**Documentation of design and process**

In the initial brainstorming stage of our project, the education application for kids was agreed upon unanimously as the one that we wanted to create. We each had an idea of what it would look like and how it would work, therefore we started a mind map of the ideas to choose the most ideal choices. We came up with a rough draft of what we wanted the app to achieve and thought of ways to make sure that goal was reached.

# Week 1 Ideas

We are making an educational media app for children. We will be targeting it primarily at children under five years of age.

It will focus on basic maths, alphabet and spelling.

## Alphabet

* Learning letters of the alphabet with pictures that start with that letter
* Word selection that start with the letters of alphabet
* Basic spelling tasks, e.g. name the animal

## Maths

* Introduce the numbers 0 through 20 along with the written equivalents
* Basic arithmetic, such as addition and subtraction

## Aesthetics

* Want to use vibrant colours to attract younger audiences
* Large fonts
* Fun audio to hold their attention
* Lots of images to reinforce learning and keep fun
* Cartoony representations of real life objects

## UI

* Simple navigation so that it is easy for young users
* Optimise for smartphone, but use responsive design so that it could work on a tablet as well.

**Personas**

Since none of us were parents or children under the age of five we had to go about created personas and templates for the users that the app was aimed towards. Every detail had to be taken into account from the free time the parent had to the reason the child was using the app or even if the goal of the app is possible if it is aimed towards the current target market. From figure 1 and 2, the personas that we created can be seen. We put in as much detail as we could and set off to tailor the app to the needs of the target market, for example it cannot be extremely difficult to the point in which the child would not find it entertaining but it also could not be simple as the child would not learn anything.

**Prototypes:**

As seen in figures 3 to 8, we designed what we thought would be the initial layout for the application. We changed the places of the buttons around on each page so the user would understand the page has changed, from these prototypes we were able to create a functioning beta application on which to improve upon. A simple, easy to navigate and consistent layout had to be created to adhere to the needs of the child using it or the parent. Both are important in this case due to the fact that the parent is one that will download the app as the child is too young who in turn needs to be able to use the application easily.

**User testing:**

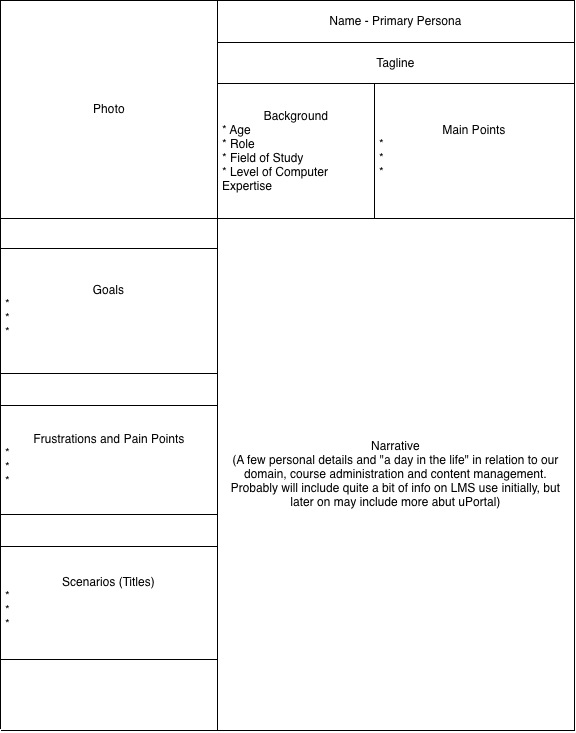
**Problem**: Child clicked on the answer to the question multiple times quickly and it added more than 1 point to their score for the same question.

**Solution:** Added a timer in JavaScript to wait until the next correct answer can be given.

**Problem:** child did not hear the sound for the picture the first time due to a number of reasons for example a distraction, but they needed to hear it again without go back and starting again.

**Solution:** The image is now clickable and will play the sound again.

**Appendix**



**Child**

**Background**

* 4
* child
* minimal computer exp

**Scenarios (Titles)**

* At home
* In car
* Family outings

**Frustrations and Pain Points**

* boredom
* Not interesting
* difficult

**Goals**

* To be entertained
* To learn
* To play

**Narrative**

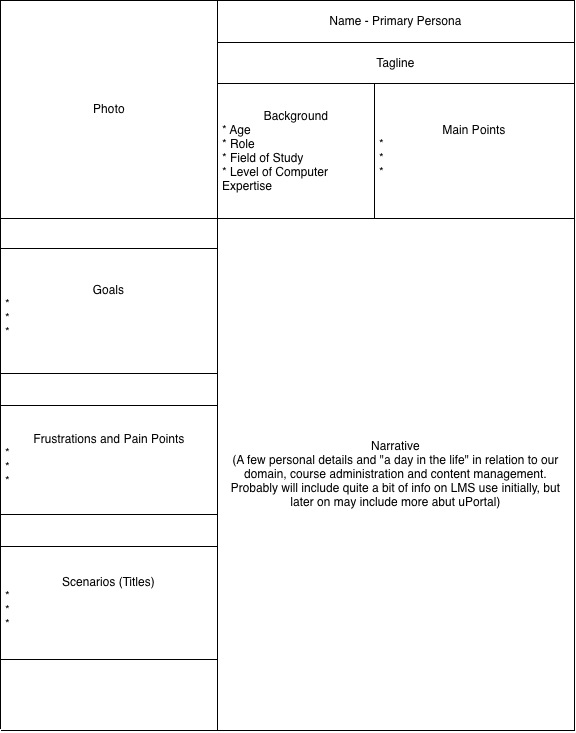
* Wake up
* Eat
* Wait for parent to take them to school (ample time to fill)
* In car (more free time)
* School (teacher could use it to teach the kids)
* On the way home (more time to fill in car)
* Time to fill before sleep

**Main points**

* Needs to be entertained
* Learn something
* Wants something to do on her own

**Tilly**

Figure 1.



**Narrative**

* Wake up
* Eat
* Get child ready for school
* Get ready for work
* Take child to school
* Go to work(small 2 minute breaks)
* Lunch (window of free time)
* Finish work
* Collect child (window of time waiting for child)
* Go home
* Parent responsibilities (aka homework/play)
* Prepare dinner
* Eat
* Evening relax (another window of time to lookup)
* bed

**Working class parent**

**Main points**

* Need something to occupy childs time but not waste it
* wants to ensure a rounded education
* appropriate

**Goals**

* To improve child education
* Entertain child

**Frustrations and Pain Points**

* Not educational
* Does not occupy childs time
* Too hard for child to complete on
* Not fun enough to keep childs attention

**Scenarios (Titles)**

* At home
* In car
* Family outings

**Background**

* 32
* parent
* low level professional

**Rosie (tillys mum)**

Figure 2.

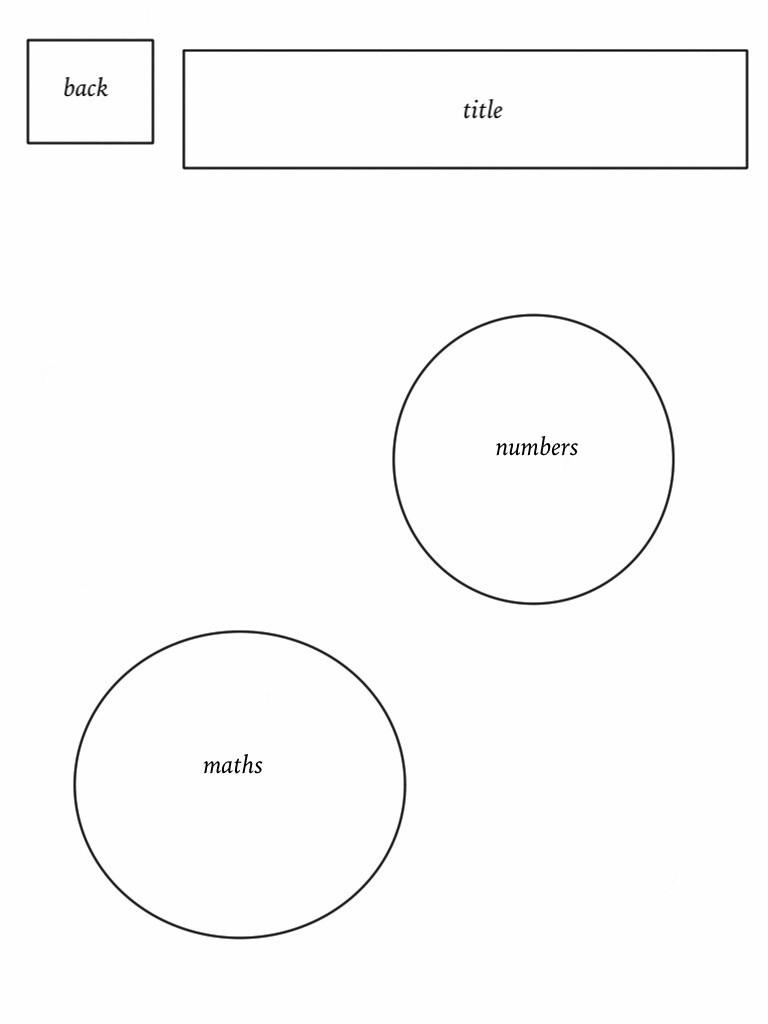


Figure 3.

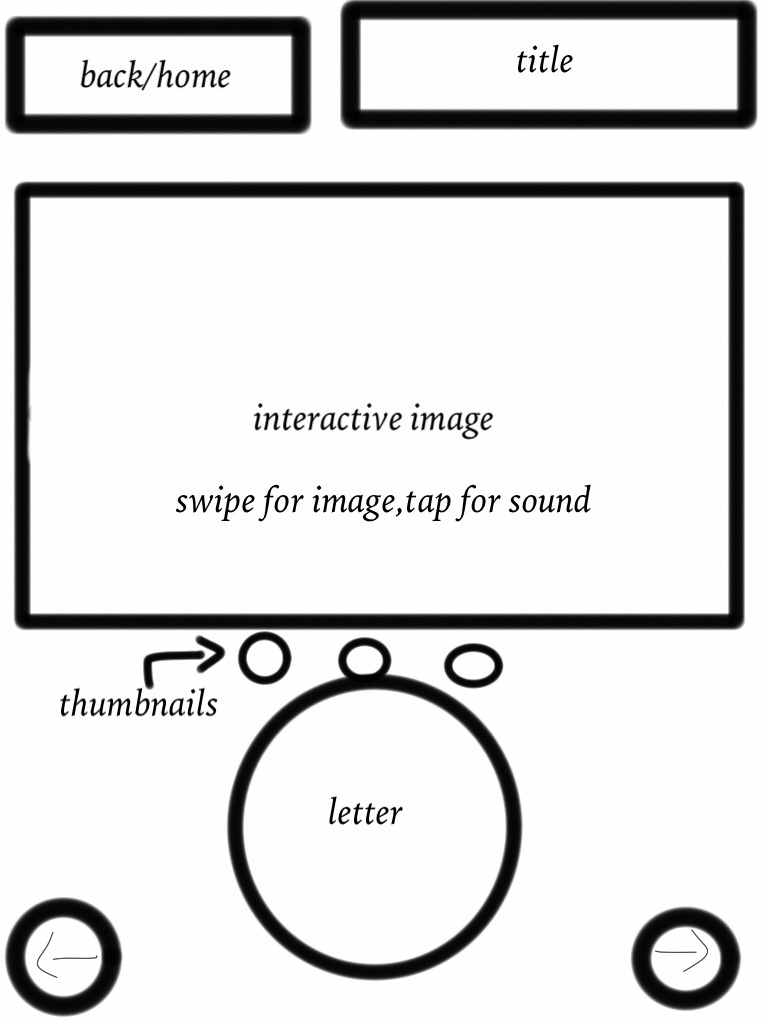


Figure 4

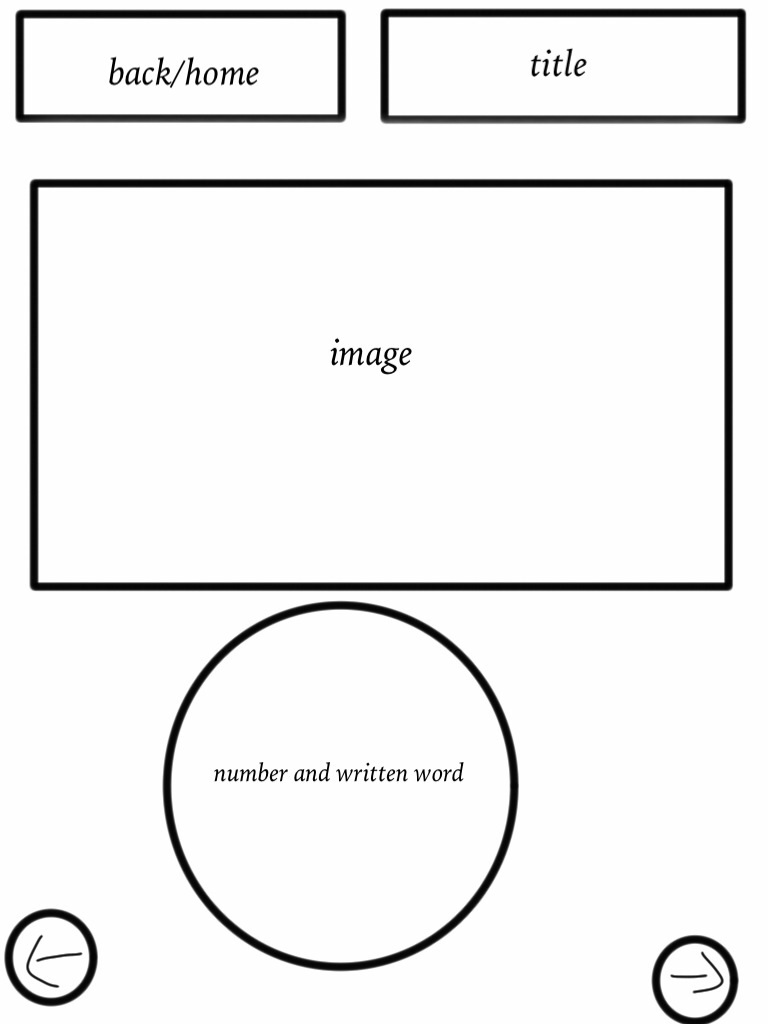


Figure 5

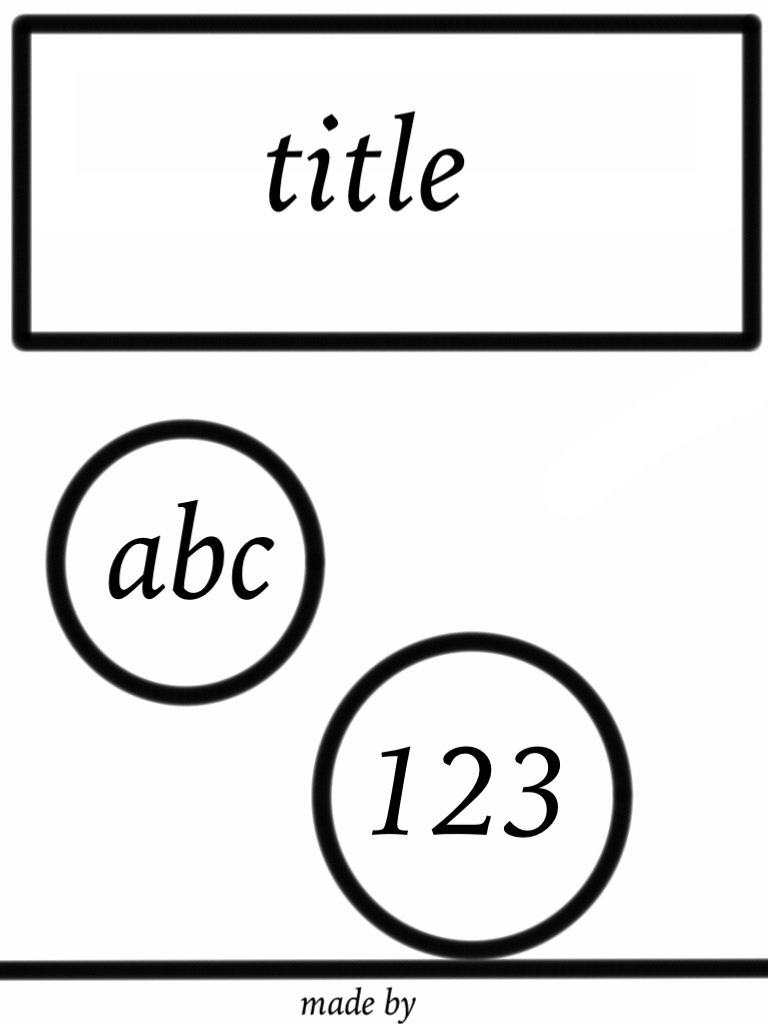


Figure 6

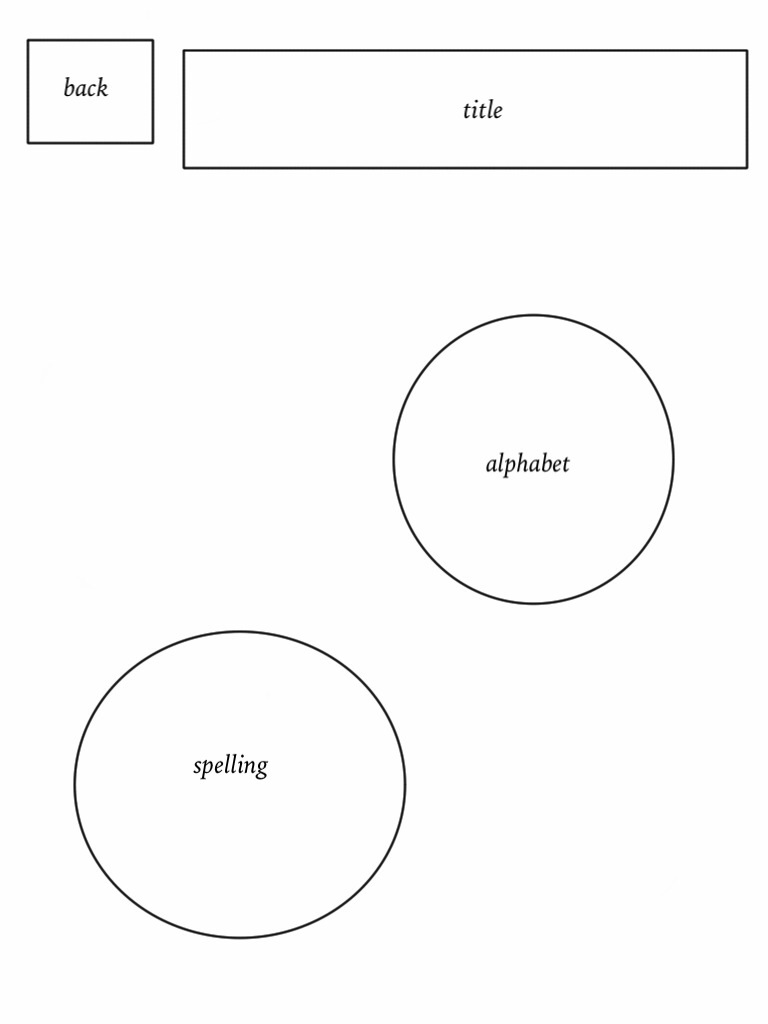


Figure 7

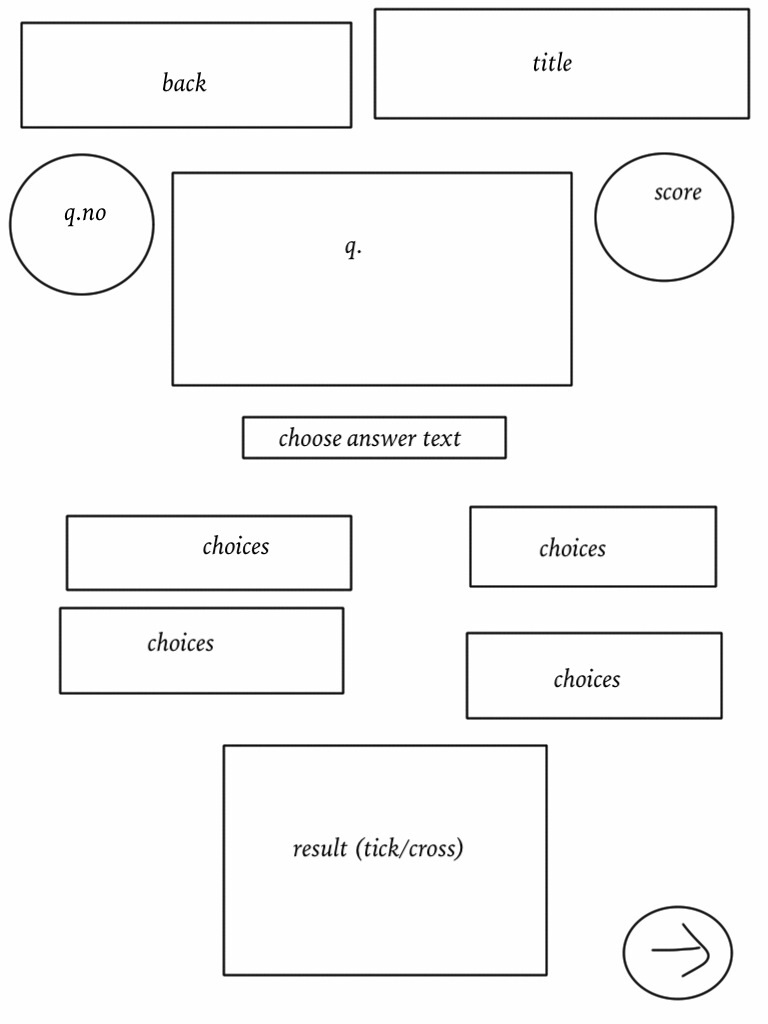


Figure 8