Structure Diagram for counting app.

```
┌──────────┐
│ Welco    │
│ me       │
│ screen   │
└────┬─────┘
     │
     │   ┌────────┐   ┌────────┐   ┌────────┐   ┌────────┐   ┌────────┐   ┌────────┐
     └───┤ Letter ├───┤ Letter ├───┤ Letter ├───┤ Letter ├───┤ Letter ├───┤ Letter │
         │   A    │   │   B    │   │   C    │   │   D    │   │   E    │   │   F    │
         └────────┘   └────────┘   └────────┘   └────────┘   └────────┘   └───┬────┘
                                                                              │
                                                                         ┌────┴─────┐
                                                                         │ Complete │
                                                                         │ Screen   │
                                                                         └──────────┘
```
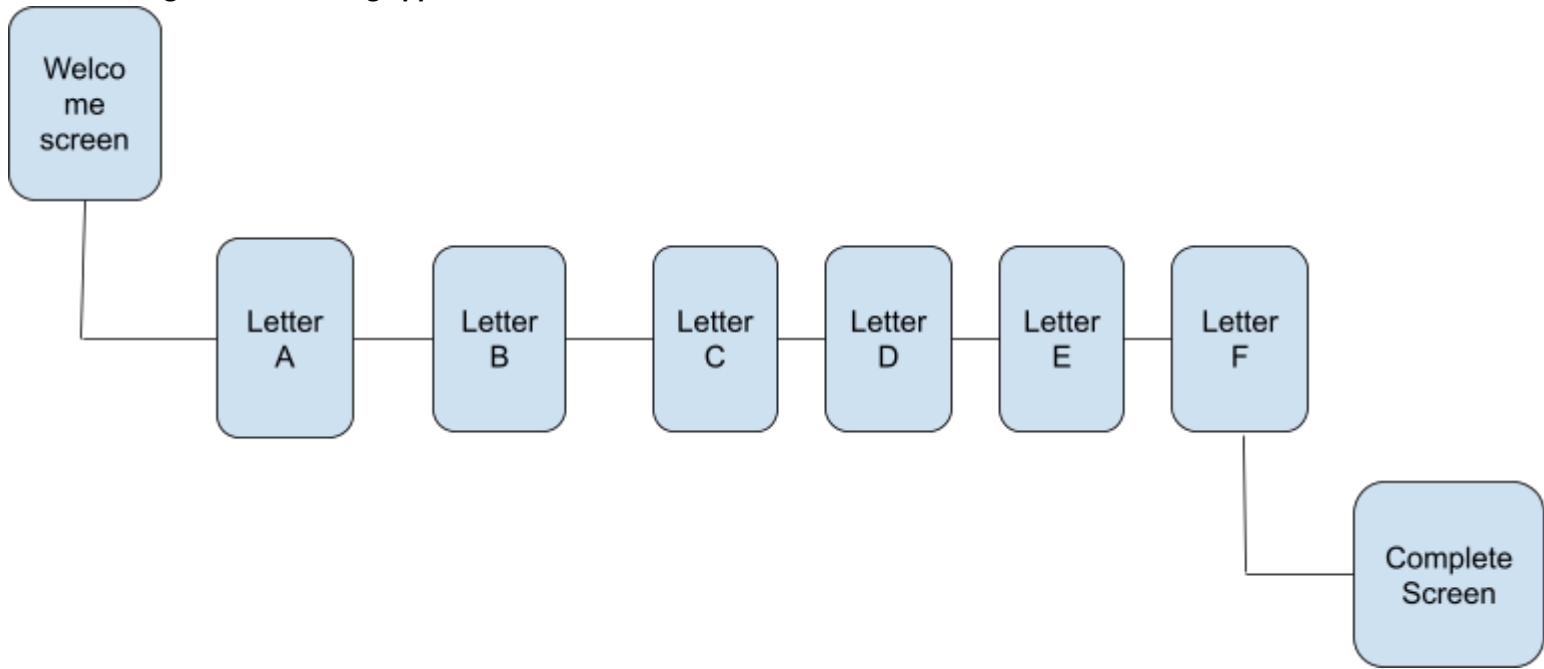
Screen Name: Start Screen
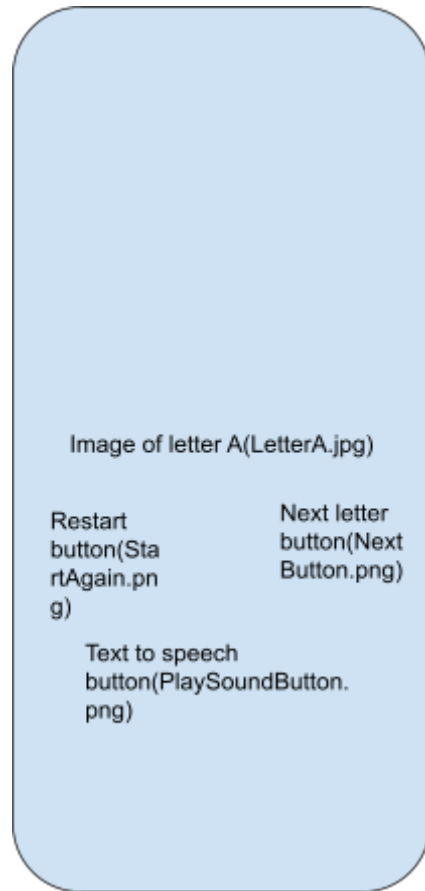
Banner image(LTCBanner.jpg)

Intro music(Intro.png)
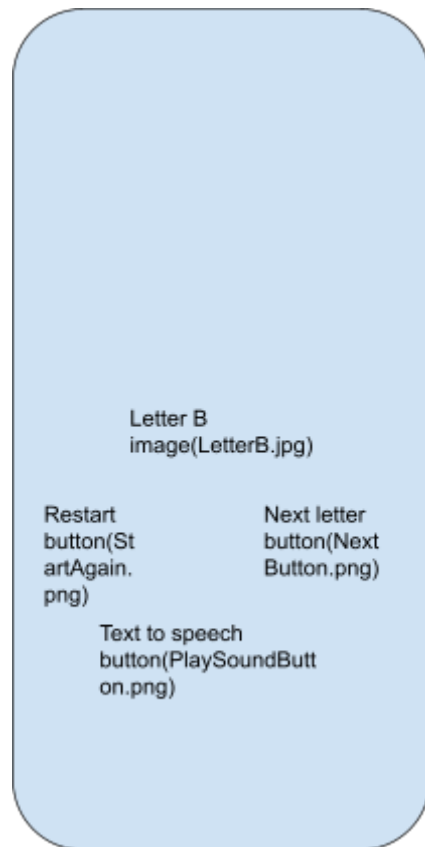
Learn The Alphabet Splash

Assets	Events(Inputs and Outputs)
LTCbanner.jpg LetterA-F.png Startbutton.png	• Alphabet letters A-F • Text to speech • Start button

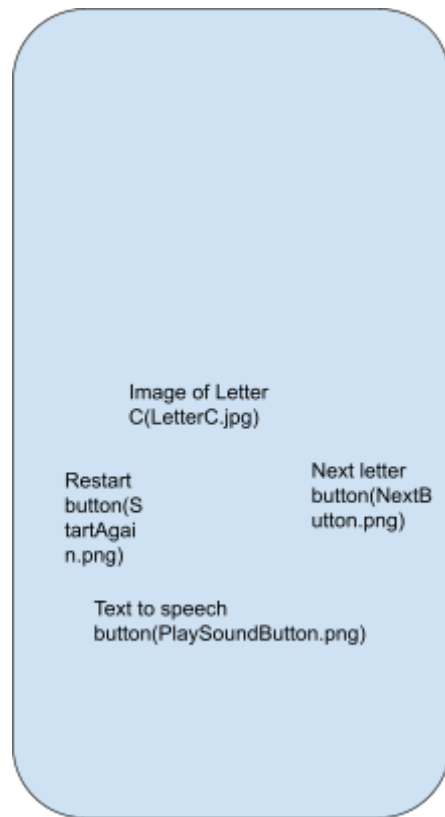| Intro.png	● Letter select button
Design notes/Alternative ideas	Method of solution (what does this screen do?)
The start screen will have a white background with bold text and sans serif font with multicoloured text.	It's child friendly and has different colours and fun images.

Assets	Events(Inputs and Outputs)

Image of letter A(LetterA.jpg)

Restart
button(Sta
rtAgain.pn
g)

Next letter
button(Next
Button.png)
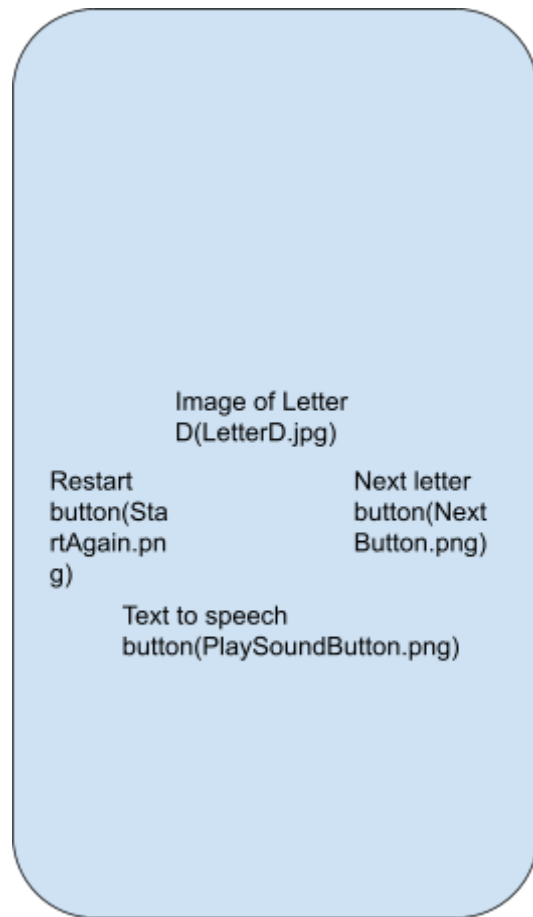
Text to speech
button(PlaySoundButton.
png)

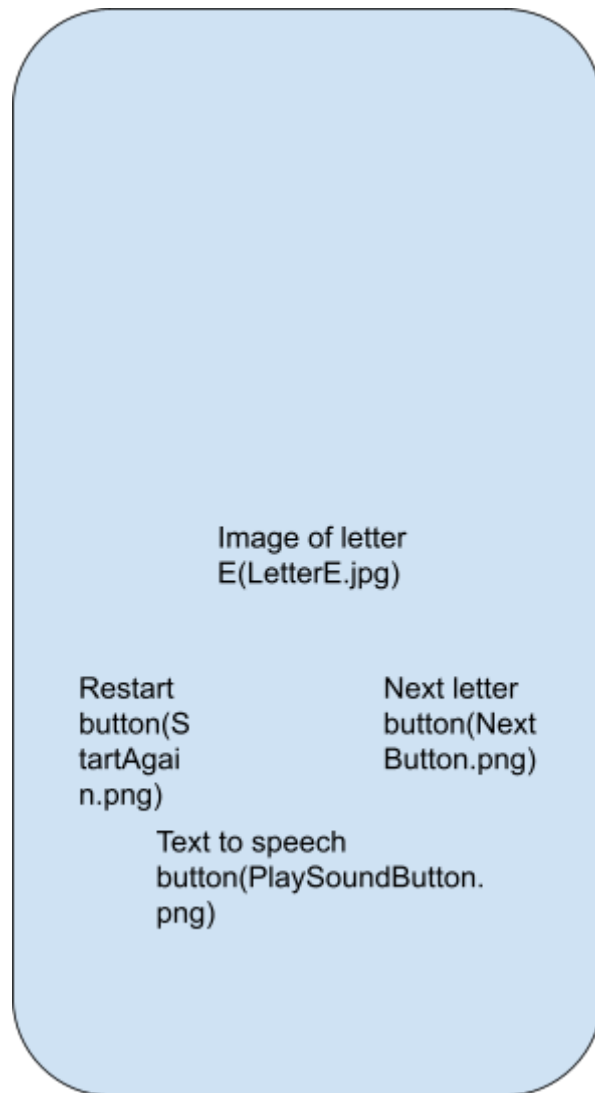| LetterA.jpg PlaySoundButton.png NextButton.png StartAgain.png	● Text to speech ● Restart button ● Next letter button
Design notes/Alternative ideas	Method of solution (what does this screen do?)
The text layout will be Multicoloured text with a white background and sans serif font in bold.	Children at young ages like different colours and fun images.

Letter B
image(LetterB.jpg)

Restart
button(St
artAgain.
png)

Next letter
button(Next
Button.png)

Text to speech
button(PlaySoundButt
on.png)

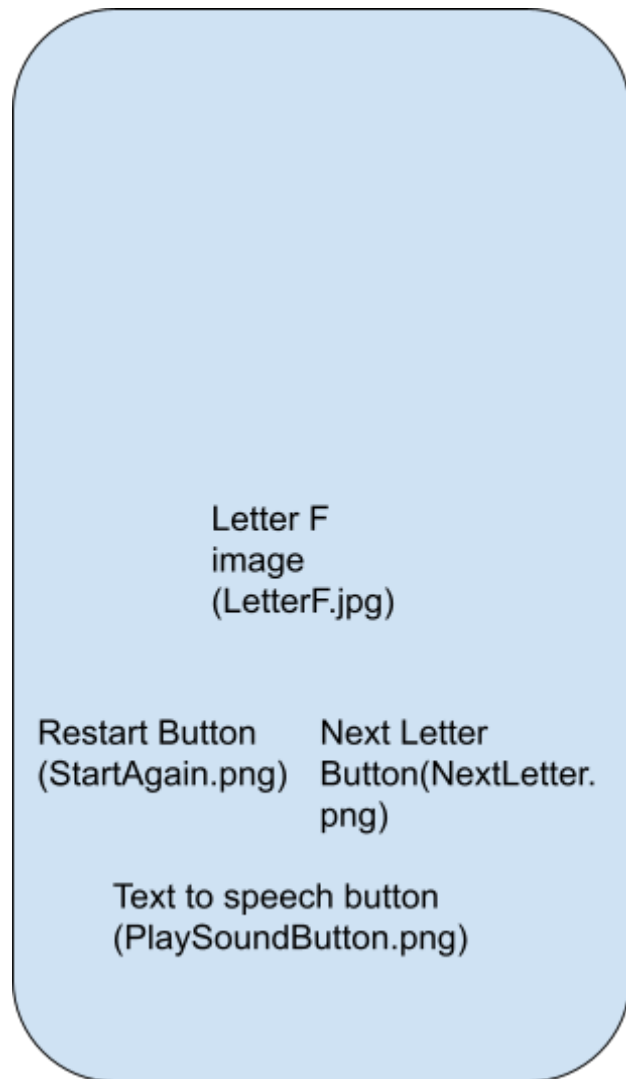| Assets	Events(Inputs and Outputs)
LetterB.jpg PlaySoundButton.png NextButton.png StartAgain.png	● Text to speech ● Restart button ● Next letter button
Design notes/Alternative ideas	Method of solution (what does this screen do?)
The text layout will be Multicoloured text with a white background and sans serif font in bold.	Children at young ages like different colours and fun images.

Image of Letter
C(LetterC.jpg)

Restart
button(S
tartAgai
n.png)

Next letter
button(NextB
utton.png)

Text to speech
button(PlaySoundButton.png)

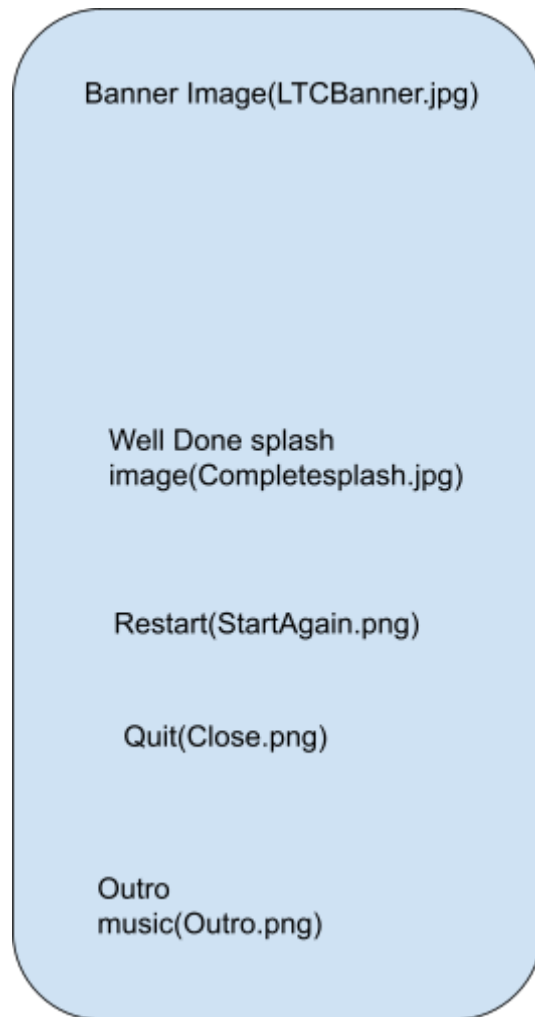| Assets	Events(Inputs and Outputs)
LetterC.jpg PlaySoundButton.png NextButton.png StartAgain.png	● Text to speech ● Restart button ● Next letter button
Design notes/Alternative ideas	Method of solution (what does this screen do?)
The text layout will be Multicoloured text with a white background and sans serif font in bold.	Children at young ages like different colours and fun images.

Image of Letter
D(LetterD.jpg)

Restart   Next letter
button(Sta   button(Next
rtAgain.pn   Button.png)
g)

        Text to speech
        button(PlaySoundButton.png)

Assets	Events(Inputs and Outputs)
LetterD.jpg PlaySoundButton.png NextButton.png StartAgain.png	● Text to speech ● Restart button ● Next letter button
Design notes/Alternative ideas	Method of solution (what does this screen do?)
The text layout will be Multicoloured text with a white background and sans serif font in bold.	Children at young ages like different colours and fun images.

Image of letter
E(LetterE.jpg)

Restart
button(S
tartAgai
n.png)

Next letter
button(Next
Button.png)

Text to speech
button(PlaySoundButton.
png)

Assets	Events(Inputs and Outputs)
LetterE.jpg PlaySoundButton.png NextButton.png StartAgain.png	● Text to speech ● Restart button ● Next letter button
Design notes/Alternative ideas	Method of solution (what does this screen do?)
The text layout will be Multicoloured text with a white background and sans serif font in bold.	Children at young ages like different colours and fun images.

Letter F
image
(LetterF.jpg)

Restart Button   Next Letter
(StartAgain.png)   Button(NextLetter.
                          png)

Text to speech button
(PlaySoundButton.png)

Assets	Events(Inputs and Outputs)
LetterF.jpg PlaySoundButton.png NextButton.png StartAgain.png	• Text to speech • Restart button • Next letter button
Design notes/Alternative ideas	Method of solution (what does this screen do?)
The text layout will be Multicoloured text with a white background and sans serif font in bold.	Children at young ages like different colours and fun images.

Banner Image(LTCBanner.jpg)

Well Done splash
image(Completesplash.jpg)

Restart(StartAgain.png)

Quit(Close.png)

Outro
music(Outro.png)

Assets	Events(Inputs and Outputs)
LTCBanner.jpg StartAgain.png Close.png Completesplash.jpg Outro.png	● Quit button ● Restart button ● Next letter button
Design notes/Alternative ideas	Method of solution (what does this screen do?)
The text layout will be Multicoloured text with a white background and sans serif font in bold.	Children at young ages like different colours and fun images.

Pseudocode

Screen	Screen 1	Letter A	Letter B	Letter C	Letter D	Letter E	Letter F	Complete
Pseudocode	If the start button pressed display letter A screen.	If Sound Button pressed play letter sound.

If finger drag across canvas draw line.

If clear button pressed clear Canvas.

If next button pressed display Letter B screen. | If Sound button pressed play letter sound. If finger drag across canvas draw line.

If clear button pressed clear Canvas.

If next button pressed display Letter C screen. | If Sound button pressed play letter sound.

If finger drag across canvas draw line.

If clear button pressed clear Canvas.

If next button pressed display letter D screen. | If Sound button pressed play letter sound.

If finger drag across canvas draw line.

If clear button pressed clear Canvas.

If next button pressed display letter E screen | If Sound button pressed play letter sound.

If finger drag across canvas draw line.

If clear button pressed clear Canvas.

If next button pressed display letter F screen. | If sound button pressed play letter sound.

If finger drag across canvas draw line.

If clear button pressed clear Canvas.

If next button pressed display Complete screen. | If restart button pressed display letter A screen

If the quit button is pressed, close the app. |

Pre-defined code

Code(Blocks)			
Taken from	[Number app](#)	[Number app](#)	[TalkToMe Tutorial](#)

Used for	Intro screen	Intro screen	End of mobile app screen

Asset/source log

Developer Name: Ryan Addleton

Description of asset	File name	Source	Modifications made	Where used
Banner image	LTCBanner.jpg	No Source used	N/A	Screens 1 & 8
Restart button	StartAgain.png	No Source used	N/A	all screens
Start button	Startbutton.png	No Source used	N/A	Screen 1
Learn the alphabet splash image	LetterA-F.png	No Source used	N/A	Screen 1
Text to speech	PlaySoundButton.png	No Source used	N/A	Start Screen-Letter F screen
Well Done Splash image	Completespalsh.jpg	No Source used	N/A	Complete screen
Next letter button	NextLetter.png	No Source used	N/A	Letter A screen- Letter F screen
Quit button	Close.png	No Source used	N/A	Complete screen
Intro music	Intro.png	No Source used	N/A	Screen 1
Outro music	Outro.png	No Source used	N/A	Complete screen

Test plan & Log

Developer name: Ryan Addleton   Application: Alphabet Mobile App

Test No	screen	Test	Expected outcome
1	1	successful	I didn't know if it would work
1	2	successful	I didn't know if it would work
1	3	successful	I didn't know if it would work
1	4	successful	I didn't know if it would work
1	5	successful	I didn't know if it would work
1	6	successful	I didn't know if it would work
1	7	successful	I didn't know if it would work