



## LEARNER ASSESSMENT SUBMISSION FRONT SHEET

<b>Learner Name</b>	Maksym Puhach
<b>Assessor Name</b>	Neil Wickham

<b>Unit</b>	8 - Mobile Apps Development
<b>Assignment Title</b>	2 - Designing Your Mobile App for CambriaTek

<b>My Literacy Targets</b>
To write everything correctly and learn something new for myself, to improve the literacy of my words

<b>My Numeracy Targets</b>
Develop a good detailed plan for the upcoming program

<b>Submission Declaration</b>
I certify that the evidence submitted for this assignment is my own. I have clearly referenced any sources and any artificial intelligence (AI) tools used in the work. I understand that false declaration is a form of malpractice.
22115231@cambria.ac.uk

## Introduction

My goal in this essay is to develop a plan for a mobile application for CambriaTek, I will make an interactive program for children, the purpose of this program will be to teach children the alphabet

## Purpose and User requirements

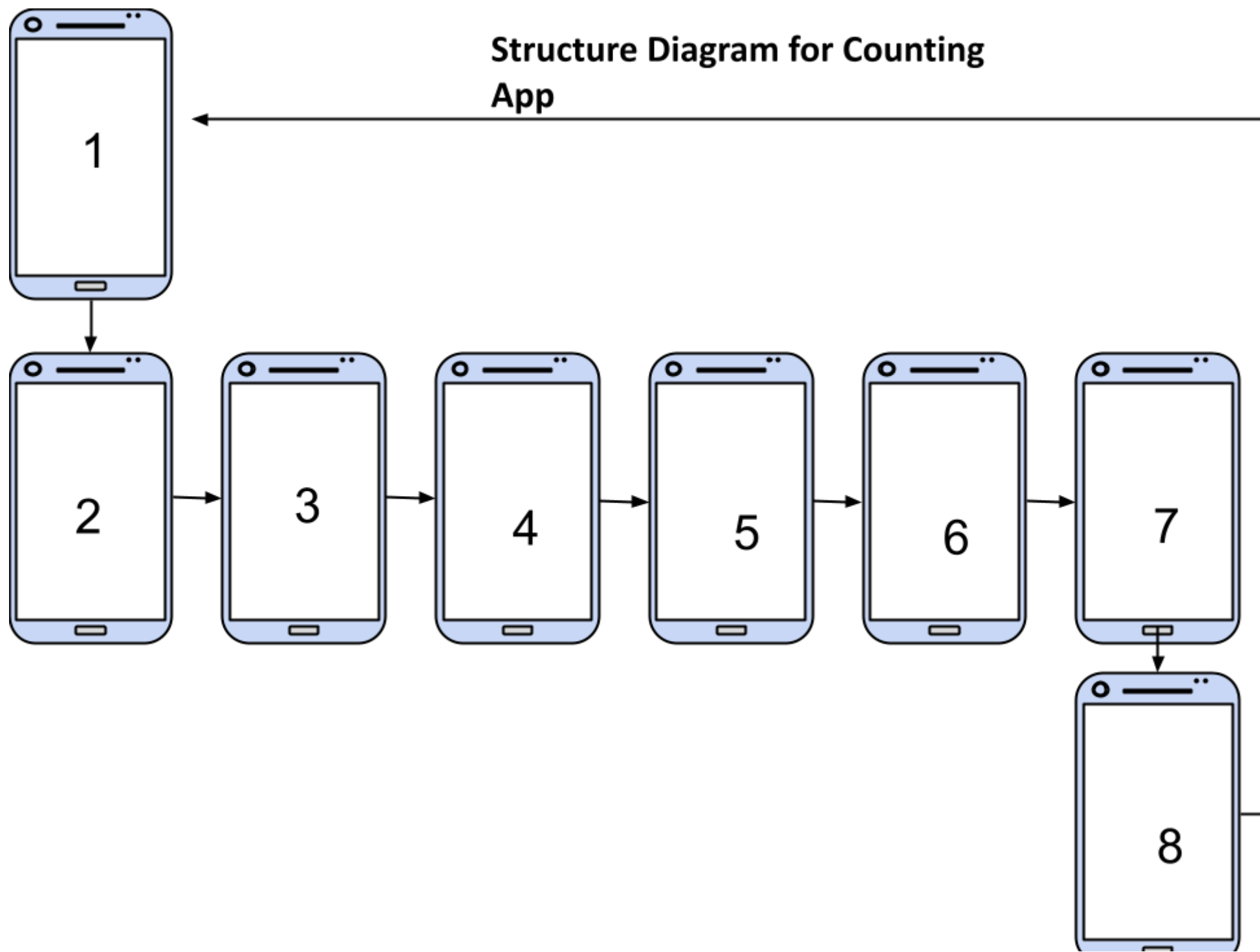
The audience of this program will be children from 3 to 7 years old, due to which the program interface will be very simple and easy to use and meet the needs of users.

The application will help users learn the letters of the alphabet, their sounds, and their recognition.

In this program, there will be no evaluation of user achievements or anything competitive, as the client only needs the program to be fun, interesting and easy for the audience, all this is necessary to ensure the education of children and reduce the likelihood of demotivation of children

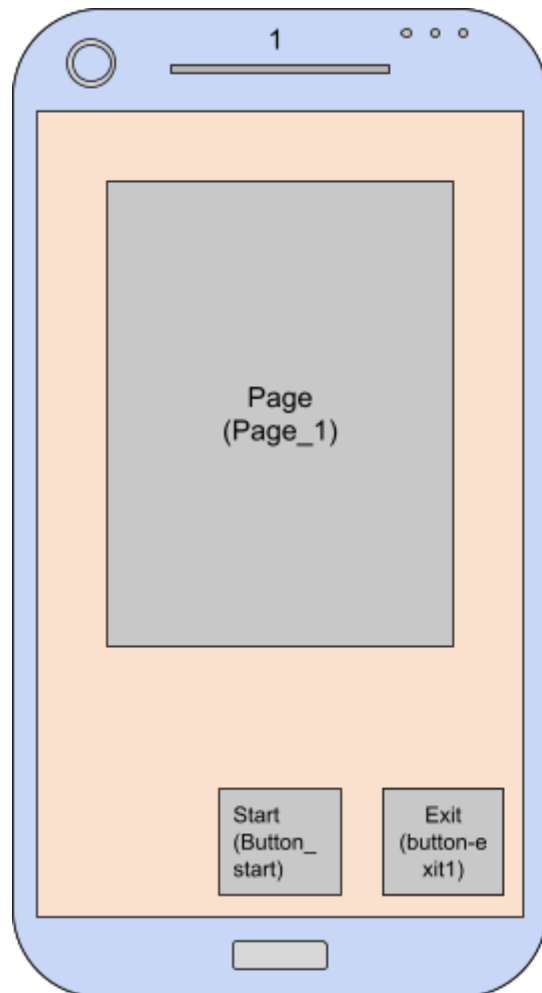


## Structure Diagram for Counting App

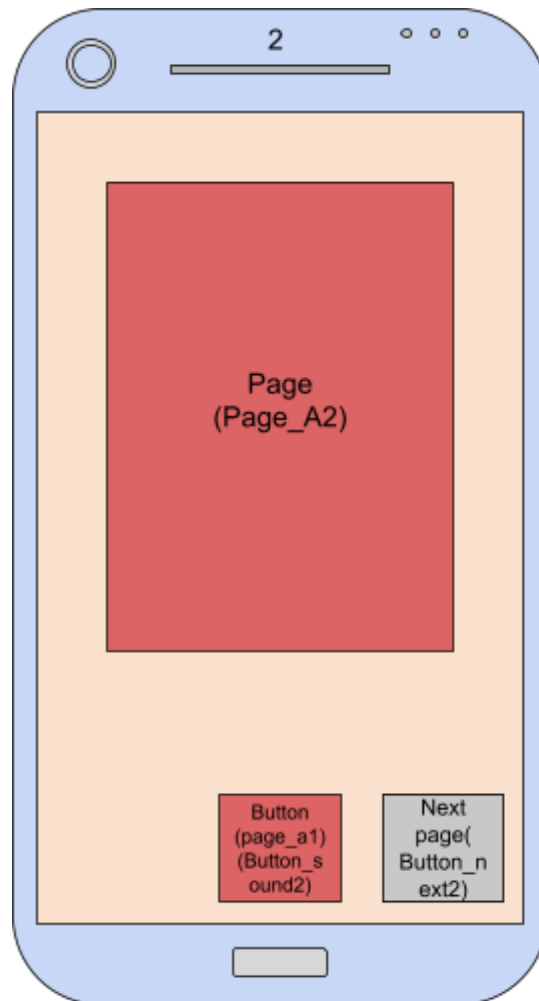


### Project solutions & Design constraints

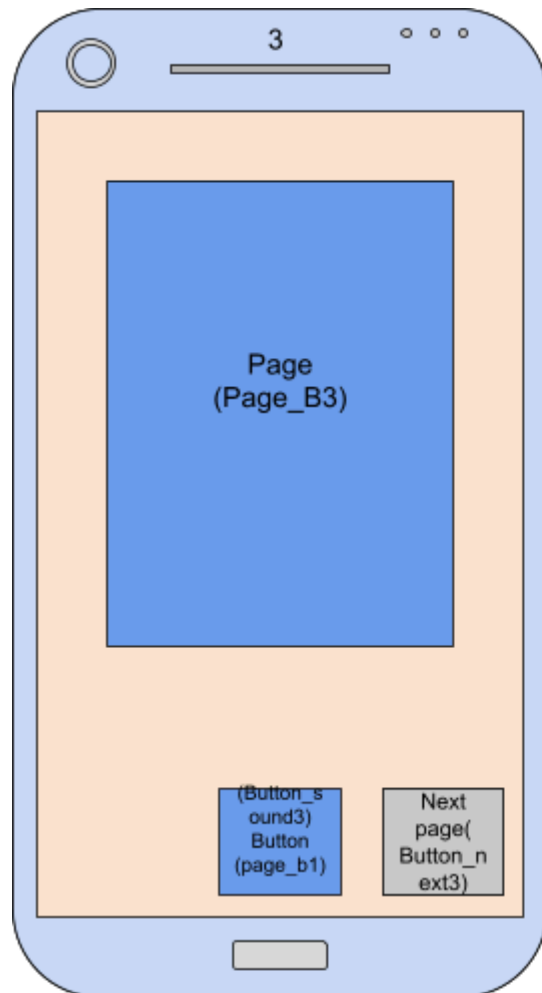
This program will have 8 pages and all the functionality, for wind blowing the sounds of the alphabet that corresponds to the original purpose, the program will have easy navigation and a beautiful design that will meet the purpose of the user. Design limitations, the program has functional limitations that do not allow you to work out small details in the design. Due to this, the design will be minimalistic and easy to use, which will meet the user's goal in the simplicity of the program



Assets	Events ( Inputs & outputs)
On this screen, a photo of the alphabet will be used, and 2 buttons with a photo, the first photo is start, the second photo is the exit button.	This screen will have a launch button and an exit button, photos will also be attached to these buttons
Design notes / Alternative device	Method of solution (What does this screen do ?)
<p>The text font will be "Lexend Normal", the background color will be "#fce5cdf", the font size will be 11, and the font color will be "#3f3636".</p> <p>The background of this page is white, the main photo with the letter is centered on the screen 300px high by 300px wide. There is also 1 button on the screen to go to the next page. 1 button 60p height 60p width</p>	This page will be a starter, it will have a beautiful photo of the whole alphabet and two buttons to start learning the alphabet and to exit the program, this page will be easy to use and nice to look at, which will meet the purpose of users

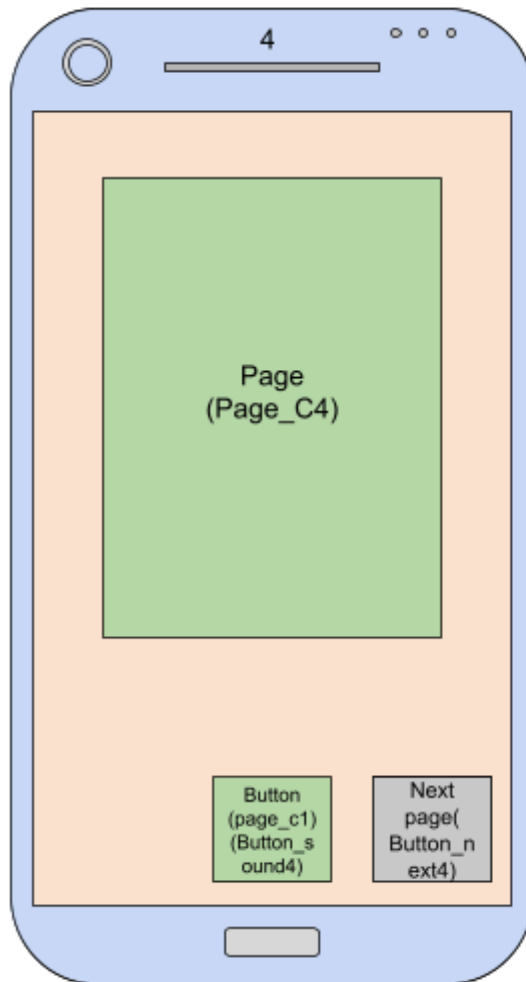


Assets	Events ( Inputs & outputs)
<p>This screen will use a photo of the uppercase and lowercase letter "A", also 1 button with a photo and sound of the letter "A", and a second button with a photo "Next", the first photo is the letter "A", the second photo is the "Next" button ".</p>	<p>On this screen there will be a sound button of the letter "A" and a button to go to the next page, photos will also be attached to these buttons</p>
Design notes / Alternative device	Method of solution (What does this screen do ?)
<p>The text font will be "Lexend Normal", the background color will be "#fce5cdff", the font size will be 11, and the font color will be "#ca5858".</p> <p>The background of this page is white, the main photo with the letter is placed in the center of the screen at 500 pixels, height and 500 pixels width. There are also 3 buttons on the screen for cleaning, sound, and switching to another page. (Photos are attached to them)</p> <p>1-button 60p height 60p width  2-button 60p height 70 width  3-button 60p height 70 width</p>	<p>This screen shows the first letter of the alphabet, the design is quite soft and audience-friendly, which meets the requirements of users.</p>

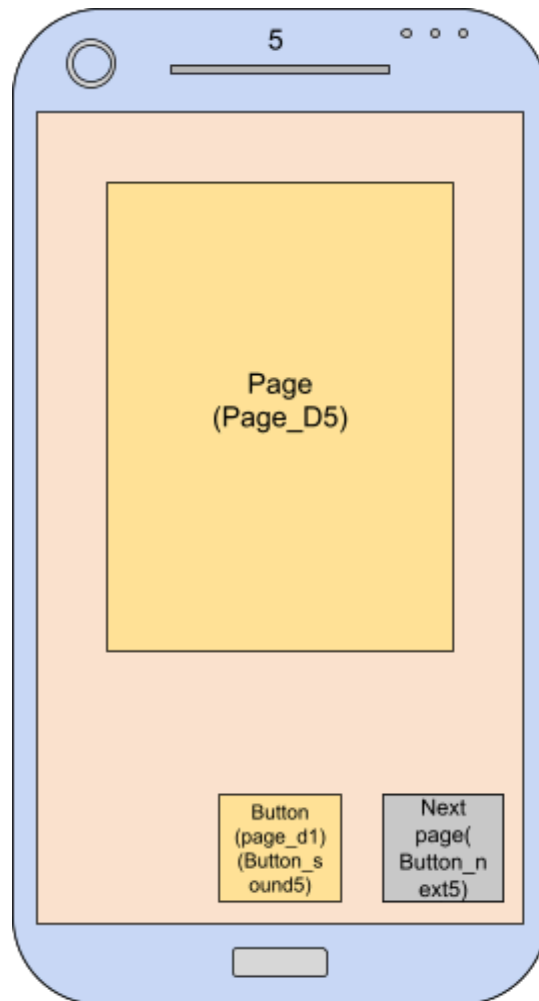


Assets	Events ( Inputs & outputs)
<p>This screen will use a photo of the uppercase and lowercase letter "B", as well as 1 button with a photo and sound of the letter "B" and a second button with a photo of "Next"</p>	<p>On this screen there will be a sound button of the letter "B" and a button to go to the next page, photos will also be attached to these buttons</p>
Design notes / Alternative device	Method of solution (What does this screen do ?)
<p>The text font will be "Lexend Normal", the background color will be "#fce5cdf", the font size will be 11, and the font color will be "#ca5858".</p> <p>The background of this page is white, the main photo with the letter is centered on the screen at 500px high by 500px wide. There are also 3 buttons on the screen for cleaning, sound and moving to another page. (photos are attached to them)</p> <p>1 button 60p height 60p width  2 buttons 60p height 70 width  3 buttons 60p height 70 width</p>	<p>This screen shows the second letter of the alphabet, the design is quite soft and user-friendly for the audience, which meets the requirements of the users.</p>

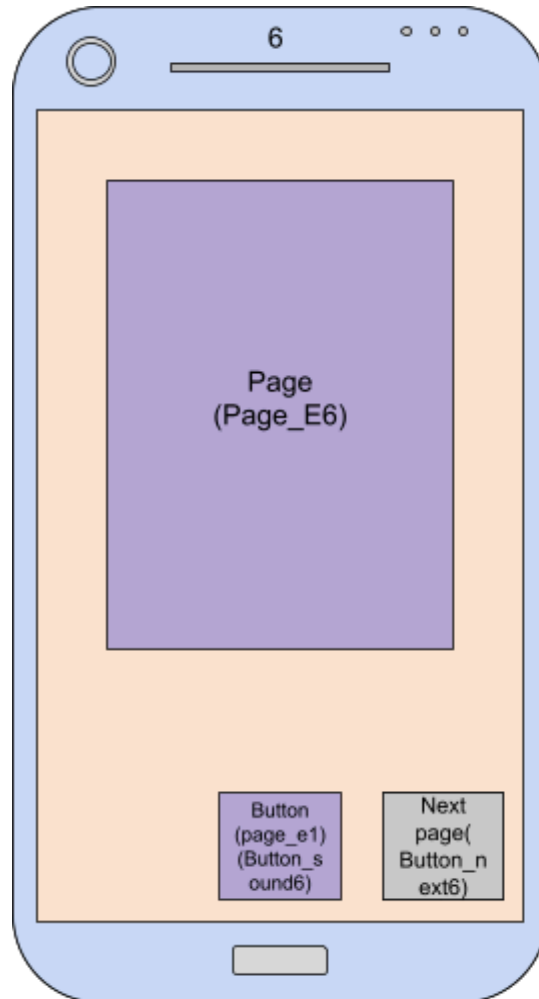




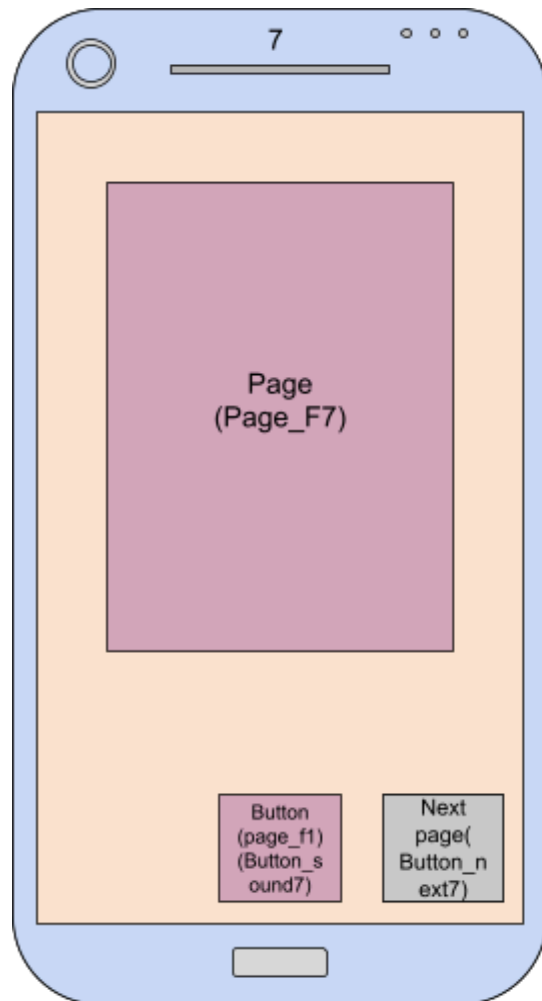
Assets	Events ( Inputs & outputs)
<p>This screen will use a photo of the uppercase and lowercase letter "C", as well as 1 button with a photo and sound of the letter "C" and a second button with a photo of "Next"</p>	<p>On this screen there will be a sound button of the letter "C" and a button to go to the next page, photos will also be attached to these buttons</p>
Design notes / Alternative device	Method of solution (What does this screen do ?)
<p>The text font will be "Lexend Normal", the background color will be "#fce5cdf", the font size will be 11, and the font color will be "#ca5858".</p> <p>The background of this page is white, the main photo with the letter is centered on the screen at 500px high by 500px wide. There are also 3 buttons on the screen for cleaning, sound and moving to another page. (photos are attached to them)</p> <p>1 button 60p height 60p width  2 buttons 60p height 70 width  3 buttons 60p height 70 width</p>	<p>This screen shows the third letter of the alphabet, the design is quite soft and audience-friendly, which meets the requirements of users.</p>



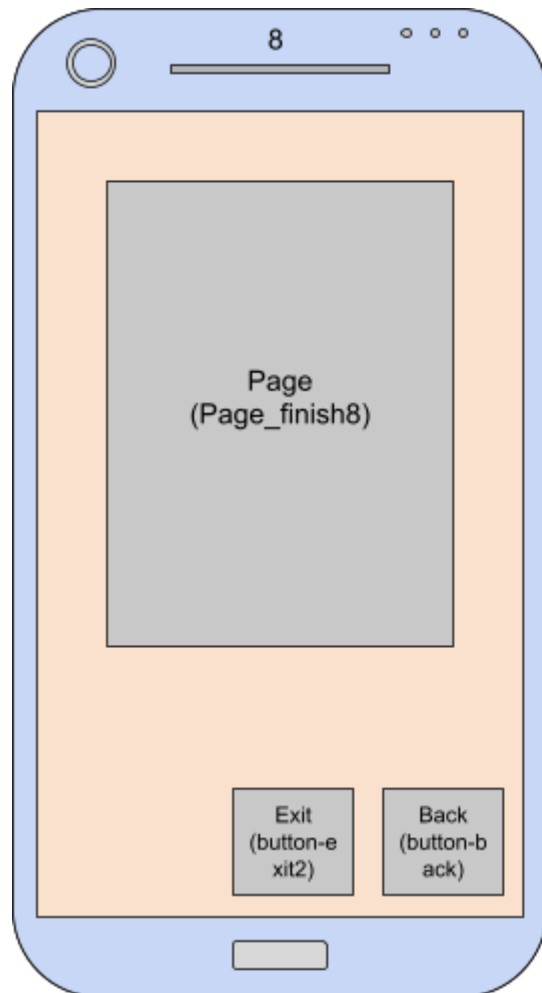
Assets	Events ( Inputs & outputs)
<p>This screen will use a photo of the uppercase and lowercase letter "D", as well as 1 button with a photo and sound of the letter "D" and a second button with a photo of "Next"</p>	<p>On this screen there will be a sound button of the letter "B" and a button to go to the next page, photos will also be attached to these buttons</p>
Design notes / Alternative device	Method of solution (What does this screen do ?)
<p>The text font will be "Lexend Normal", the background color will be "#fce5cdff", the font size will be 11, and the font color will be "#ca5858".</p> <p>The background of this page is white, the main photo with the letter is centered on the screen at 500px high by 500px wide. There are also 3 buttons on the screen for cleaning, sound and moving to another page. (photos are attached to them)</p> <p>1 button 60p height 60p width  2 buttons 60p height 70 width  3 buttons 60p height 70 width</p>	<p>This screen shows the fourth letter of the alphabet, the design is quite soft and comfortable for the audience, which meets the requirements of users.</p>



Assets	Events ( Inputs & outputs)
<p>This screen will use a photo of the uppercase and lowercase letter "E", as well as 1 button with a photo and sound of the letter "E" and a second button with a photo of "Next"</p>	<p>On this screen there will be a sound button of the letter "E" and a button to go to the next page, photos will also be attached to these buttons</p>
Design notes / Alternative device	Method of solution (What does this screen do ?)
<p>The text font will be "Lexend Normal", the background color will be "#fce5cdff", the font size will be 11, and the font color will be "#ca5858".</p> <p>The background of this page is white, the main photo with the letter is centered on the screen at 500px high by 500px wide. There are also 3 buttons on the screen for cleaning, sound and moving to another page. (photos are attached to them)</p> <p>1 button 60p height 60p width  2 buttons 60p height 70 width  3 buttons 60p height 70 width</p>	<p>This screen shows the fifth letter of the alphabet, the design is quite soft and user-friendly, which meets the requirements of users.</p>



Assets	Events ( Inputs & outputs)
<p>This screen will use a photo of the uppercase and lowercase letter "F", as well as 1 button with a photo and sound of the letter "F" and a second button with a photo of "Next"</p>	<p>On this screen there will be a sound button of the letter "F" and a button to go to the next page, photos will also be attached to these buttons</p>
Design notes / Alternative device	Method of solution (What does this screen do ?)
<p>The text font will be "Lexend Normal", the background color will be "#fce5cdf", the font size will be 11, and the font color will be "#ca5858".</p> <p>The background of this page is white, the main photo with the letter is centered on the screen at 500px high by 500px wide. There are also 3 buttons on the screen for cleaning, sound and moving to another page. (photos are attached to them)</p> <p>1 button 60p height 60p width  2 buttons 60p height 70 width  3 buttons 60p height 70 width</p>	<p>This screen shows the sixth letter of the alphabet, the design is quite soft and comfortable, which meets the requirements of users.</p>

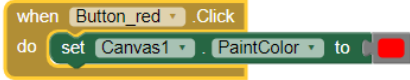
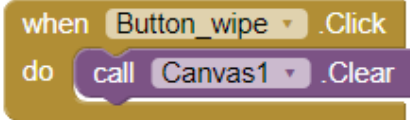
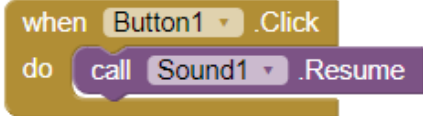


Assets	Events ( Inputs & outputs)
<p>This screen will use an exit photo and 2 buttons, the first button is the exit button and the second is to go back to page 1.</p>	<p>This screen will have an exit button, and a button to return to page 1, and photos will also be attached to these buttons</p>
Design notes / Alternative device	Method of solution (What does this screen do ?)
<p>The text font will be "Lexend Normal", the background color will be "#fce5cdf", the font size will be 11, and the font color will be "#3f3636".</p> <p>The background of this page is white, the main photo with the letter is centered on the screen 500px high by 500px wide. There is also 1 button on the screen to return to the first page. 1 button 60p height 60p width</p>	<p>This page will be the last one, it will have a nice end photo and exit button, and flood to the first screen, this page will be easy to use and nice to look at, which will meet the users' goals</p>

## Pseudocode

Screen	1	2	3	4	5	6	7	8
Pseudocode	On the first screen, the start button, after interacting with it, the user gets to the 2nd screen of this program, when interacting with the exit button, he leaves the program.	The second page has 2 buttons, the first button when interacting with it will play the sound of the letter "A", the second button after interaction will go to screen 3.	The third page has 2 buttons, the first button when interacting with it will play the sound of the letter "B", the second button after interaction will go to screen 4.	The fourth page has 2 buttons, the first button when interacting with it will play the sound of the letter "C", the second button after interaction will go to screen 5.	The fifth page has 2 buttons, the first button when interacting with it will play the sound of the letter "D", the second button after interaction will go to screen 6.	The sixth page has 2 buttons, the first button when interacting with it will play the sound of the letter "E", the second button after interaction will go to screen 7.	The seventh page has 2 buttons, the first button when interacting with it will play the sound of the letter "F", the second button after interaction will go to screen 8.	On the eighth screen, the exit button, after interacting with it, the user leaves the program, and the back button, returns to the first screen

## Pre-defined Code

Code ( Blocks)			
Taken from	<a href="http://www.appinventor.org/content/ai2apps/simpleApps/paintPot2">http://www.appinventor.org/content/ai2apps/simpleApps/paintPot2</a>	<a href="https://drive.google.com/file/d/1jhMpYWvQcBpkq3hHN8OTfBmbDUnZV6m1/view">https://drive.google.com/file/d/1jhMpYWvQcBpkq3hHN8OTfBmbDUnZV6m1/view</a>	<a href="https://drive.google.com/file/d/1jhMpYWvQcBpkq3hHN8OTfBmbDUnZV6m1/view">https://drive.google.com/file/d/1jhMpYWvQcBpkq3hHN8OTfBmbDUnZV6m1/view</a>
Used for	This allows you to choose the colour that will be used to draw (The first command for the button "When the button is red", performs the action canvas1 point point red ")	This block allows you to clear what has been drawn by the user. (when the button is clicked, the canvas code is activated with page clearing)	The third block allows you to play sound after interacting with the button (When the button is clicked, the command to play music is launched)

## Asset/Sources Log

Developer name:

Description of asset	File name	Source	Modifications made	Where used
Button	Button_start	<a href="https://www.freepik.com/icon/start_495468">https://www.freepik.com/icon/start_495468</a>	Changed name, and score on the Mit App	1 page
Button	Button_exit	<a href="https://www.cleanpng.com/png-computer-icons-button-return-icon-5270505/">https://www.cleanpng.com/png-computer-icons-button-return-icon-5270505/</a>	Changed name, and score on the Mit App	1 page
IMG	Page_1	<a href="https://www.amazon.co.uk/Alpha-bet-Chart-Carson-Dellosa-Publishing/dp/1483817253">https://www.amazon.co.uk/Alpha-bet-Chart-Carson-Dellosa-Publishing/dp/1483817253</a>	Changed name, and score on the Mit App	1 page
Button	Button_next	<a href="https://www.klipartz.com/en/search?q=next+Button">https://www.klipartz.com/en/search?q=next+Button</a>	Changed name, and score on the Mit App	2-7 pages
Button	Button_sound2	<a href="https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/">https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/</a>	Changed name, and score on the Mit App	2 page
IMG	Page_A2	<a href="https://www.pinterest.com/pin/554153929151244634/">https://www.pinterest.com/pin/554153929151244634/</a>	Changed name, and score on the Mit App	2 page
Sound	Sound2	<a href="https://robivox.ru/">https://robivox.ru/</a>		2 page
Button	Button_sound3	<a href="https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/">https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/</a>	Changed name, and score on the Mit App	3 page
IMG	Page_B3	<a href="https://www.englishforkidz.com/2018/08/letter-b-worksheets-flash-cards-coloring.html">https://www.englishforkidz.com/2018/08/letter-b-worksheets-flash-cards-coloring.html</a>	Changed name, and score on the Mit App	3 page
Sound	sound3	<a href="https://robivox.ru/">https://robivox.ru/</a>		3 page
Button	Button_sound4	<a href="https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/">https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/</a>	Changed name, and score on the Mit App	4 page
IMG	Page_C4	<a href="https://www.pinterest.com/pin/347621664999415614/">https://www.pinterest.com/pin/347621664999415614/</a>	Changed name, and score on the Mit App	4 page
Sound	Sound4	<a href="https://robivox.ru/">https://robivox.ru/</a>		4 page



Description of asset	File name	Source	Modifications made	Where used
Button	Button_start	<a href="https://www.freepik.com/icon/start_495468">https://www.freepik.com/icon/start_495468</a>	Changed name, and score on the Mit App	1 page
Button	Button_exit	<a href="https://www.cleanpng.com/png-computer-icons-button-return-icon-5270505/">https://www.cleanpng.com/png-computer-icons-button-return-icon-5270505/</a>	Changed name, and score on the Mit App	1 page
IMG	Page_1	<a href="https://www.amazon.co.uk/Alpha-bet-Chart-Carson-Dellosa-Publishing/dp/1483817253">https://www.amazon.co.uk/Alpha-bet-Chart-Carson-Dellosa-Publishing/dp/1483817253</a>	Changed name, and score on the Mit App	1 page
Button	Button_next	<a href="https://www.klipartz.com/en/search?q=next+Button">https://www.klipartz.com/en/search?q=next+Button</a>	Changed name, and score on the Mit App	2-7 pages
Button	Button_sound2	<a href="https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/">https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/</a>	Changed name, and score on the Mit App	2 page
IMG	Page_A2	<a href="https://www.pinterest.com/pin/554153929151244634/">https://www.pinterest.com/pin/554153929151244634/</a>	Changed name, and score on the Mit App	2 page
Sound	Sound2	<a href="https://robivox.ru/">https://robivox.ru/</a>		2 page
Button	Button_sound5	<a href="https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/">https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/</a>	Changed name, and score on the Mit App	5 page
IMG	Page_D5	<a href="https://www.englishforkidz.com/2019/05/letter-d-worksheets-flash-cards-coloring.html">https://www.englishforkidz.com/2019/05/letter-d-worksheets-flash-cards-coloring.html</a>	Changed name, and score on the Mit App	5 page
Sound	Sound5	<a href="https://robivox.ru/">https://robivox.ru/</a>		5 page
Button	Button_sound6	<a href="https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/">https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/</a>	Changed name, and score on the Mit App	6 page
IMG	Page_E6	<a href="https://www.pinterest.com/pin/592223419767203143/">https://www.pinterest.com/pin/592223419767203143/</a>	Changed name, and score on the Mit App	6 page
Sound	Sound6	<a href="https://robivox.ru/">https://robivox.ru/</a>		6 page
Button	Button_sound7	<a href="https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/">https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/</a>	Changed name, and score on the Mit App	7 page
IMG	Page_F7	<a href="https://www.englishforkidz.com/2019/10/big-printable-alphabet-letters-f-g-h-i-j.html">https://www.englishforkidz.com/2019/10/big-printable-alphabet-letters-f-g-h-i-j.html</a>	Changed name, and score on the Mit App	7 page
Sound	Sound7	<a href="https://robivox.ru/">https://robivox.ru/</a>		7 page

Description of asset	File name	Source	Modifications made	Where used
Button	Button_start	<a href="https://www.freepik.com/icon/start_495468">https://www.freepik.com/icon/start_495468</a>	Changed name, and score on the Mit App	1 page
Button	Button_exit	<a href="https://www.cleanpng.com/png-computer-icons-button-return-icon-5270505/">https://www.cleanpng.com/png-computer-icons-button-return-icon-5270505/</a>	Changed name, and score on the Mit App	1 page
IMG	Page_1	<a href="https://www.amazon.co.uk/Alpha-bet-Chart-Carson-Dellosa-Publishing/dp/1483817253">https://www.amazon.co.uk/Alpha-bet-Chart-Carson-Dellosa-Publishing/dp/1483817253</a>	Changed name, and score on the Mit App	1 page
Button	Button_next	<a href="https://www.klipartz.com/en/search?q=next+Button">https://www.klipartz.com/en/search?q=next+Button</a>	Changed name, and score on the Mit App	2-7 pages
Button	Button_sound2	<a href="https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/">https://pixabay.com/vectors/loud-sound-speaker-volume-icon-157172/</a>	Changed name, and score on the Mit App	2 page
IMG	Page_A2	<a href="https://www.pinterest.com/pin/554153929151244634/">https://www.pinterest.com/pin/554153929151244634/</a>	Changed name, and score on the Mit App	2 page
Sound	Sound2	<a href="https://robivox.ru/">https://robivox.ru/</a>		2 page
IMG	Page_finish8	<a href="https://www.vecteezy.com/vector-art/23208448-well-done-hanging-banner-design-good-job-flat-vector">https://www.vecteezy.com/vector-art/23208448-well-done-hanging-banner-design-good-job-flat-vector</a>	Changed name, and score on the Mit App	8 page
Button	button_back	<a href="https://www.cleanpng.com/png-computer-icons-button-return-icon-5270505/">https://www.cleanpng.com/png-computer-icons-button-return-icon-5270505/</a>	Changed name, and score on the Mit App	8 page

## Test Plan & Log

Developer Name

Application:

Test No	Screen	Test	Expected Outcome	Actual Outcome	Comments
1	Page_1	Press start button	Next page with letter "A"	Tested, everything works	
2	Page_1	Open app	Screen 1 displays and all images and buttons are displayed and fully visible	Tested, everything works	
3	Page_A2	Display screen	The letter "A" appears on the screen, all images and buttons are fully visible and functional	Tested, everything works	
4	Page_A2	Sound Button	'Sound 2' sound file is played and heard clearly	Tested, everything works	
5	Page_A2	Next Batton	letter "B" screen is displayed	Tested, everything works	

6	Page_B3	Display screen	The letter "B" appears on the screen, all images and buttons are fully visible and functional	Tested, everything works	
7	Page_B3	Sound Button	'Sound 3' sound file is played and heard clearly	Tested, everything works	
8	Page_B3	Next Batton	letter "C" screen is displayed	Tested, everything works	
9	Page_C4	Display screen	The letter "C" appears on the screen, all images and buttons are fully visible and functional	Tested, everything works	
10	Page_C4	Sound Button	'Sound 4' sound file is played and heard clearly	Tested, everything works	
11	Page_C4	Next Batton	letter "D" screen is displayed	Tested, everything works	
12	Page_D5	Display screen	The letter "D" appears on the screen, all images and buttons are fully visible and functional	Tested, everything works	
13	Page_D5	Sound Button	'Sound 5' sound file is played and heard clearly	Tested, everything works	
14	Page_D5	Next Batton	letter "E" screen is displayed	Tested, everything works	

15	Page_E6	Display screen	The letter "E" appears on the screen, all images and buttons are fully visible and functional	Tested, everything works	
16	Page_E6	Sound Button	'Sound 6' sound file is played and heard clearly	Tested, everything works	
17	Page_E6	Next Batton	letter "F" screen is displayed	Tested, everything works	
18	Page_F7	Display screen	The letter "F" appears on the screen, all images and buttons are fully visible and functional	Tested, everything works	
19	Page_F7	Sound Button	'Sound 7' sound file is played and heard clearly	Tested, everything works	
20	Page_F7	Next Batton	letter "Page_finish8" screen is displayed	Tested, everything works	
21	Page_finish8	Display screen	Screen 8 displays and all images and buttons are displayed and fully visible	Tested, everything works	
22	Page_finish8	Press Start Back button	Screen1 is displayed	Tested, everything works	

## Justification & Constraints

**This will help the user to learn the alphabet in depth**

**I would add more functionality, for example, make a separate page with the full alphabet and buttons with letter sounds, also a nice navigation menu so that it is convenient to move between screens like in some games, but unfortunately my limited knowledge of this program does not allow me to do this . This program will have 8 pages, a light interactive design, its purpose will be to teach users the alphabet, which corresponds to the original purpose.**

### **Justification**

**The design of this app is fit for purpose as it has 6 letters that users can access and learn, it has bright collars that don't hurt the eyes, all the buttons are made big and easy to use which suits the original purpose. Letter sounds for smokers will have a gentle and pleasant voice to encourage users to complete the game that matches the goal.**