

LEARNER ASSESSMENT SUBMISSION FRONT SHEET

Learner Name	Chiara Elliotte
Assessor Name	Neil Wickham

Unit	8 - Mobile Apps Development
Assignment Title	3 - Develop, Test and Review Your Mobile App for CambriaTek

My Literacy Targets
-Paragraphs -Grammar

My Numeracy Targets
-Subtraction -Decimals

Submission Declaration
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.
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Introduction

In this assignment I will be creating the app I designed in the previous assignment and then reviewing it once the app is complete

Assets/Sources log

Developer name: Chiara Elliotte


Description of asset	File name	Source	Modifications made	Where used
A banner for the front page of the app	Ban.jpg	Self made	N/A	Screen 1
an image showing various letters of the alphabet	letters.jpg	https://cdn.getmidnight.com/45d07b00b0188a892509950ff919e14e/2023/03/How-many-alphabet-letters.png	N/A	Screen 1
A button that says start	start.jpg	Link	N/A	Screen 1
An image of a dusting brush	clear.jpg	https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQ-s2FUICOpmpvPkXubx1OSZT-QYf-I_dsBxi1u9L-pUw&s	N/A	Screens 2-7
Blue button with a speaker symbol	play.jpg	link	N/A	Screens 2-7
An arrow saying next	next.jpg	https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcTnnbt9_JWm-9-sQDFD8tjpMEkjlIvns3ehVCfouVjOw&s	N/A	Screens 2-7
Green button with a restart symbol	restart.jpg	https://images.freeimages.com/fic/images/icons/2794/metro_ui/512/power_restart.png	N/A	Screen 8
Red "X" Icon	quit.jpg	https://st2.depositphotos.com/1216158/7549/v/450/depositphotos_75495973-stock-illustration-delete-remove-quit-icon.jpg	N/A	Screen 8
Splash image	splash.jpg	Link	N/A	Screen 8

showing a face smiling and displaying Well Done				
An image of the letter A	A.jpg	Link	N/A	Screen 2
An image of the letter B	B.jpg	Link	N/A	Screen 3
An image of the letter C	C.jpg	https://images.squarespace-cdn.com/content/v1/5883caad59cc684854aef84c/1508481898976-B67ASS4N3HGWL73TUQET/C+blank.JPG	N/A	Screen 4
An image of the letter D	D.jpg	https://images.squarespace-cdn.com/content/v1/5883caad59cc684854aef84c/1508482664234-NKWDZAF759MLXTUZM3FN/D+blank.JPG	N/A	Screen 5
An image of the letter E	E.jpg	Link	N/A	Screen 6
An image of the letter F	F.jpg	https://images.squarespace-cdn.com/content/v1/5883caad59cc684854aef84c/1508482799058-IVWYOS2AY5OENX5C3LNN/F+blank.JPG	N/A	Screen 7
A person saying A	a.mp3	https://www.jollylearning.co.uk/resource-bank/learn-the-letter-sounds/	N/A	Screen 2
A person saying B	b.mp3	https://www.jollylearning.co.uk/resource-bank/learn-the-letter-sounds/	N/A	Screen 3
A person saying C	ck.mp3	https://www.jollylearning.co.uk/resource-bank/learn-the-letter-sounds/	N/A	Screen 4
A person saying D	d.mp3	https://www.jollylearning.co.uk/resource-bank/learn-the-letter-sounds/	N/A	Screen 5
A person saying E	e.mp3	https://www.jollylearning.co.uk/resource-bank/learn-the-letter-sounds/	N/A	Screen 6
A person saying F	f.mp3	https://www.jollylearning.co.uk/resource-bank/learn-the-letter-sounds/	N/A	Screen 7

		o.uk/resource-bank/learn-the-letter-sounds/		
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Screenshots of completed screen, the blocks with comments and the initial plan

Screen name: Screen_1

Completed Screen	Initial plan
	<div>Banner (rainbow text)</div> <div></div> <div>Picture of the alphabet so the children know what the app is for</div> <div>Plain white background</div> <div> <div>The</div> <div>Start</div> <div>Button</div> </div>

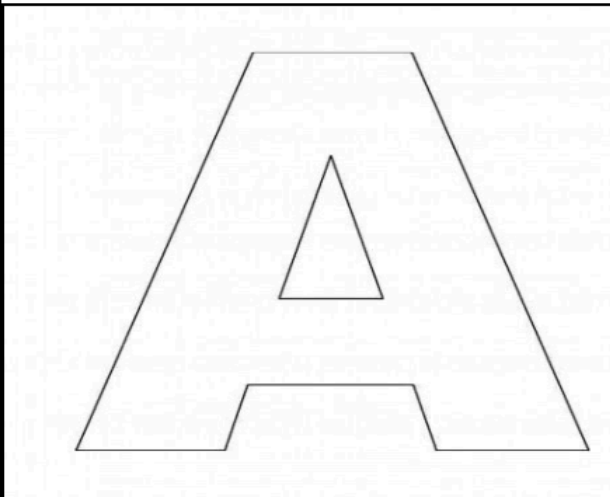
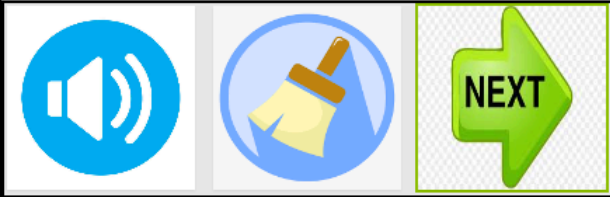
Blocks and comments

This changes the screen to the letter A screen

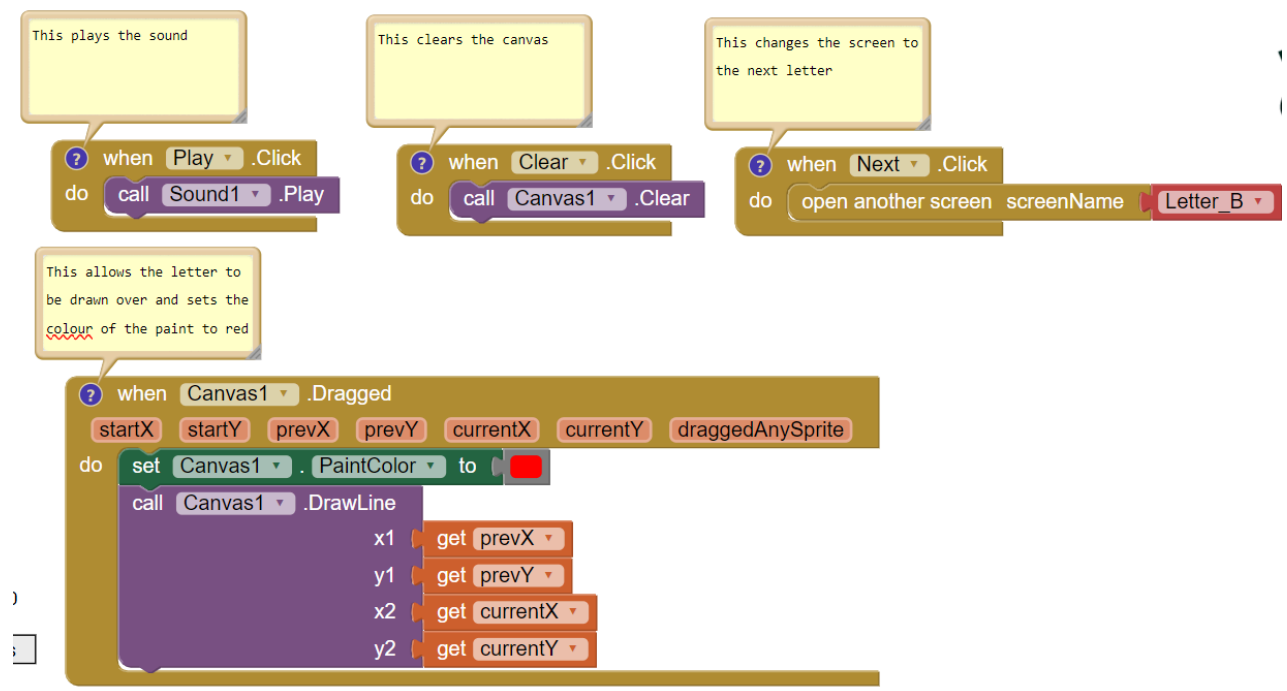
when Start .Click
do
open another screen screenName Letter_A

Compared to the initial plan I'd say that the two pages are exactly alike, if I were to create a new diagram for the finished page it would be identical to the initial plan. This page was easy to code for due to there only being one button.

Screen name: Letter_A

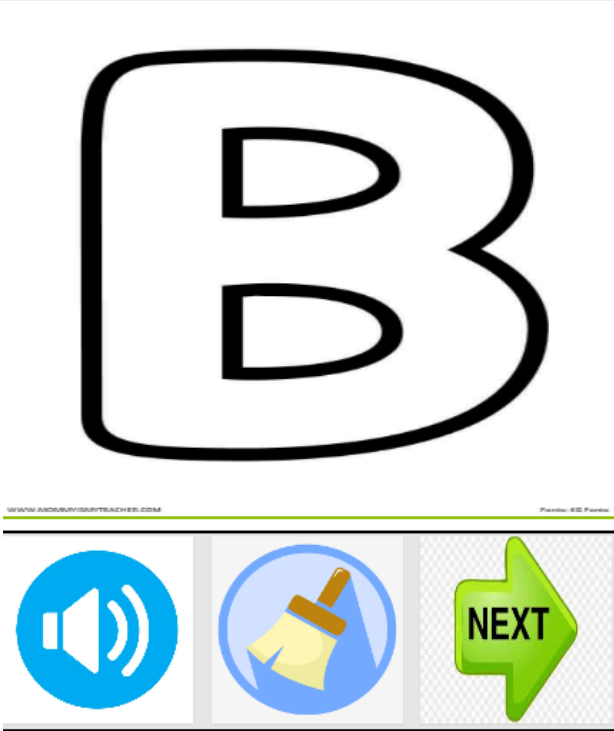
Completed Screen	Initial plan			
	<p>Picture of the letter A that will double as the background for a canvas so children can draw over the letter</p> <p>Plain white background</p>			
	<table><tr><td>Play sound button</td><td>Clear screen button</td><td>Next screen button</td></tr></table>	Play sound button	Clear screen button	Next screen button
Play sound button	Clear screen button	Next screen button		

Blocks and comments

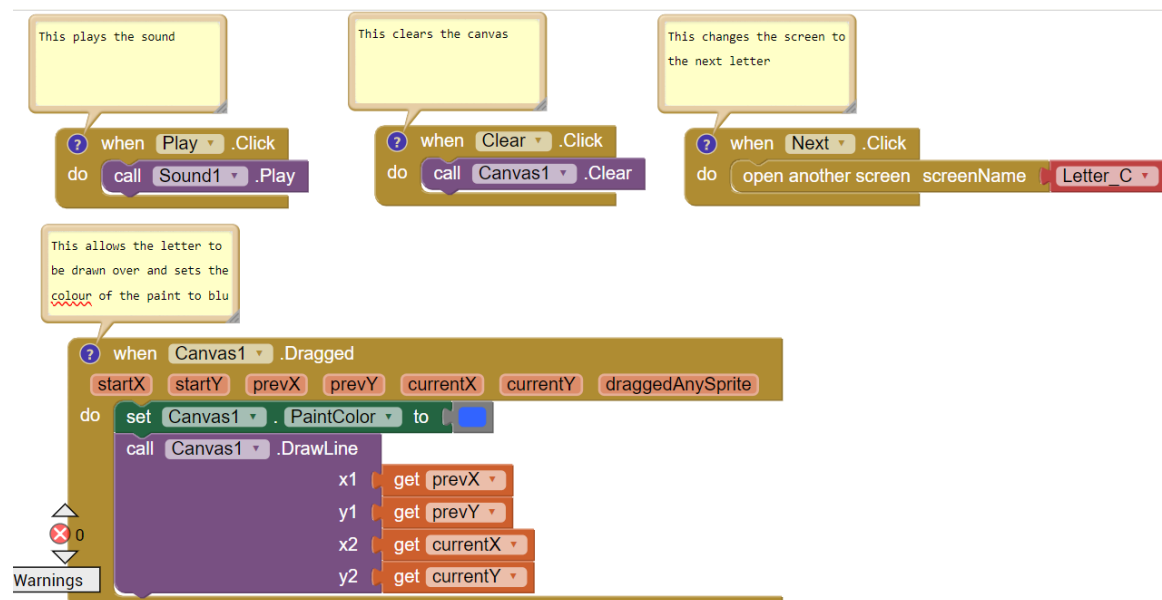


Compared to the initial plan I'd say that the two pages are exactly alike, if I were to create a new diagram for the finished page it would be identical to the initial plan. I found this page harder to code as I have had trouble getting the drawing to work in the past, but it worked in the end.

Screen name: Letter_B

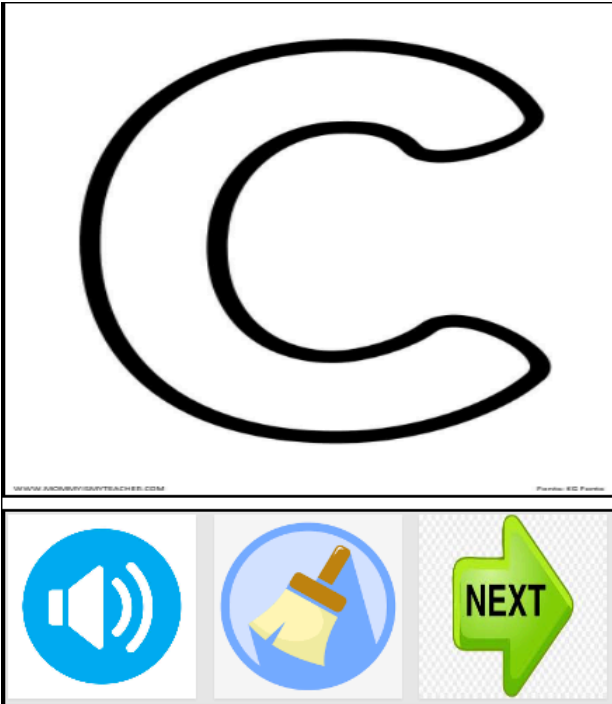
Completed Screen	Initial plan
	<p>A canvas with an image of the letter B as a background</p> <p>Plain white background</p> <p>Play sound button</p> <p>Clear screen button</p> <p>Next screen button</p>

Blocks and comments

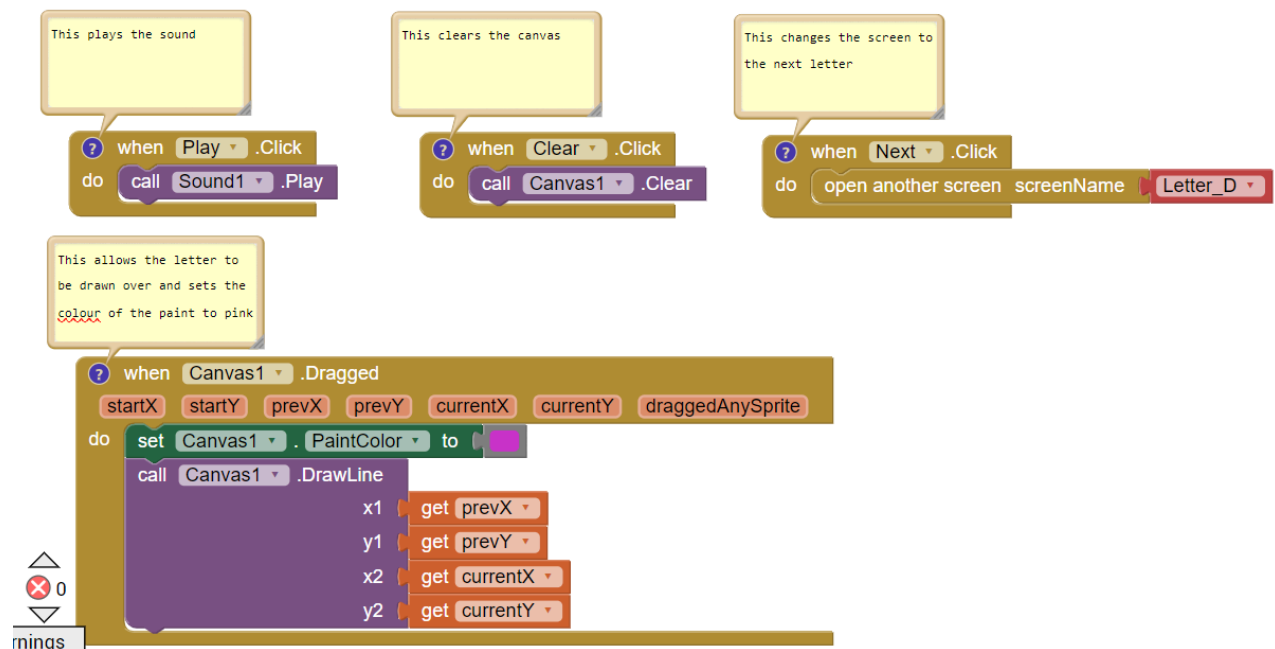


Compared to the initial plan I'd say that the two pages are exactly alike, if I were to create a new diagram for the finished page it would be identical to the initial plan. This page was easy to code for due to me reusing code

Screen name: Letter_C


Completed Screen	Initial plan
	<p>This canvas has a background image containing the letter C</p> <p>Plain white background</p> <p>Play sound button</p> <p>Clear screen button</p> <p>Next screen button</p>

Blocks and comments

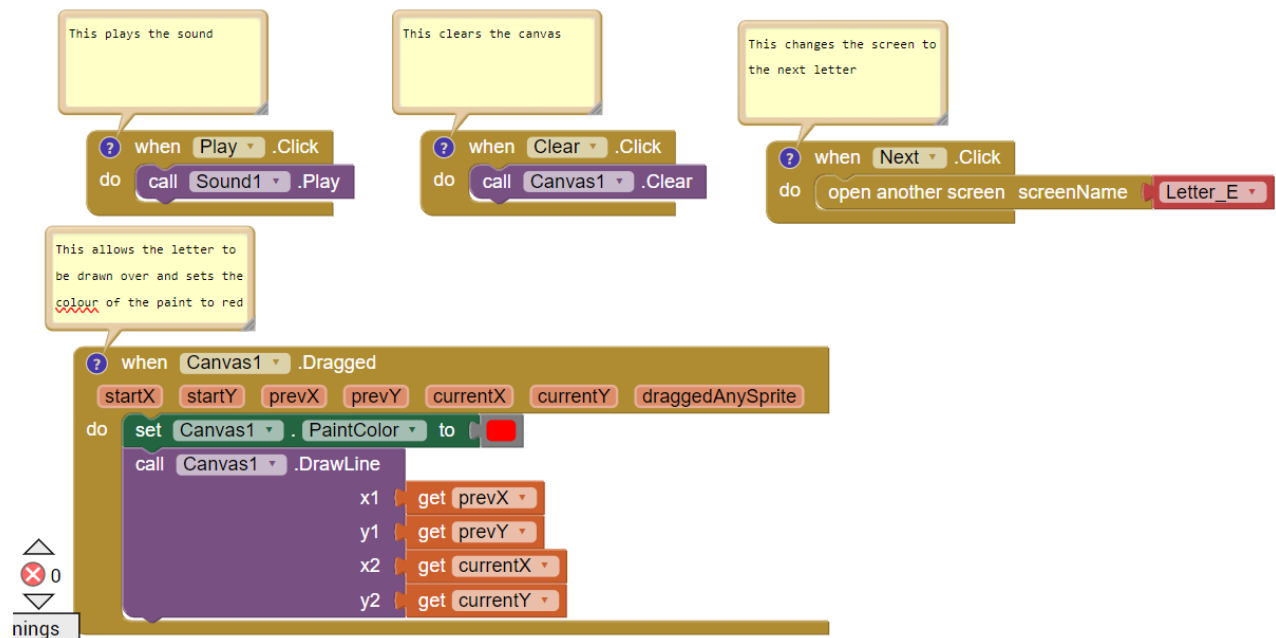


Compared to the initial plan I'd say that the two pages are exactly alike, if I were to create a new diagram for the finished page it would be identical to the initial plan. This page was easy to code for due to me reusing code.

Screen name: Letter_D

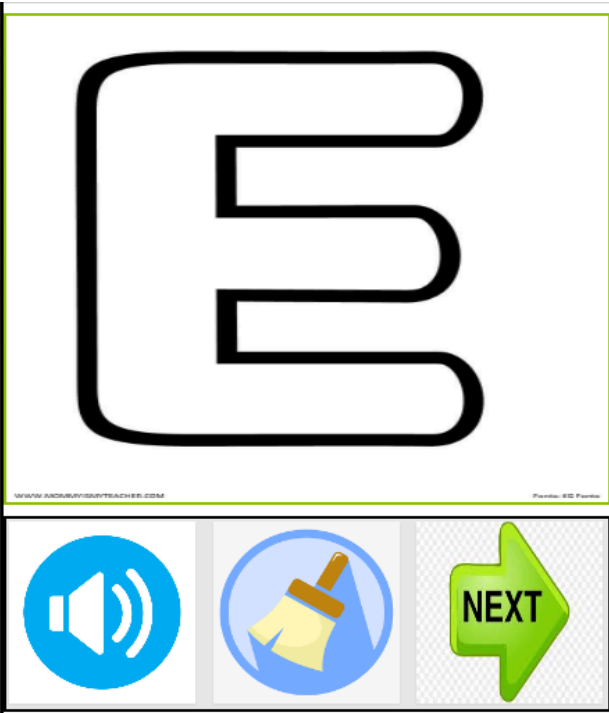
Completed Screen	Initial plan
	<p>Image of the letter D serving as the canvas background, allowing children to draw over it</p> <p>Plain white background</p> <p>Play sound button</p> <p>Clear screen button</p> <p>Next screen button</p>

Blocks and comments

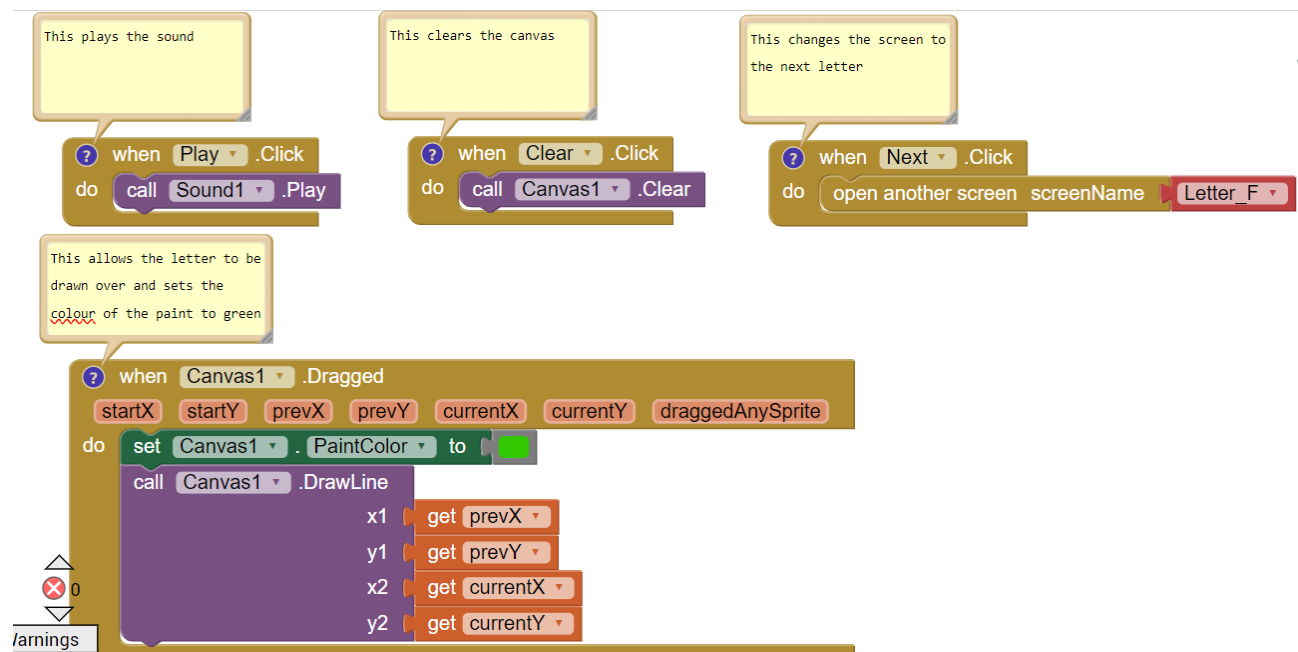


Compared to the initial plan I'd say that the two pages are exactly alike, if I were to create a new diagram for the finished page it would be identical to the initial plan. This page was easy to code for due to me reusing code.

Screen name: Letter_E


Completed Screen	Initial plan
	<p>A picture of the letter E will also be the canvas background</p> <p>Plain white background</p> <p>Play sound button</p> <p>Clear screen button</p> <p>Next screen button</p>

Blocks and comments



Compared to the initial plan I'd say that the two pages are exactly alike, if I were to create a new diagram for the finished page it would be identical to the initial plan. This page was easy to code for due to me reusing code

Screen name: Letter_F

Completed Screen	Initial plan
	<div>The letter F's image will be the canvas background, providing a space for children to draw over it.</div> <div>Plain white background</div> <div><div>Play sound button</div><div>Clear screen button</div><div>Next screen button</div></div>

Blocks and comments

This plays the sound

when Play .Click

do call Sound1 .Play

This clears the canvas

when Clear .Click

do call Canvas1 .Clear

This changes the screen to the final screen

when Next .Click

do open another screen screenName Completion_Screen

This allows the letter to be drawn over and sets the colour of the paint to yellow

when Canvas1 .Dragged

do set Canvas1 .PaintColor to yellow

call Canvas1 .DrawLine

x1 get prevX


y1 get prevY

x2 get currentX

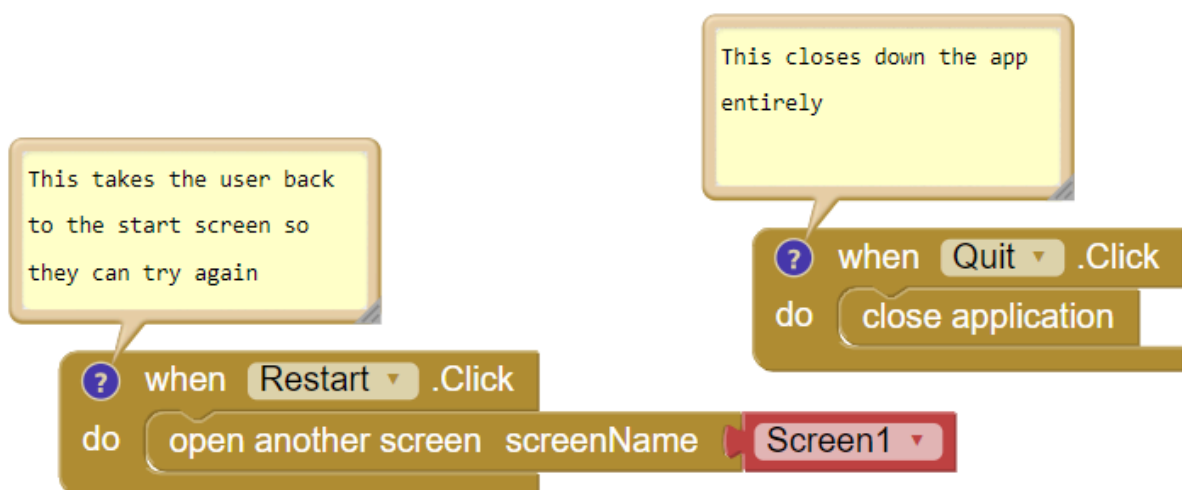
y2 get currentY

Compared to the initial plan I'd say that the two pages are exactly alike, if I were to create a new diagram for the finished page it would be identical to the initial plan. This page was easy to code for due to me reusing code

Screen name: Complete_Screen

Completed Screen	Initial plan
	<p>Image showing a smiley emoji with the words well done on the top of it</p> <p>Plain white background</p> <p>Restart button</p> <p>Quit button</p>

Blocks and comments



Compared to the initial plan I'd say that the two pages are exactly alike, if I were to create a new diagram for the finished page it would be identical to the initial plan. This page was nice and simple to code due to the simple commands, I was surprised when the quit button was fully functional

Test plan and log

Test No	Screen	Test	Expected outcome	Actual outcome	Comments
1	All	Pages load	They will all load correctly	Pages loaded no issues	It surprised me that the app worked that fast even with no data
2	All	Buttons work	All buttons will do what they're supposed to	Buttons functioned as intended consistently	I was happy that the quit button had no issues
3	All	Images load	Images will have no problem loading instantaneously	Images loaded as soon as the screen did	Images appeared without delay
4	2-7	Sounds play	Sounds will play as expected	Sounds played no issues	Sounds were a little quieter than expected
5	2-7	Drawing works as intended	Drawing will have a few issues that I need to work out	Drawing worked as intended the first time around no issues	This was surprising as I was never able to get it right in the past
6	2-7	Clear button functions correctly	Clear button will function as expected	The clear button cleared the canvases on every page every time	No comment

Feedback forms and comments on them

Mobile App developed by	Chiara Elliotte
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Does the app open and work on a mobile device?	Yes
Is the app easy to use with a clear and consistent layout?	Yes
Is all text correctly spelt with good grammar?	Yes
Are all images and content relevant to my audience of 3-7 year olds?	Yes

Please comment on the overall look of the app.	The overall look of the app is consistent, however some of the assets could look cleaner.
Please comment on the usability of the app.	The app is very easy to use and anyone could take to it like a duck to water.
Do you think the app is suitable for my intended audience of 3-7 year olds?	Yes, the drawing feature will particularly appeal to the audience.
Suggestions for improvement to the app.	The app could integrate a little more colour to be more appealing to the audience, perhaps making the letters more colourful.

Review completed by	Timothy Backhouse	Date	22/02/2024
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I agree with the feedback given by Tim, looking back my images could have been of higher quality and more colourful in order to attract a younger audience like the client had specified. However, I would not be able to act on this feedback in a timely manner as it would require me sourcing all of the new images, which would take up a lot of time. This is not possible at the given point in time due to the strict deadline. If I was to develop this into a full app I would definitely act on this feedback.

Aside from the improvements he suggested, Tim seems to think that the app prototype is appropriate for the target audience and meets all of the user specifications, which reassures me that the app is headed in the right direction. I feel like after acting on some other feedback that the app will become a lot better.

Mobile App developed byA	Chiara Elliotte
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Does the app open and work on a mobile device?	Yes
Is the app easy to use with a clear and consistent layout?	Yes
Is all text correctly spelt with good grammar?	Yes
Are all images and content relevant to my audience of 3-7 year olds?	Yes

Please comment on the overall look of the app.	Kinda plain looking but that helps serve it's purpose
Please comment on the usability of the app.	Very usable, it's for kids so it's nice and simple. Gets the job done though
Do you think the app is suitable for my intended audience of 3-7 year olds?	Yes I do
Suggestions for improvement to the app.	You need to make the drawing lines thicker

Review completed by	Greg Georgenson	Date	22/02/2024
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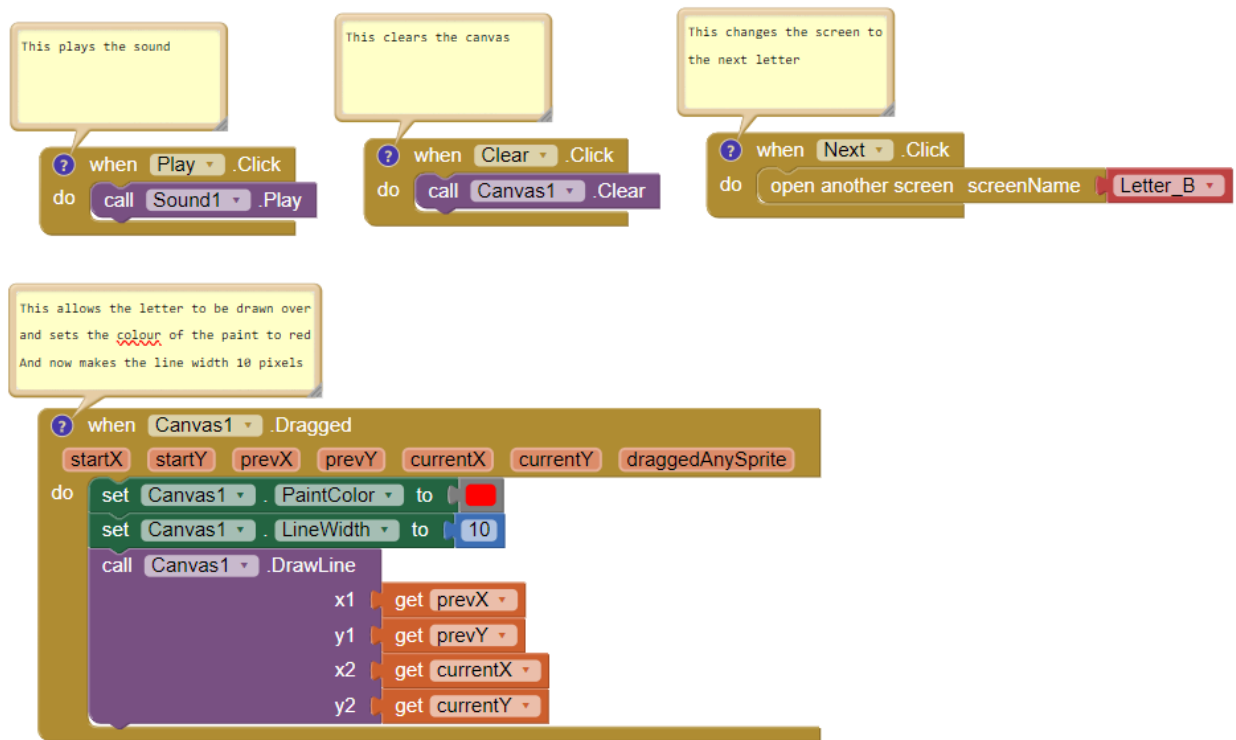
I agree with the feedback given by Greg. The drawing lines will need to be thicker and most likely a different colour, as it stands the drawing lines are admittedly quite thin and sometimes that makes the colour blend into the background. Thankfully this will be an easy fix and can easily be done before the deadline passes.

Greg and Tim seem to hold the same opinions on the app as a whole which shows me that if this app got released to the public that they would most likely have the same issues. I will put a heavier focus on fixing the issues in order to make this app the best I can.

Does the app open and work on a mobile device?		Yes	
Is the app easy to use with a clear and consistent layout?		Yes	
Is all text correctly spelt with good grammar?		Yes	
Are all images and content relevant to my audience of 3-7 year olds?		Yes	
Please comment on the overall look of the app.		Simple and clean look that should suit audience but some images look a bit distorted due to sizing issues	
Please comment on the usability of the app.		Intuitive and easy to use	
Do you think the app is suitable for my intended audience of 3-7 year olds?		Yes	
Suggestions for improvement to the app.		- Resize some images to fix distortion issues.	
Review completed by	N Wickham	Date	23/02/2024

I agree with the feedback given by Neil. Whilst developing the app I was not aware of the sizing issue that affects various images. I made the mistake of not regularly testing the app on my phone, instead relying on the app inventor's out of date phone visuals. If I had enough time I would absolutely go back and fix it but unfortunately that is not an option due to the deadline.

After reading all the reviews the general idea is that it is a good prototype that fits all the user requirements and intended purpose.



This is a screenshot of the code blocks from the "Letter_A" screen. I took this after receiving the feedback. What I was able to change given the time constraints was making was adding a snippet of code to all the letter pages that would make the drawing lines thicker.

Final review

I believe that the app has met all of the user requirements set by CambriaTek. I believe this because the app follows all of the outlined user requirements, which prioritises creating an educational experience for young children aged 3-7. Its design is specifically designed to cater to the target audience, featuring a user-friendly interface that is both easy to understand and engaging. By placing a strong emphasis on simplicity and accessibility, the app bridges the gap between learning and play, making it accessible to children of varying skill levels and attention spans.

The app's commitment to creating a positive learning environment is noteworthy. I made the deliberate decision to not grade the user's achievements to ensure that children can interact with the app without the fear of failure or the pressure to meet standards that may be too difficult for them to achieve. This encourages young learners to engage with the content at their own pace. By prioritising enjoyment and engagement over performance metrics, the app succeeds in creating a supportive space for children to develop their alphabetical skills.

It meets the purpose by including various activities to help children recognize both the shapes and sounds of letters. The interactive elements, such as drawing letters and listening to corresponding sounds, enhance the learning experience and promote early literacy skills effectively. This approach makes sure that children engage with the material from various angles, catering to the diverse learning styles and preferences inherent in any group of young learners.

Through a carefully chosen selection of interactive elements, such as tracing letters and actively listening to their corresponding sounds, the app transforms the traditional process of letter recognition into a fun and interesting learning experience. This approach not only captures children's attention but also helps them to remember how to say and write the letters, allowing for a deeper understanding and retention of the material. Furthermore, the app's emphasis on interactivity promotes a positive association with learning, transforming what could be perceived as boring tasks into enjoyable and rewarding experiences.

Despite its effectiveness, the development of the app encountered several constraints that influenced its development. First among these limitations were time constraints, which restricted the extent to which certain features could be fully developed. Due to the pressure of deadlines, there wasn't enough time to explore more impressive images or add in additional features that could have made the user experience a lot better.

My limited technical expertise in certain areas hindered the implementation of certain features, preventing the app from reaching its full potential. For example, the inclusion of more complex interactive elements may have been prevented by technical limitations, resulting in a less effective user experience than I had initially envisioned.

Resource constraints also played a significant role, particularly in terms of asset acquisition and code optimisation. Limited access to supplementary assets and pre-defined code snippets restricted the visual and interactive aspects of the app, limiting its overall effectiveness. Furthermore, resource limitations may have impacted the app's performance on different devices and platforms, potentially leading to compatibility issues that detract from the user experience.

In addition to these constraints, budget limits have also influenced the scope and scale of the app's development. Insufficient funding has restricted the ability to invest in advanced technology, further constraining the app's potential for refinement.

To further improve the app's quality and the user's satisfaction with it, I will read and take into account feedback from users to drive constant improvement. By actively seeking out and using user input, I aim to boost the app's functionality and fix specific issues such as having more colourful images and thicker drawing lines. This process may involve expanding the range of activities offered within the app, I could involve something like having the users pick out an image that starts with the letter (for example: image of a cat for letter C)

Additionally, I will prioritise refining the user interface based on rigorous testing, making sure that interactions are simple and easy for all users. Furthermore, adjusting the app's code so it can be compatible with many different devices and platforms is crucial to enhancing its reach. Addressing compatibility issues will be a top priority, as ensuring functionality across different operating systems and screen sizes is essential to maximising the app's impact and accessibility.

Lastly, I am committed to acting on all feedback provided by reviewers, especially those that could not be addressed within the constraints of the initial development timeline. By revisiting and implementing suggested improvements, I aim to refine the app's features and functionality, ensuring that it continues to evolve in response to user needs and preferences. Through these ongoing efforts, I am confident that the app will not only meet but exceed expectations, providing a valuable experience for users of all ages.