G7
MY DESIGN PORTFOLIO
Using Digital technology to give a voice to the Elderly

International School of London
Qatar

STUDENT

Teacher: **Mr Gale**

Homeroom: **7B**

STATEMENT OF INQUIRY

As humans age, modes of communication may be adapted to fulfill the function of maintaining dignity.

INQUIRY QUESTIONS

- **Factual**:
  - What medical conditions can cause people to lose the ability to speak as they age?
  - What are the basic programming skills that I need to learn to create my product?
- **Conceptual**:
  - How significant is this problem globally?
  - How are programming languages similar and is developing skills with one language a waste of time as each one is unique?
- **Debatable**:
  - The universal declaration states "All human beings are born free and equal in dignity and rights". Given the technological innovations of the modern world, failure to assist the elderly in communicating breaches this right.

LEARNER PROFILE

During your work you will have the opportunity to be inquirers, knowledgeable, communicators and open minded.

Concept: Communication

Global Context: Identities and Relationships- Human nature and human dignity

DESIGN TASK

You will **Research**, **Design**, **Make** and **Evaluate** a digital product to help elderly people that have lost the ability to speak, to communicate with their carers and family.

AREAS OF ASSESSMENT

A: Inquiring and Analysing

i. Explain and justify the need for a solution to a problem

ii. Construct a research plan, which states and prioritises the primary and secondary research needed to develop a solution to the problem

Iii. analyse a group of similar products that inspire a solution to the problem

iv. develop a design brief, which presents the analysis of relevant research.

B: Developing Ideas

i. develop a design specification which outlines the success criteria for the design of a solution based on the data collected.

ii. present a range of feasible design ideas, which can be correctly interpreted by others

iii. present the chosen design and outline the reasons for its selection

iv. develop accurate planning drawings/diagrams and outline requirements for the creation of the chosen solution.

C: Creating the Solution

i. construct a logical plan, which outlines the efficient use of time and resources, sufficient for peers to be able to follow to create the solution

ii. Demonstrate excellent technical skills when making the solution.

iii. follow the plan to create the solution, which functions as intended

iv. explain changes made to the chosen design and the plan when making the solution.

D: Evaluating

i. Describe detailed and relevant testing methods, which generate accurate data, to measure the success of the solution

ii. explain the success of the solution against the design specification

iii. describe how the solution could be improved

iv. Describe the impact of the solution on the client/target audience.

A: Inquiring and Analysing

THE PROBLEM

The problem is that some people in the world cannot talk. These people need something to help them express their needs or wants.

SIGNIFICANCE/PREVALENCE

    i.   Around 70 million people are mute.

Quora.com. (2018). *What percentage of people in the world are mute? - Quora*. [online] Available at:https://www.quora.com/What-percentage-of-people-in-the-world-are-mute [Accessed 31 Dec. 2018]..
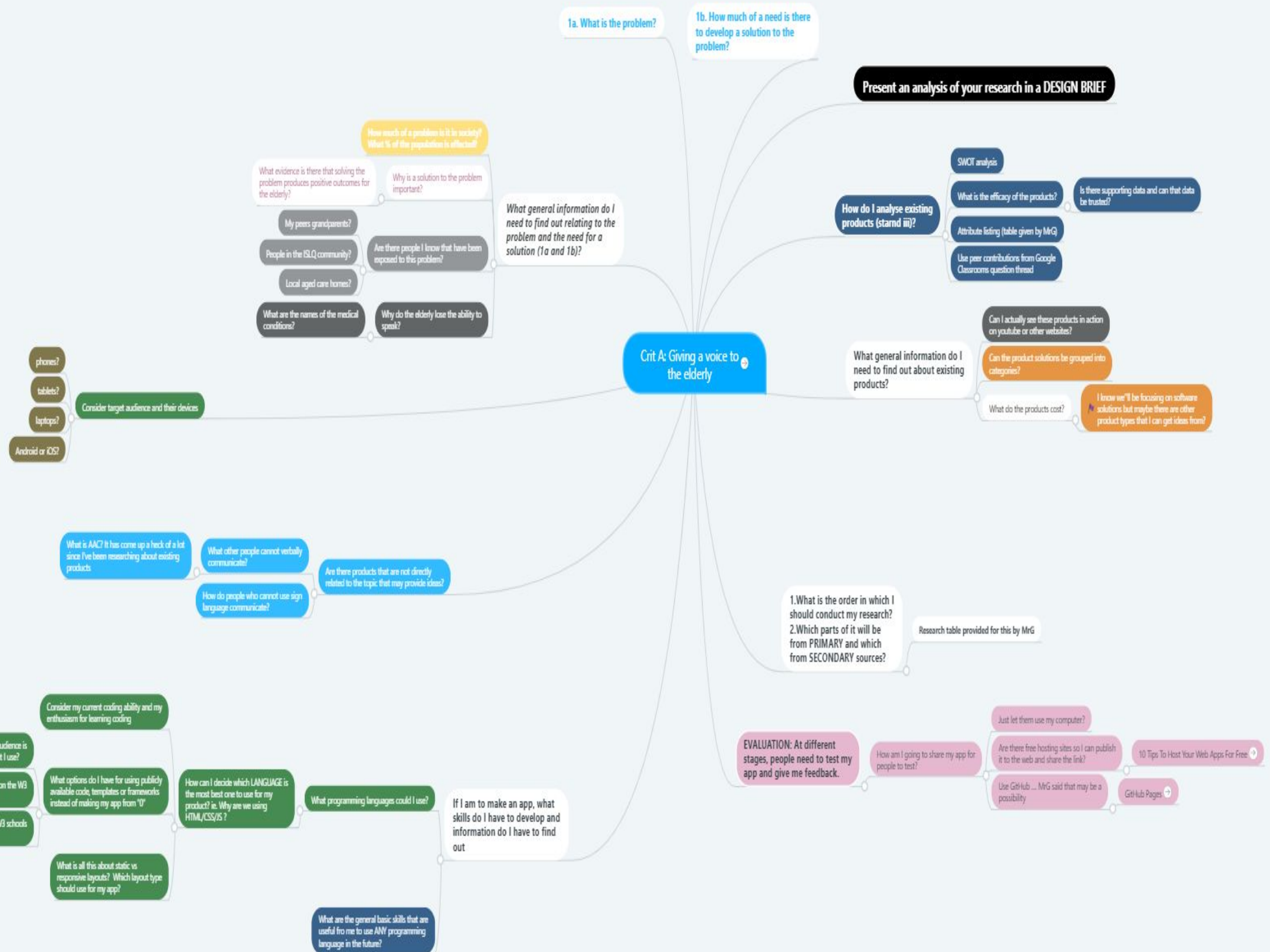
CAUSES

- Problem in vocal cords
- Injury
- Viral infections
- Stroke

CONSEQUENCES

    i.   They can't express their needs such as a bathroom break or they need assistants to help them

    ii.   Also people who have this problem can't communicate with their families which is bad for their emotional health

i. Explain and justify the need for a solution to a problem

1a. What is the problem?

1b. How much of a need is there to develop a solution to the problem?

Present an analysis of your research in a DESIGN BRIEF

How much of a problem is it in society? What % of the population is affected?

What evidence is there that solving the problem produces positive outcomes for the elderly?

Why is a solution to the problem important?

What general information do I need to find out relating to the problem and the need for a solution (1a and 1b)?

My peers grandparents?

People in the ISLQ community?

Are there people I know that have been exposed to this problem?

Local aged care homes?

What are the names of the medical conditions?

Why do the elderly lose the ability to speak?

SWOT analysis

What is the efficacy of the products?

Is there supporting data and can that data be trusted?

How do I analyse existing products (starnd iii)?

Attribute listing (table given by MrG)

Use peer contributions from Google Classrooms question thread

Can I actually see these products in action on youtube or other websites?

What general information do I need to find out about existing products?

Can the product solutions be grouped into categories?

What do the products cost?

I know we'll be focusing on software solutions but maybe there are other product types that I can get ideas from?

Crit A: Giving a voice to the elderly

phones?

tablets?

laptops?

Android or iOS?

Consider target audience and their devices

What is AAC? It has come up a heck of a lot since I've been researching about existing products

What other people cannot verbally communicate?

Are there products that are not directly related to the topic that may provide ideas?

How do people who cannot use sign language communicate?

1. What is the order in which I should conduct my research?
2. Which parts of it will be from PRIMARY and which from SECONDARY sources?

Research table provided for this by MrG

Consider my current coding ability and my enthusiasm for learning coding

Does the device that my target audience is using influence the language that I use?

What is Bootstrap and why is it on the W3 schools website?

What options do I have for using publicly available code, templates or frameworks instead of making my app from "0"

How can I decide which LANGUAGE is the most best one to use for my product? ie. Why are we using HTML/CSS/JS ?

Bootstrap

JQuery and why are they on the W3 schools website?

jQuery

What programming languages could I use?

If I am to make an app, what skills do I have to develop and information do I have to find out

What is all this about static vs responsive layouts? Which layout type should I use for my app?

EVALUATION: At different stages, people need to test my app and give me feedback.

How am I going to share my app for people to test?

Just let them use my computer?

Are there free hosting sites so I can publish it to the web and share the link?

10 Tips To Host Your Web Apps For Free

Use GitHub ... MrG said that may be a possibility

GitHub Pages

What are the general basic skills that are useful from me to use ANY programming language in the future?

GIVING A VOICE TO THE ELDERLY: Template to support the development of a research plan

Priority #	Category	Sub category	Questions the research is answering (WHY)	Information source Primary Secondary Both	Research details (HOW)	Links to resources (see research in the appendix)	Proposed completion date (WHEN)
1	Problem	medical	1 Why do the elderly (and young) lose the ability to speak? 2 Is there a medical solution to this problem? 3 What is ACC?		Using the internet	https://www.medicinenet.com/loss_of_speech/symptoms.htm	16.10.18
		World Problems	How significant is the problem is in the world?		Research through the Internet	https://www.quora.com/What-percentage-of-people-in-the-world-are-mute	16.10.18
		Mental	Are people affected mentally when the illness occurs?		Ask family members who have gone through the process, look up interviews or blogs on the internet		16.10.18
		family	Is the family affected by the illness? Could this illness be passed through genes?		On the internet, interviews can be found with families that have mute people.	https://www.ncbi.nlm.nih.gov/pubmed/17672986	17.10.18
		Political	Will the solution to this problem cost too much?		Research on the internet and check other apps	https://savvyapps.com/blog/how-much-does-app-cost-massive-review-pricing-budget-considerations	15.10.18
2	Need for a solution	General	What evidence is there that solving the problem produces positive outcomes for the elderly?				
		dignity	How will it help the elderly to restore his/her dignity?		Can be asked to a person who has gone through the process		
		quality of life	Will it increase the quality of life if we give a voice to an elderly?		Can be asked to elderly that is in the need of an app like this		
		Respect	Will the number of people that respect the ill person increase or decrease?		Can be asked to a person that has been through this situation		
3	Existing Products	Analysis methods	What is a SWOT analysis? What is an analysis listing table? How do I use the app evaluation rubric? Are there any other types of analysis?		Searched on the internet	https://www.liveplan.com/blog/what-is-a-swot-analysis-and-how-to-do-it-right-with-examples/ https://www.quora.com/What-are-some-good-examples-of-an-apps-competitive-analysis-rep	
		Apps	Where can I find apps that were done before for the same reason?		Research on the internet which will also help with the SWOT analysis	For Example: https://itunes.apple.com/us/app/ispeak-for-mute-people/id1073417537?mt=8	

ii. Research Plan: Table

		General types/formats	I know we"ll be focusing on software solutions but maybe there are other product types that I can get ideas from?			
		Frameworks	Bootstrap, jQuery, W3schools		Search on the internet or use W3schools search bar	https://www.w3schools.com/css/css_rwd_frameworks.asp
2 + ongoing	Programming	language types	Can I code the app to use more than one language?		Can be asked or decided that if it is needed or not	
		device types - phones, tablets. computers	Can my app be used in computers and phones? How can I make the app suitable for both iOS devices and Androids?		Can be tested with the finished code or searched through the internet	https://github.com/
		OS considerations				
		browser considerations	Can the app be used in any type of browser?			
		pre-built templates/Frameworks	W3schools, Bootstrap		Can be found on the internet when searched coding frameworks	https://www.w3schools.com/css/css_rwd_frameworks.asp
		Advanced Skills	Will I need any advanced coding skills? Where can I find advanced codes that I have not learnt in class?		Depends on the code pieces I need to have according to my design specification	
4	Product development		How could I make my app more appropriate for the elderly?			
			Which parts could I improve?			
	Product testing	Storage	How do I allow people to access my product to test it and give feedback at different stages?		Can be found on the internet by how people publish their codes	
			Are there any public host websites/apps that are free?		Search the internet	https://codecondo.com/5-free-hosting-solutions-small-apps-projects/
			GITHUB			https://github.com/
			Who can host our app?		Search the internet	https://www.macupdate.com/app/mac/40003/hosts https://github.com/ http://macappstore.org/hosts/ etc.

APPENDIX

Design=Draft

---

https://docs.google.com/document/d/1SRDpGM6Freaaln0PRTUDq9j-x2hL9aLP1EnqInbxq_w/edit

Problem:

Medical

1. They lose the ability to speak because of damage in brain cells or vocal cords.
2. According to the research I have done right now it cannot be cured.
3. Agenesis of Corpus Callosum

Popularity

70,000,000 people are mute (not able to talk) in the world

Mental

When people become mute that is usually because of a shock or trauma so most probably they will be injured mentally.

Family

The family will be affected by the illness. They would not be able to communicate with their family. This muteness can sometimes (rarely) pass through genes.

Political

Making/ Programming doesn't cost any money so it is basically free

Need For a solution

General

There will definitely be positive outcomes such as the ability to communicate and express basic needs. Also the respect the elderly gets from the youth will increase because a weakness they have will be removed.

Dignity

Since not being able to have a voice is a weakness having it restored will restore if not big but a part of the respect they get from the younger generations because they will be able to talk to them and address them and show them that they also have a voice.

Quality Of Life

Even if not in a major way it will because the elderly will finally be able to communicate their basic needs to the people who take care of them also they will have a voice which they have lost.

Respect

In my opinion it will, being able to communicate does help out a lot. The elderly will be able to communicate to people which will show that even though they might be old they are still alive and can do actions and with this product they will also be able to speak.

Existing products:

Analysis Methods

SWOT analysis is when the app is gone through and the Strengths, Weaknesses, Opportunities and Threats are analyzed and taken note off.

An analysis listing table is a table filled with the information collected from the analysis done to apps by asking questions.

The app evaluation rubric can be used through an analysis listing table where you can analyze parts of the app and create columns to write the information down.

There are other types of evaluation such as a checklist but using the SWOT analysis along with the analysis listing table we will have analyzed the apps on a high level.

Frameworks

There are two majorly known frameworks, one is the W3schools and the other one is Bootstrap. Both of these are provided in the W3schools website.

Programming

Language Types

Searched on the internet we can see that the most used language in the world is English. Using only English to code the app I believe would be enough.

Device Types

All devices can use this app if they have internet. If they do they can enter Github and find the app and use on the internet. Same for iOS and Android devices.

Browser Considerations

Since browsers use the internet to operate and to use the app I made you also need internet different browsers can be used to work the app.

PRODUCT DEVELOPMENT

The buttons could be hover click instead of using a mouse or trackpad to actually click the buttons. The labels on the icons could be more

understandable with a different color. The categories could have been more specific with more choices.

PRODUCT TESTING

I can allow people to use and give feedback to my program through Github and Codepen. Two sites where they can use the app and give feedback.

Openshift, AppFog, Heroku, Apprenda, Cloud 66, Github etc.

Giving a Voice to the Elderly: Attribute listing of existing products used in SWOT analysis

Product name	Type	Price	Compatibility	Availability	Menu options	Icon categories	Icon size	Contrast	Other information
SALTILLO 42 BASIC FLIPCHART	Flipchart	Free	NA	Print from website	NA	A full range – from directions through to emotions	User choice	High	
LET me TALK	software	Free	Android iOS	Play Store Apple Store	Can add own images, categories and search for images	General food drinks clothes disease,feelings,tools,toys,colours, numbers,alphabet, shapes	Tablet - 2.5cm x 2.5 cm single page Phone - 1.5cm x 1.5cm	Low – gray background, white buttons, clip chart dull coloured graphics	Images on buttons much smaller than the buttons themselves
MYVOICE	software	$129	iOS	Apple Store	Can add own sentences	General Hello, Goodbye etc.		Kind of colorful, blue screen size buttons, images	
VERBAL VICTOR	software	$11.99	iOS	Apple Store	Can create new buttons and new sounds	General needs Food, reading		Blue and gray, blue buttons, images on the buttons	

Strengths:	Weakness:
Colorful Can add own buttons Covers general needs Software so can be used nearly everywhere Has images so people who can't read can see what the button means	Only for iOS Has a price Expensive
Opportunities: Can be used with a lot of age groups Easy communication Accessible Can edit yourself	Threats: Might have virus Might get deleted Might take a long time to download May need internet

Verbal Victor

Strength	Weakness
Covers general needs Software no need for prints Saves trees Images to help understand Has easy pressable buttons	May need internet Only iOS Not free Needs download Needs device Not colorful
Opportunities Can add you own voice/ buttons Used for ages +4 Accessible Can be used nearly everywhere since on	Threats May need internet Can cause eye problems Might have a virus May need change of device if not owned

Let Me Talk

Strengths	Weakness
Can add different buttons on your own Can add buttons together for forming a full sentence Covers basic and extra needs	Only for +12 Green White buttons Grey background Sometimes has no sound Requires iOS 8.0 or later
Opportunities You can add your own buttons Accessible It is free Both iOS and android	Threats May have virus Looking at the screen to much can cause eye problems and addiction

Stallio 42 basic flipchart

Strengths	Weakness
On paper Colorful Pictures Writing Can be used with different ages	Can get lost Needed to point on all icons Might be confusing with all the icons
Opportunities There are no opportunities	Threats Paper cuts Tree loss

phone	iOS

Throughout this time we have learnt about the elderly losing their voices and becoming mute for the rest of their lives. Answering the question of of how did they become mute along the way and more. This is a problem all around the world that 70 million people have to face. This being a major issue of losing communication, respect and dignity by the elders we have decided to make an app that will put an end to all those problems more or less. We have also researched made apps to get ideas and analyze them (shown in the SWOT analysis).

Design Brief for my product

- I am making a software product which will make the elderly that are mute able to communicate for basic needs. The idea is to let the elderly communicate the same way that we can so they can address their simple wants like to call a family member or simple needs.
- I plan to start the coding of my app around the middle of November so I can have it finished before the 3 week holidays because I want to use that time to improve my drafts with the feedback I have gotten.
- The target audience for this project is the elderly that are mute.

  - I want to add buttons when clicked plays sound, colorful

  - JS,HTML,CSS

  - I will use basic frameworks already done by others and make it compatible to my wants

  - Phones, computer, Ipads

Google,Internet Explorer.

B: Developing Ideas

Design Specifications as a list of Success Criteria (1)

Category	My app should ...	My app could ...
Functionality	• have buttons with dimensions of at least 200 x 200 pixels • allows the user to select common everyday words and actions • have buttons that play audio when clicked/pressed • have clear graphics on buttons • Have responsive buttons to different screen sizes • Have a search button or clear menu 　• have buttons that physically respond on hover or click (size/colour change)	• allows the user to select from word/action categories
Aesthetics	• have clear graphics on buttons • Be responsive to different screen sizes • Have a unique theme • Have joyful colours	• have clear graphics and words on buttons • Maybe special effects
Target audience	• have responsive buttons that are able to be easily pressed by fragile people • Have easy instructions since the elderly are using the app	• A sentence maker
Accessibility/compatibility	• operate on Android devices (table and phone) • Operate on iOS devices	• have buttons that play audio • No internet
Programming level	• involve coding skills that we've learned/will learn in class • Basic Framework	• involve more advanced coding that I've had to learn through research • Advanced Framework

Proposed category/menu items for my app (1)

Category	Sub-category	Audio buttons
Urgent	Urgent! I need/ am	Toilet In pain Vomit (If has diaper) Change Diaper Choke
Feelings	I feel...	Happy Sad Scared Angry Disgusted Depressed Confused Shocked Sick Lonely
Basic questions/requests	How/Tell/ What/Can	How are you feeling today? How is the weather outside? Tell me about what's going on in the news What's the time? What is today's date? Can I talk with you?
Basic answers		No I'm not in pain I can't hear you No thank you Yes please …..

Proposed category/menu items for my app (2)

Category	Sub-category	Audio buttons
Action	I want to	Walk Sleep Sit Talk Eat Watch TV Run Swim
Pain		Head Stomach Eyes Feet Arm Hands Inside
Colors		Blue Yellow Green Red Purple Black White Orange Pink etc.
Directions		Left Right Up Down Straight
Countries		America Qatar England etc.
Food		Burger Pizza Dairy Snacks Fruit Vegetable

ii. Presentation of Ideas: Category item table

Rough annotated sketches of my app design ideas

idil Arat 7B

Final Design

Website Name

Search bar

Search...

Scroll Down/Up

Category box

Urgent ▽

Basic...

Click

More options

Home Page

Takes to

Hyperlink

Backwards

Plays audio when clicked

Photo/Name

- Actions
- Colors
- Feelings
- Pain
- Directions
- Basic Questions
- Basic Answers
- Food

Picture with Name

Category name

Urgent !

Vomit

Toilet

Dying

cough Choking

Scroll up down for more options

Click
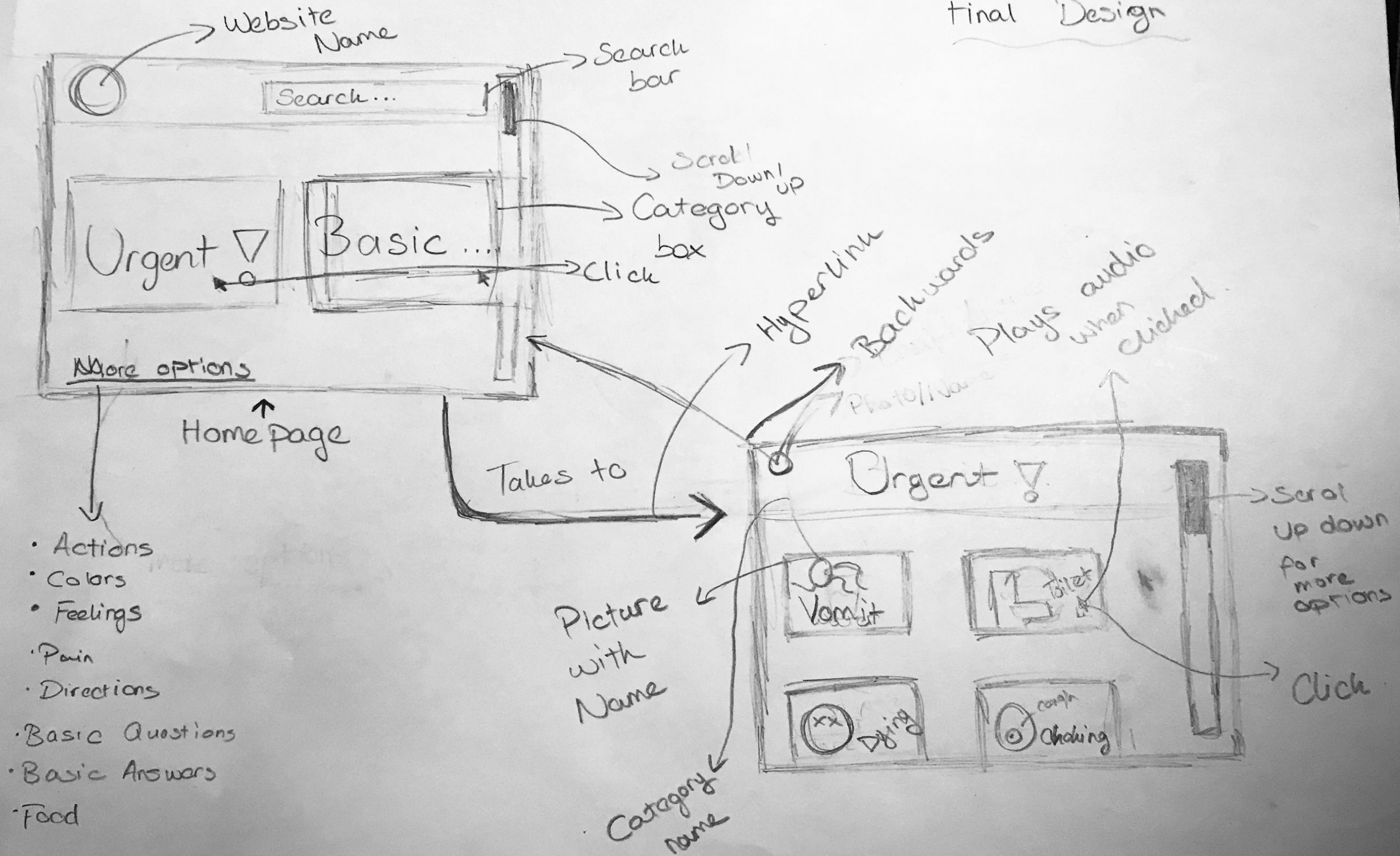
Rough annotated sketches of my app design ideas
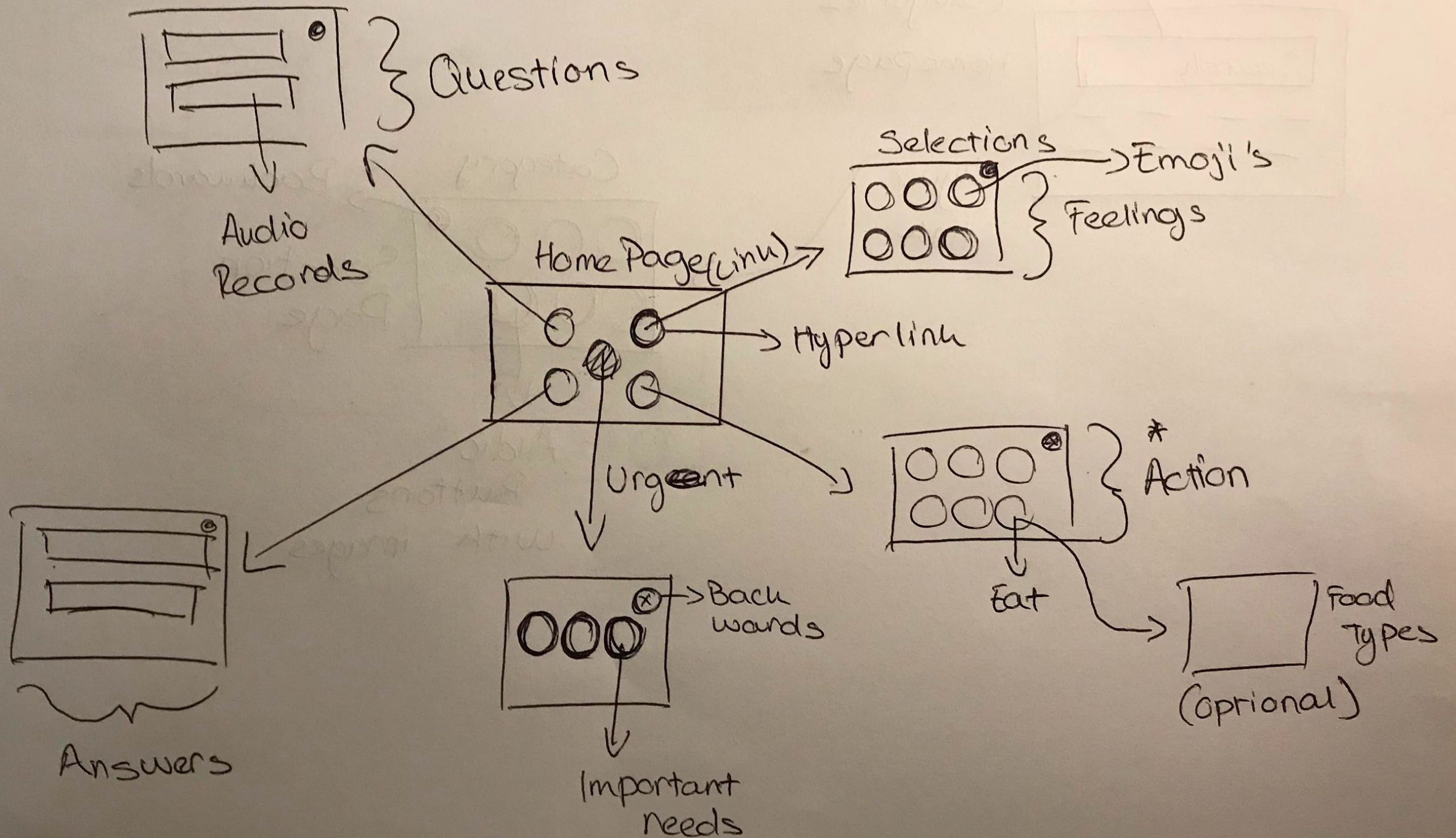
3. **Present the chosen design and outline the reasons for its selection**
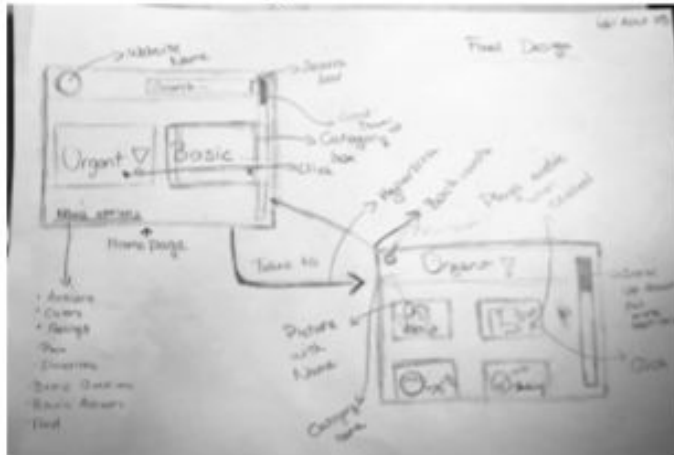
Yes=x
No=Nothing

My app should/could	Yes/No
• have buttons with dimensions of at least 200 x 200 pixels	x
• allows user to select common everyday words and actions	x
• have buttons that play audio when clicked/pressed	x
• have clear graphics on buttons	x
• Have responsive buttons to different screen sizes	x
• Have a search button or clear menu	x
• allows user to select from word/action categories	x
• have buttons that physically respond on hover or click (size/colour change)	
• have clear graphics on buttons	x
• Be responsive to different screen sizes	x
• Have a unique theme	x
• Have joyful colours	x
• have clear graphics and words on buttons	x

• Maybe special effects	
• have responsive buttons that are able to be easily pressed by fragile people	x
• Have easy instructions since the elderly are using the app	x
• A sentence maker	
• operate on android devices (table and phone)	
• Operate on iOS devices	
• have buttons that play audio	x
• No internet	
• involve coding skills that we've learned/will learn in class	x
• Basic Framework	x
• involve more advanced coding that I've had to learn through research	x
• Advanced Framework	x

My app should/could	Yes/No
• have buttons with dimensions of at least 200 x 200 pixels	x
• allows user to select common everyday words and actions	x
• have buttons that play audio when clicked/pressed	x

My design ideas checked against the success criteria

• have clear graphics on buttons	X
• Have responsive buttons to different screen sizes	X
• Have a search button or clear menu	X
• allows user to select from word/action categories	X
• have buttons that physically respond on hover or click (size/colour change)	
• have clear graphics on buttons	X
• Be responsive to different screen sizes	X
• Have a unique theme	
• Have joyful colours	
• have clear graphics and words on buttons	X
• Maybe special effects	
• have responsive buttons that are able to be easily pressed by fragile people	X
• Have easy instructions since the elderly are using the app	
• A sentence maker	
• operate on android devices (table and phone)	
• Operate on iOS devices	
• have buttons that play audio	X
• No internet	
• involve coding skills that we've learned/will learn in class	X
• Basic Framework	X
• involve more advanced coding that I've had to learn through research	X
• Advanced Framework	

I choose the design that was the most available and the one that was that had the most crosses.

I choose the app with the most 'x'. Which represents that it matches the design specifications. The one with the most 'x' is the one that matches the design specification the most. I also choose this design because for me it was less confusing and more advanced than the other one. I also thought this design was more appropriate to the elderly than the first design. The major reason though was I liked this design more than the other one because this was the idea I had from the beginning of the design cycle.

Design- Strand 4

Idil Arat

Urgent!

Colours

Basic Questions
???

Basic Answers

Action

Food/ Drinks

URGENT!

X

Vomit 🤮

Toilet 🚽

In Pain 🤕

Change Diaper

Dying 😵

COLOURS

X

Blue

Red

Yellow

Green

Orange

Pink

Purple

BASIC QUESTIONS

How are you?

What is the date?

What is the time?

X

BASIC ANSWERS

X

Good 👍

Bad 👎

Okay 👍

Type date here....
📅 July 17

Type time here…
🕰️

ACTION

Run

Walk

Sleep

Watch TV

Read

Look at pictures

Call family

Give me …

FOOD/ DRINKS

X

Water 🥤

Hamburger 🍔

Soup 🍲

Cookie 🍪

Salad 🥗

Snack 🥪

Cola 🥤

Design Strand 4

Urgent

Needs

Food & Drinks

Questions

Actions

Emotions

Vomit

Toilet

Diaper

RIP

TV

IPad

Internet

Games

Books

Music

Games

Books

Music

Water

Burger

Soup

Cookie

Salad

Snack

Cookie

Salad

Snack

Drinks
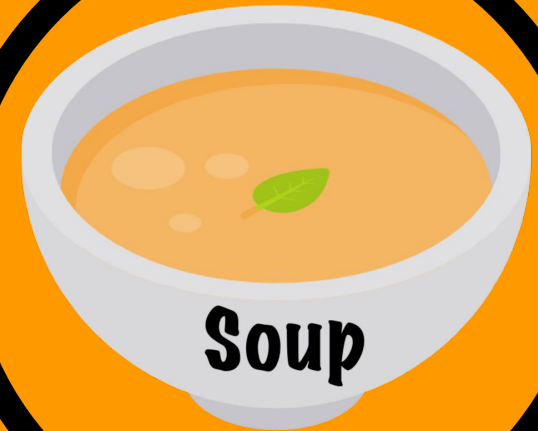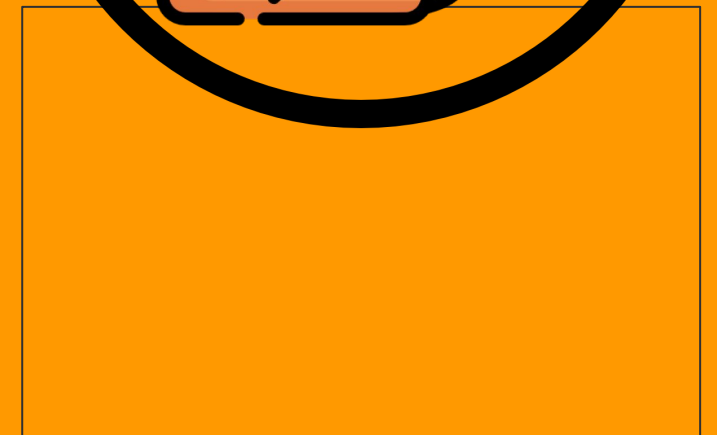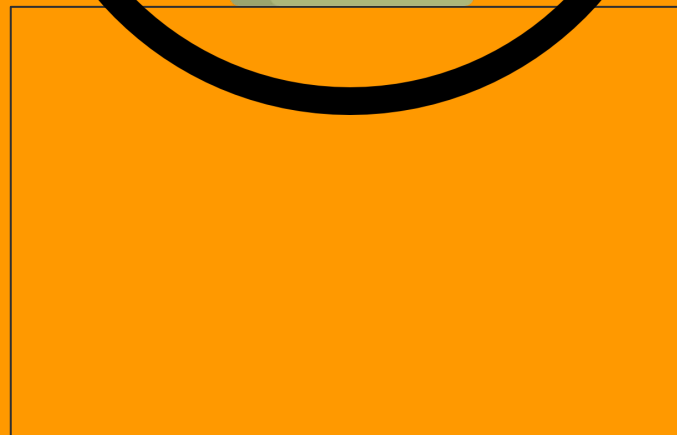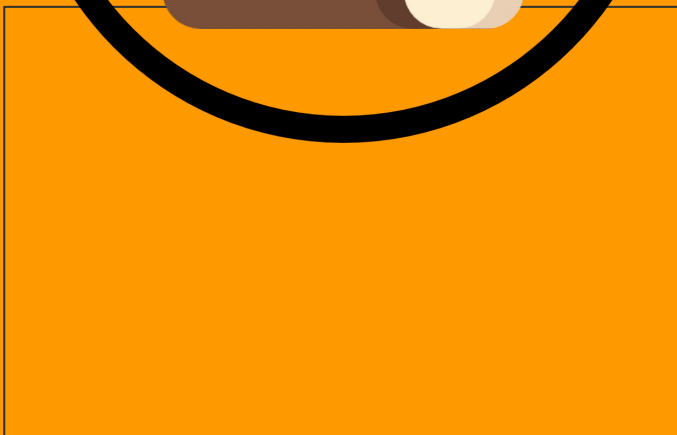
Questions

What is your name?

How are you?

Where are you from?

What is the date?

How old are you?

Can you tell me the news for today?

What month is it?

Actions

Walking

Run

Sleep

Call ...

Look At
Pictures

Call ...

Look At
Pictures
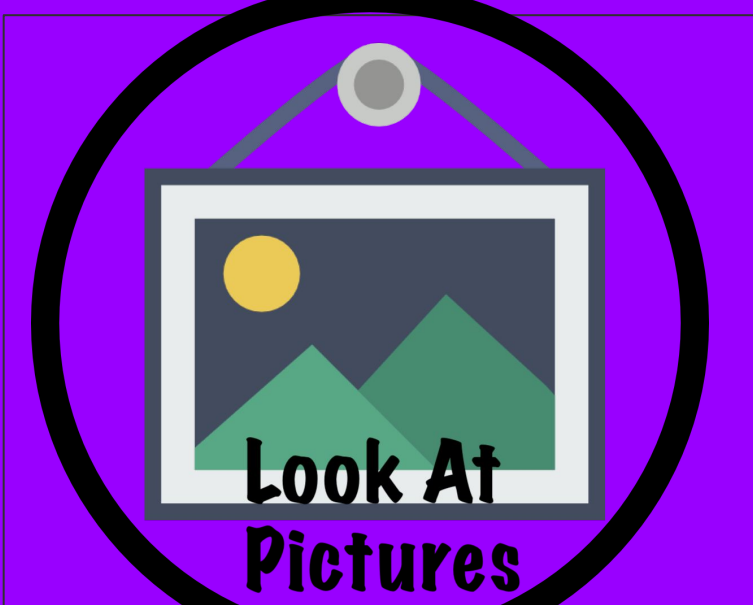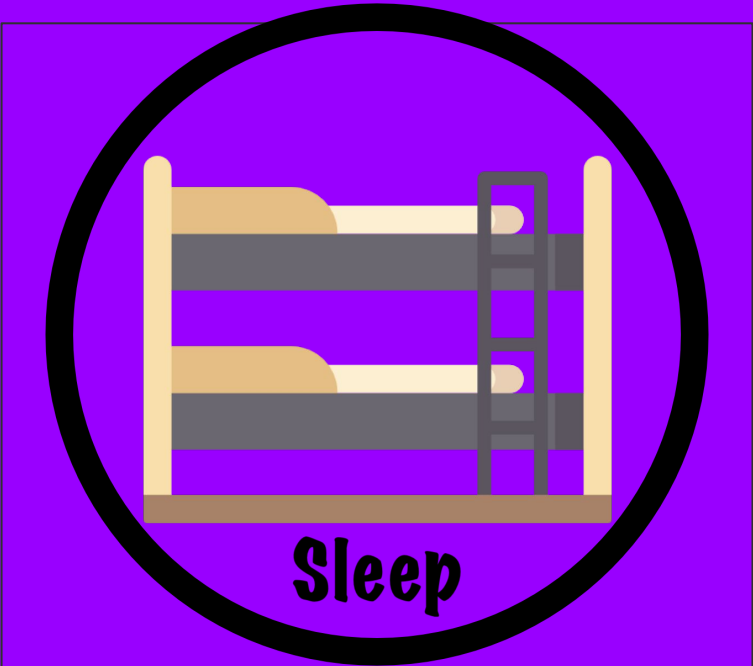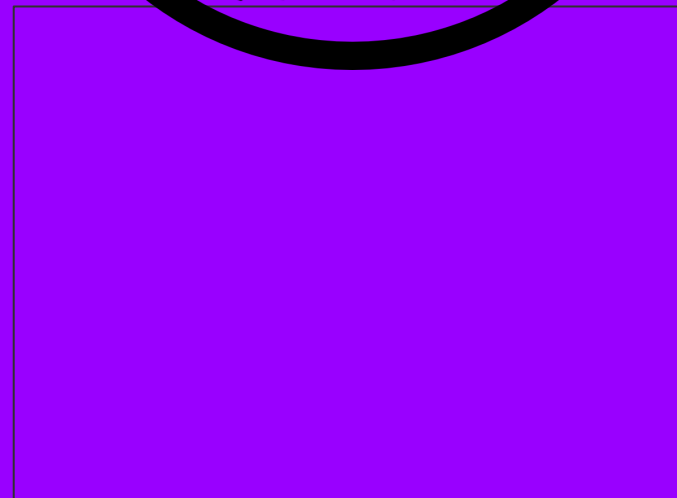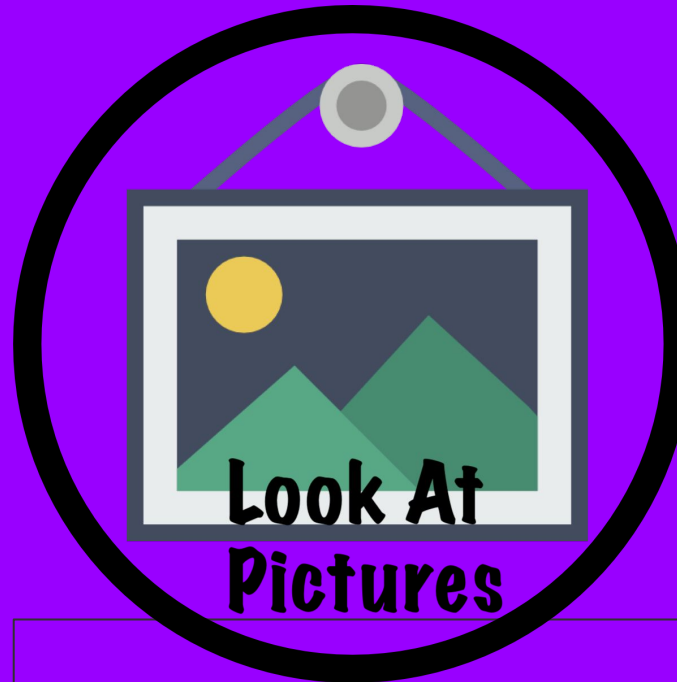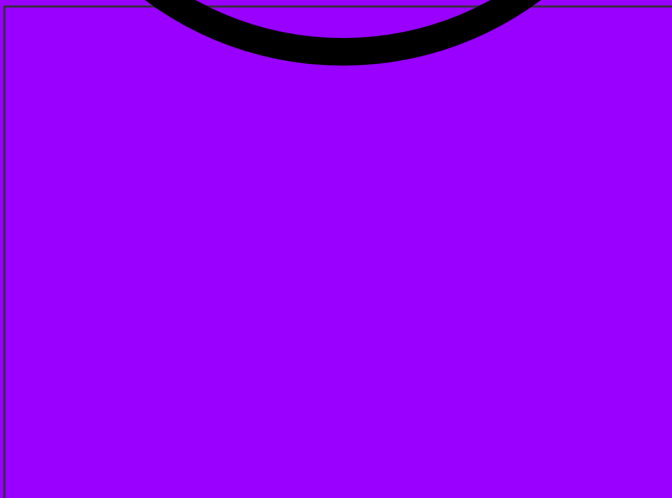
Er

Happy

Sad

Angry

Scared

Tired

Bored

Scared

Tired

Bored

Confused

Shocked

Sick

Pain

Pain

Head

Shoulder

Arm

Back

Leg
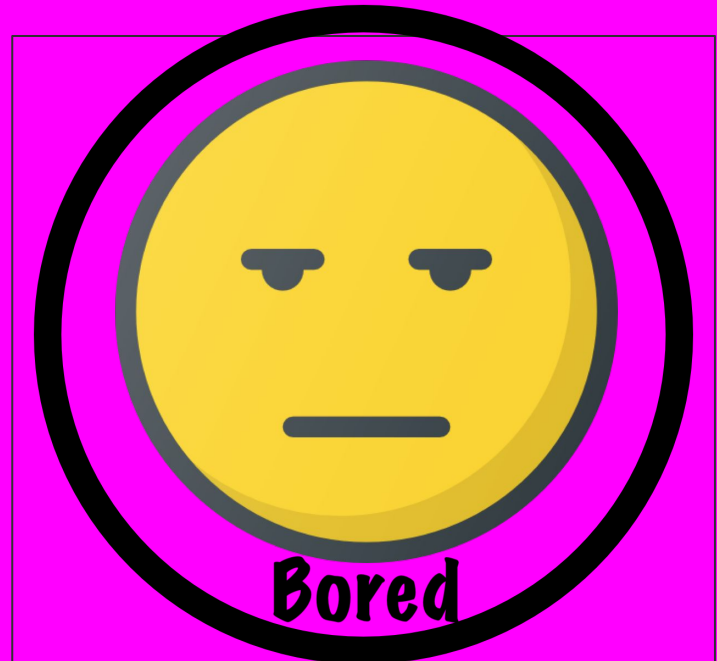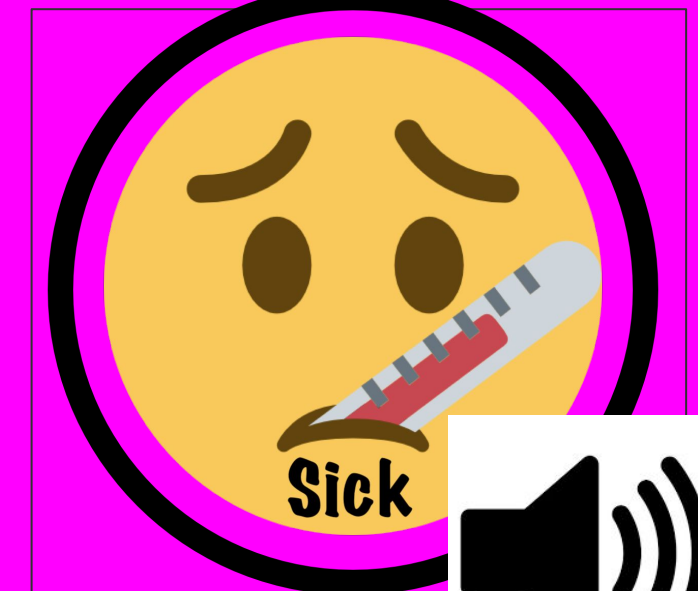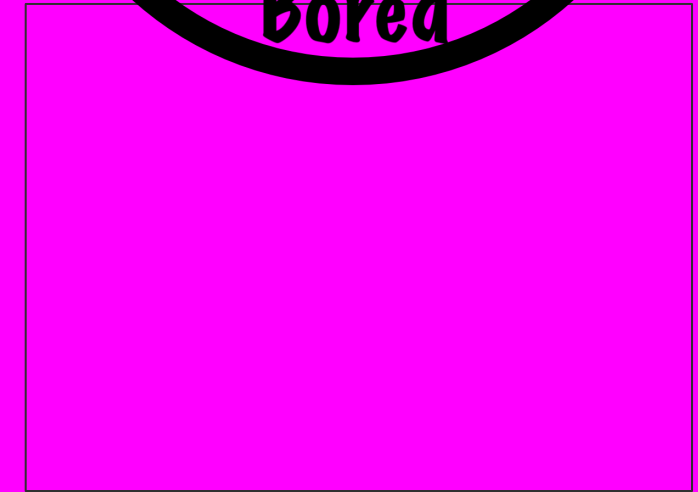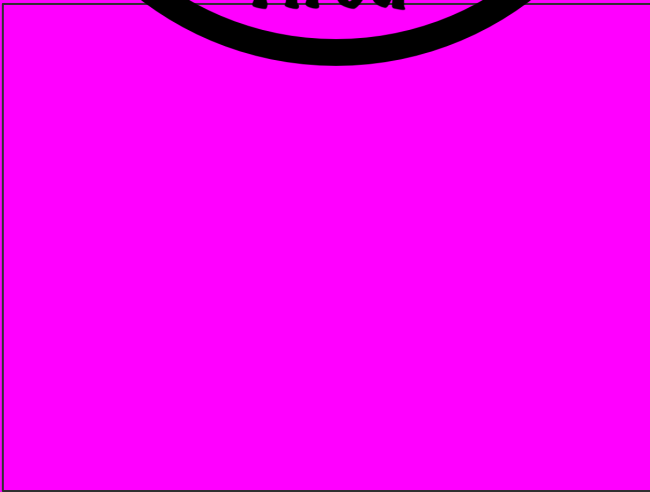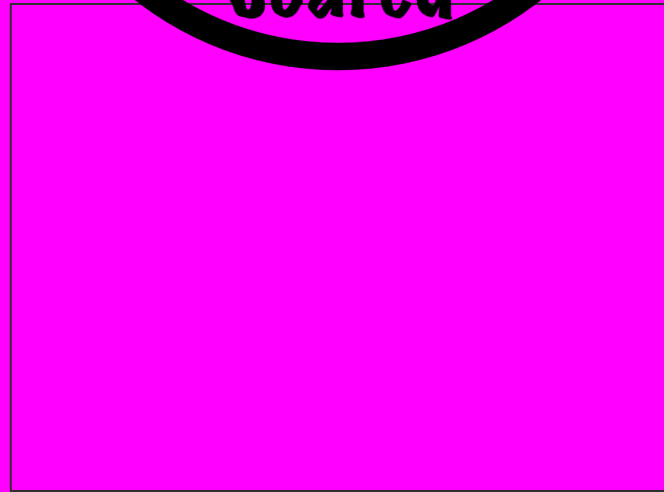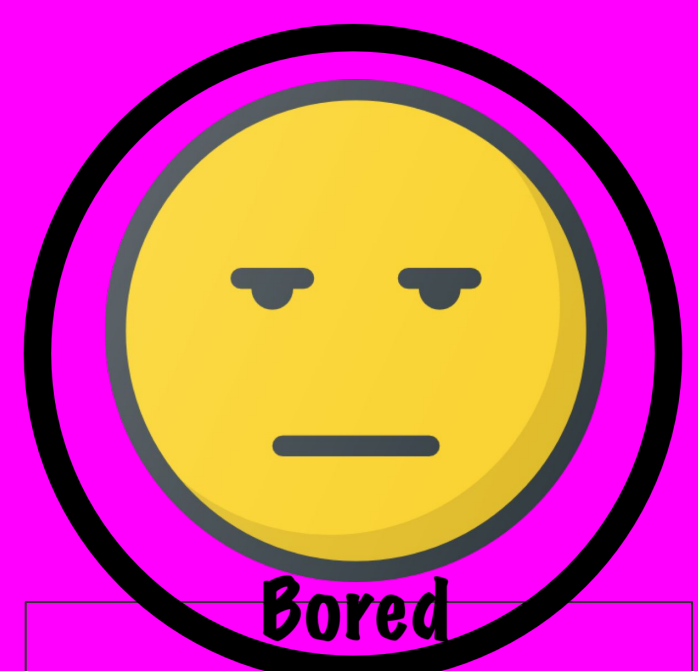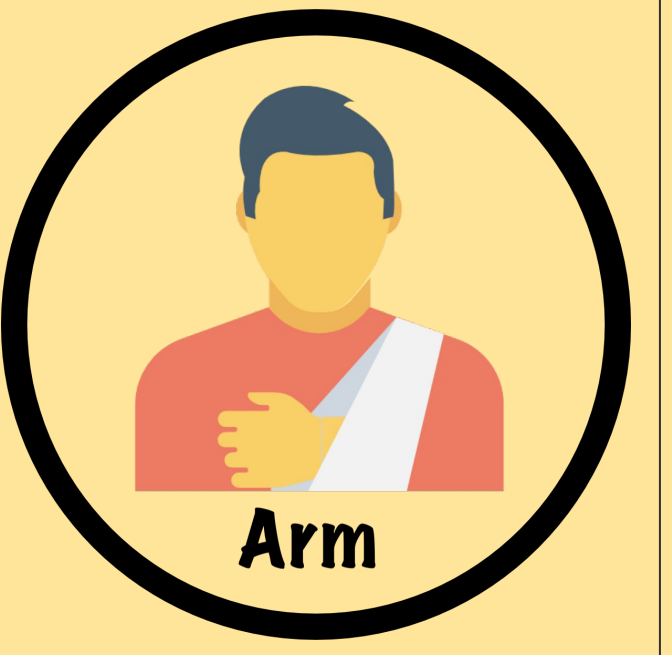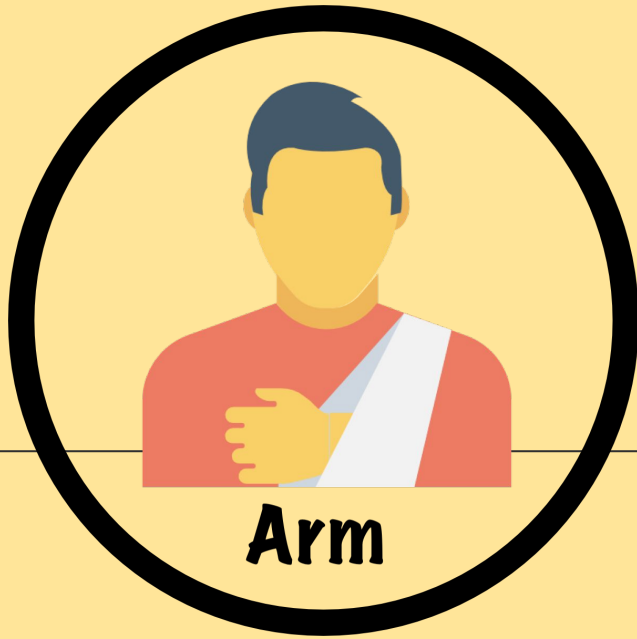
Arm

Back
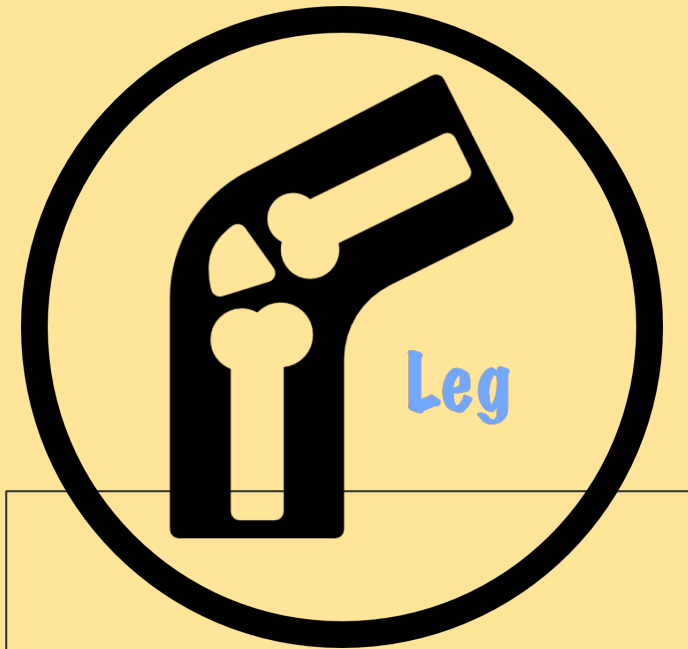
Leg

C: Creating the Solution

Task Breakdown		Resources		Timeline (week starting …)							
Task	Task Description	Tools	Materials	Nov 11	Nov 18	Nov 25	Dec 2				
1.Grid layout and responsiveness	Check I can make the proposed grid layout and responsiveness Make the basic section layout of my app - main menu	W3schools framework		🟥							
				🟩							
2. Add categories	Copy the layout of the home page use that to add new categories in my criterion b strand 4 And change their features according to their designs on the slideshow	Google Slides			🟥						
					🟩						
3.Making Icons and adding them to the framework	Get icons from open source websites or use gravit designer to make my own Code the icons into the code using the layout from the slideshow	Framework Google Slides	Images Icons Text		🟥						
					🟩						
4.Adding hyperlinks to icons	Code in the hyperlinks to work when a button is clicked so it can take the elderly to a new category or the previous one	Hyperlink Code			🟥						
					🟩						
5. Record audio	Take a phone or another device to record my voice or one from my family's according to the needs I have coded		Phone to record me speaking A siren sound from the internet			🟥					
						🟩					
							🟩				

i. Logical plan: Slippage Chart (1)

Slippage Chart (continued)

6. Add audio to the app	Send the audio's from the device used to my computer download it and code it into the app P.S. Add the siren sound to all the urgent buttons	App Code	Audio				🟥						
							🟩						
7. Adding detail	Add colours, fonts, background, add colours according to categories etc.	Code App	Fonts Images					🟥					
							🟩	🟨					
8. Add final touches	Add the app name and logo etc. By coding in rectangles and adding text	App	Fonts Image from gravit designer					🟥					
								🟩					
9. Launch the app	Find an open source where I can submit my app Hand it in to Mr.G	App Website to launch the app						🟥					
								🟩					

My final product

1. Demonstration of my product: (provide LOOM video link)

   https://www.useloom.com/share/5f464e3e536d4a92b5a1458d9ef50ffa

1. Live hosting of my product: (provide link to your GitHub site or OneDrive hosted ppt)

https://kmrgale.github.io/idil_talk.github.io/index.html

Changes I made from my Crti B final design choice

https://www.useloom.com/share/471ccdae4f1244538e96e3395e725202

D: Evaluating

My testing method(s) ... paste from draft

Test done with Father. The design specifications have been turned into questions and asked. Also asked to give a score for the design specifications out of 5..

Data type produced My testing method(s) will produce data that is quantitative and qualitative

Data analysis I will analyse the raw data produced from my testing method(s) by going over it and coming up with an analyzed version and rewriting it.

Testing Participants   The participants in my testing procedure were ……. *(paste from draft)*. They were chosen because *(paste from draft)*

Survey Questions

Questions With Answers (Raw Data):

1. Do the icons have acceptable sizes?

   I can see the icons pretty well and read the texts.

1. Does the app have everyday uses?

   Well, I can ask for water and food so I say yes but you could add more detail to certain categories.

1. Do the buttons that are supposed to play audio play audio?

   Yes they do. The audio though is not that clear could be better.

1. Are the icons clear?

   Very clear and I like the ones you choose.

1. Does the button change when the screen size changes?

   It does change it's placing with different screen sizes.

1. Does it have a search button and clear menu?

   I cannot see a search button which will be a no for that part but the menu/ homepage is pretty clean.

1. Can you select what you want?

   Yes I can. The majority of needs are here but some are not like fruits and vegetables.

1. Can you click any button and it functions?

   Some have links to new pages and some have audio but yes all of them except the "Hello!" which I thought would take me to setting or a log in did work.

1. Does it have a unique theme?

   Nah, not really have seen this in apps that I use.

1. Does it have joyful colours?

   Most of the time yes except the parts where it is grey.

1. Does the app have any special effects?

   Nope, except the buttons darken when the mouse is over them.

Survey Questions (2)

Can the buttons be clicked easily?

Yes, just one click with the trackpad, mouse does it.

Can it operate in different devices?

Well, you showed me Github and where your app was and when I tried it, the app worked both on the computer and on the phone.

Can the app work without internet?

Can't since we tried and Github needed internet to work the app.

Does it have a basic or advanced framework?

Not really. The app looks like most of the ther apps.

Does it have advanced coding?

I don't know a lot about coding but my best guess is that

Analysed Data from my testing procedure

Test Results (Analyzed) Summary

From the test results I have I can clearly say that my app covers the most of the design specifications. For example one was to have a unique theme. While I could have done my design using a template from the internet I coded it all from the beginning myself sometimes using advanced coding. The results mostly showed that the app did have a different themes according to other apps but there was a point where the results showed that it actually had a fine theme but has been seen before. Another example would be to have clear graphics on buttons. The results show that the images/icons I have in my app are perfectly clear without pixels so this area matches together completely. Also an example would be to cover basic needs the results show that the most major needs like water or sleep is stated but some part of the results say that there could have been more needs such a needing a jacket, umbrella, medicine etc.
Overall I still have areas that need to be improved but most of the app is in fine condition and covers basic needs, basically the app is actually suitable for the elderly to use if they need to.

Specifications	Yes/No	Evidence From Tests
• have buttons with dimensions of at least 200 x 200 pixels	4/5	The dimensions are 200 to 500 not 200 to 200
• allows user to select common everyday words and actions	5/5	It has water and sleep and other every day actions
• have buttons that play audio when clicked/pressed	5/5	When clicked all buttons except the ones with hyperlinks audio is played
• have clear graphics on buttons	4/5	The words and icons are clear for an elderly eye to see
• Have responsive buttons to different screen sizes	5/5	When the screen size is decreased or increased the buttons are affected too
• Have a search button or clear menu	3/5	I do have a clear menu with icons and writing but I don't have a search button since there is no need
• allows user to select from word/action categories	5/5	When clicked the buttons either play audio or hyperlink to more detailed categories
• have buttons that physically respond on hover or click (size/colour change)	4/5	The buttons have hover click and respond to clicks
• have clear graphics on buttons	5/5	The icons are easy to read and decipher/ understand
• Be responsive to different screen sizes	5/5	When the screen size is decreased or increased the buttons are affected too
• Have a unique theme	2/5	The app was not copied but looked like normal apps.
• Have joyful colours	4/5	Most of all the colours are joyful but sometimes it is grey or black
• have clear graphics and words on buttons	5/5	The icons and words are understandable because the opposite colours are used
• Maybe special effects	1/5	Except hover click there aren't any special effects
• have responsive buttons that are able to be easily pressed by fragile people	4/5	The buttons are easily clicked when the touchpad is touched
• A sentence maker	0/5	I dont have one since I had no need to have one
• operate on android devices (table and phone)	5/5	The program operates on any device with internet
• Operate on iOS devices	5/5	The program operates on any device with internet
• have buttons that play audio	5/5	Buttons without hyperlinks play audio
• No internet	0/5	Nope the app does not work without internet
• involve coding skills that we've learned/will learn in class	5/5	Involves all the coding skills learnt in class
• Basic Framework	5/5	Uses the framework of W3-schools
• involve more advanced coding that I've had to learn through research	2/5	Involves some coding like cards that were not learnt in class
• Advanced Framework	1/5	Not really I just needed to find the W3-schools framework

ii. App evaluation: Check against success criteria

Checking my product against the success criteria from Crit B
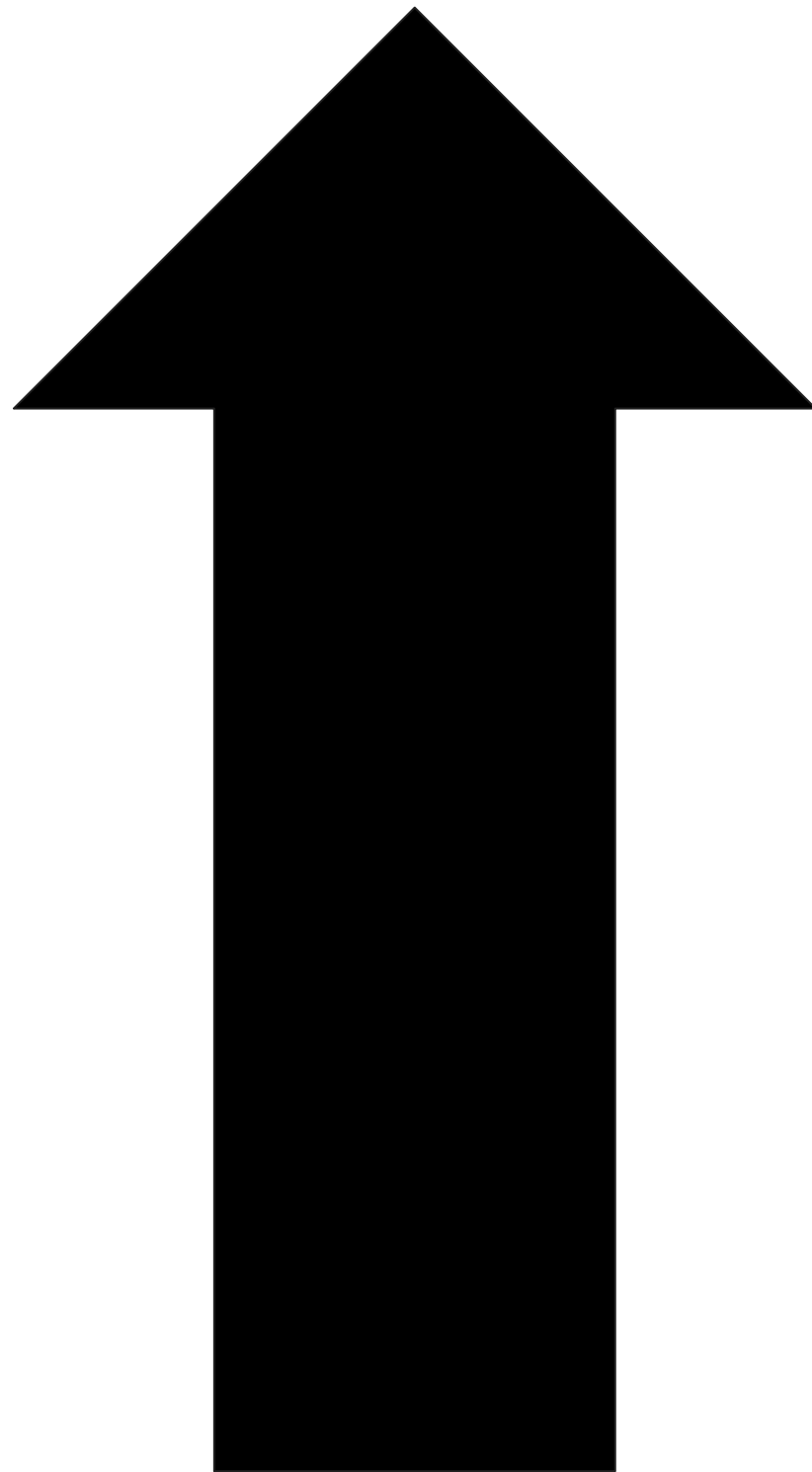
Purple=Should
Blue=Could

Concluding statement on the success of my product/Improvement

Strengths	Weaknesses	Improvements
● The app covers the major basic needs like water, sleep, walk, salads, call etc. ● The app has audio with enough clarity to make a person understand the need or want ● It has clear graphics on buttons also clear writing to state what the graphics stand for ● The app has buttons that react to different sizes of screens	● The audio in the app is not clear enough could be more clear ● There could be more specific categories like adding more food (fruits, vegetable etc.) ● The icons might be too small ● The buttons were the same colour as the background which meade it hard to see them ● The writing on some icons were not the best quality and could not been easily read	● It could be improved if there were more buttons for the food and drinks sections for example: Tea, coffee, biscuits etc. ● The design could be improved if the audio was more clear instead of my computer i should have used my phone ● It would be better if the buttons were a separate colour than the background so the buttons could be in front while the background at the back ● It would be more understandable if the words/captions were more clear with using different colours that is not the icon colour or background colour ● The design would be better if the icons were more large I could increase the pixels of the icons with the cards around surrounding it

A statement about the impact of my product on the target audience.

- To what extent has the client's or target audience's problem been solved?
  The app extents to an average level of covering problems using audio. The app has basic needs covered like sleep, water etc. Overall the extent of the app is average maybe a bit larger. It is not an asteroid that killed the dinosaurs.
- How does this solution improve the client's or target audience's situation?
  This app helps the elderly who is the target audience have a way to communicate to ask for basic needs. It helps elderly to express themselves with audio coded to play when a button is pressed. Since the elderly are mute and we are making this app for them the audio really helps. This solution helps the elderly in the easiest way possible.
- To what extent has the design brief been met?
  If I were to give a number to the extent   that the app meets the design brief it would be 8/10. This would be because some of the design briefs such as having a search menu and not being able to work off-line was not covered. This would either be because that it was not needed or it was too over level coding/ I could not use my time effciently. But overall most of the design specifications were met.
- Are there any negative effects this solution could have?
  This solution uses the screen so elderly might have eyes that don't see well. Also elderly with very fragile hands might injure them selves even more than they are.