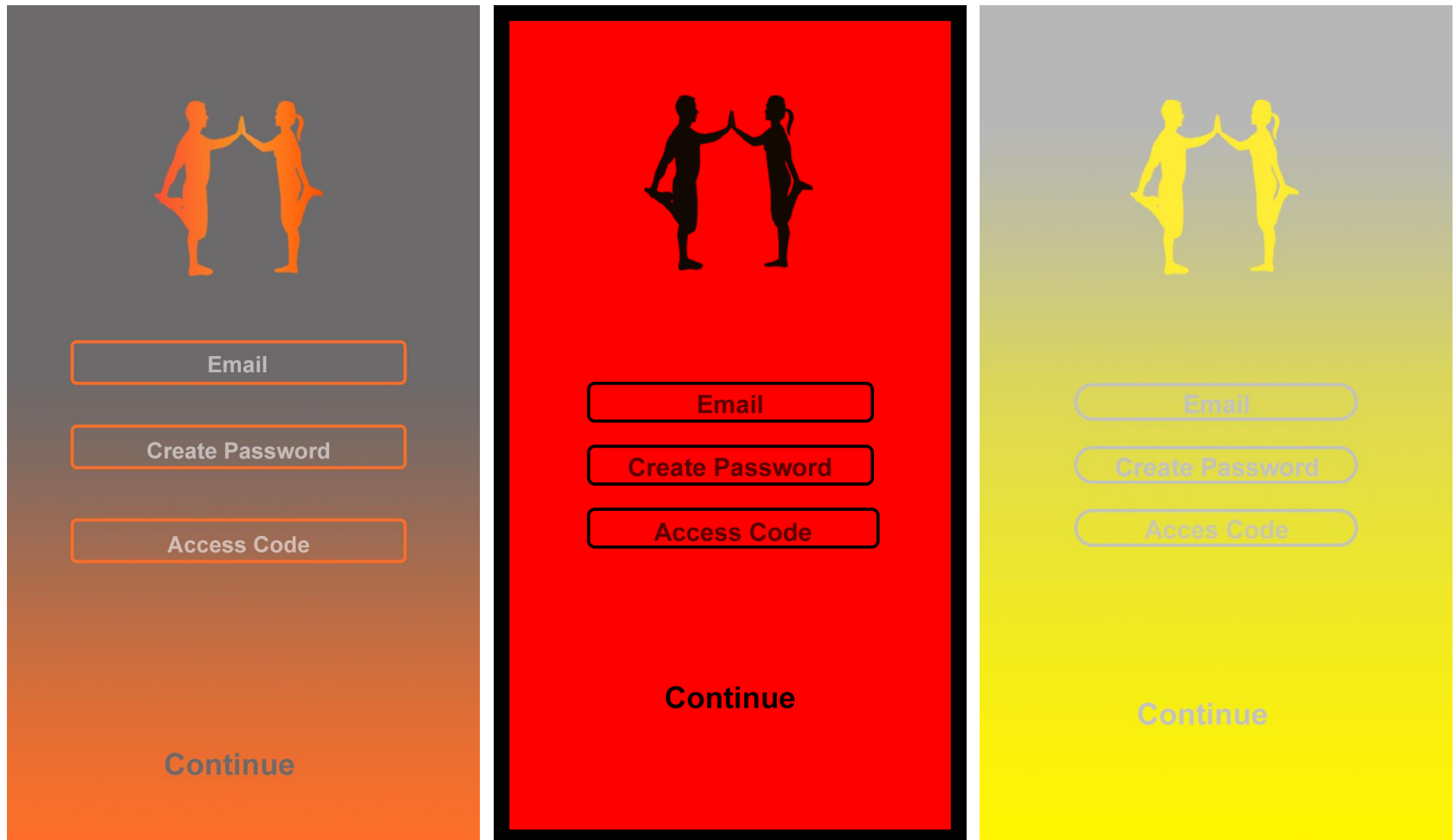
Appointments



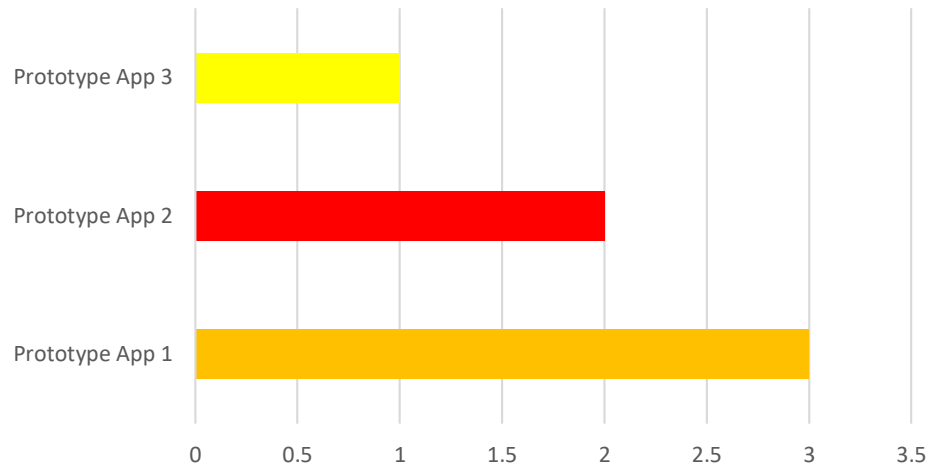


App Prototypes Responses

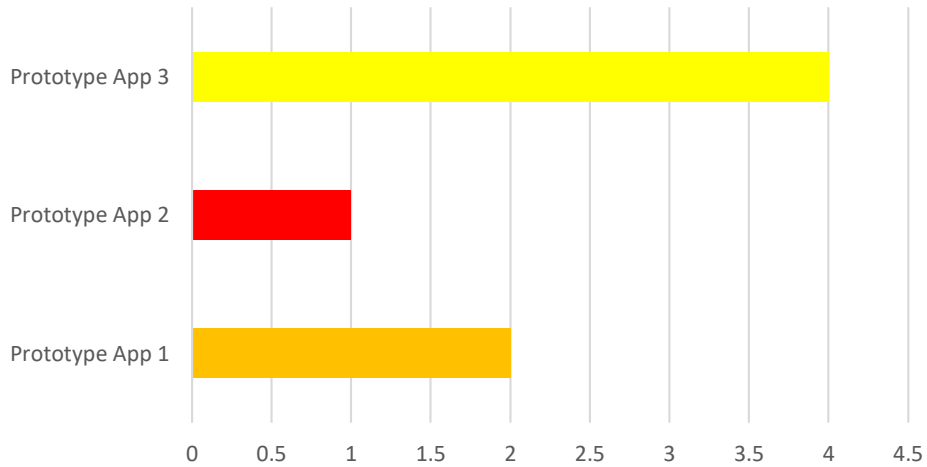
To analyse which aspects of the three prototype apps would be the best I again went and asked the same 6 users that tested the existing apps previously. The 6 users would select one of the apps in each area.



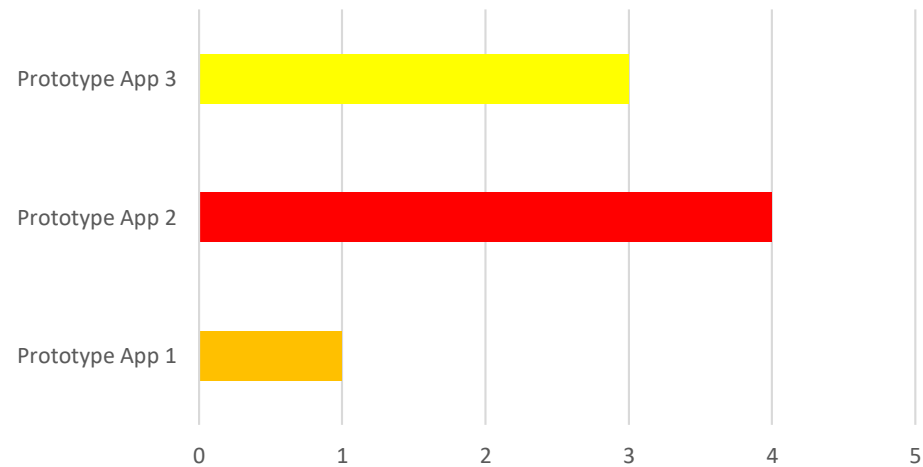
Page Title



Shapes



Manoeuvring Through The App



After evaluating the results I can now determine the best options and styles for the final app.

Page title - App 1

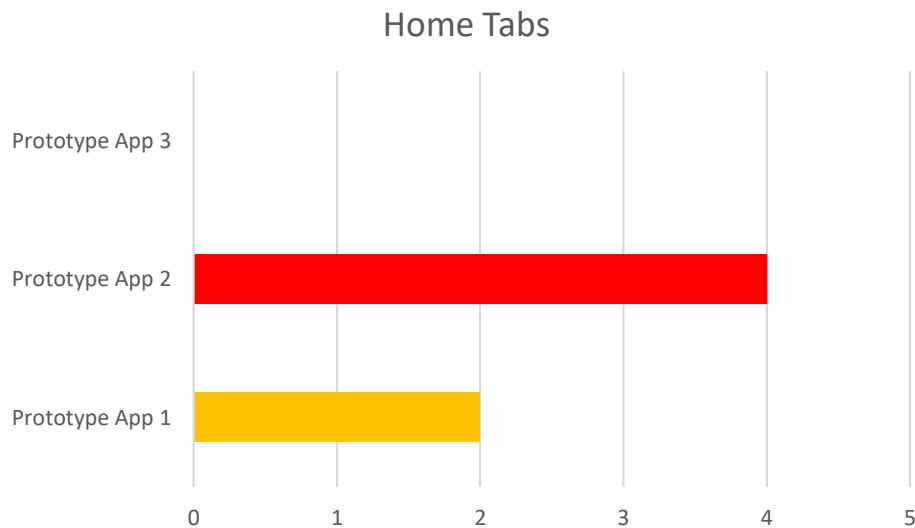
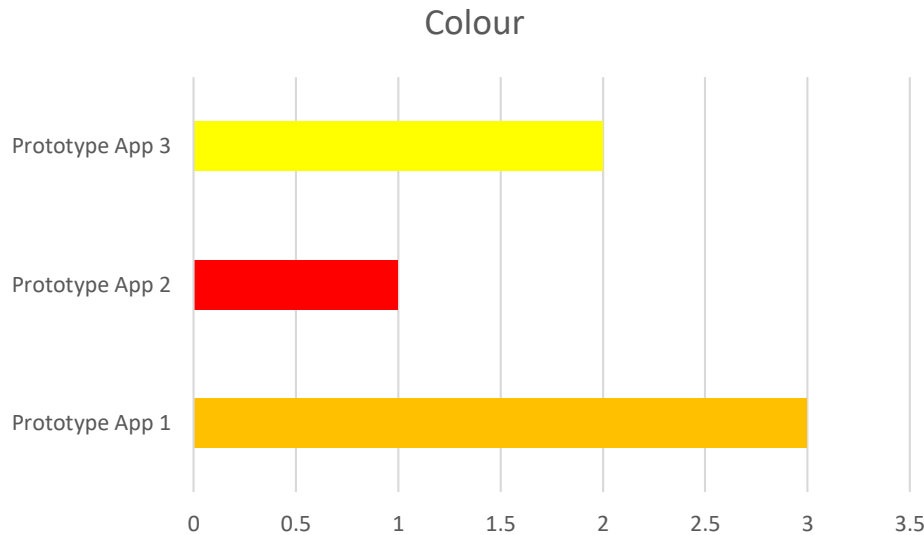
Manoeuvring through the app - App 2

Shapes - App 3

Colour - App 1

Home Tabs – App 2

In the case of the complete app I also asked the users to analyse the layout of the complete app and the aspects of it. This was done by creating the app to work interactively using the website invision. Each user thoroughly liked the aspects of reminding you to exercise, Watching a video of the exercise really helps , The appointment reminders and to see the progress of the injury.



Conclusion

In conclusion the research that I have done through this project has helped to gather the information for the three prototypes. I truly believe that the idea and design itself can help bridge the gap between physiotherapist and patient creating a better and quicker recovery experience. This app can help to affect lives for the better and that is the most rewarding thing of them all.