

# Quiz Game

Emmett Byrne & Przemek Tomczyk

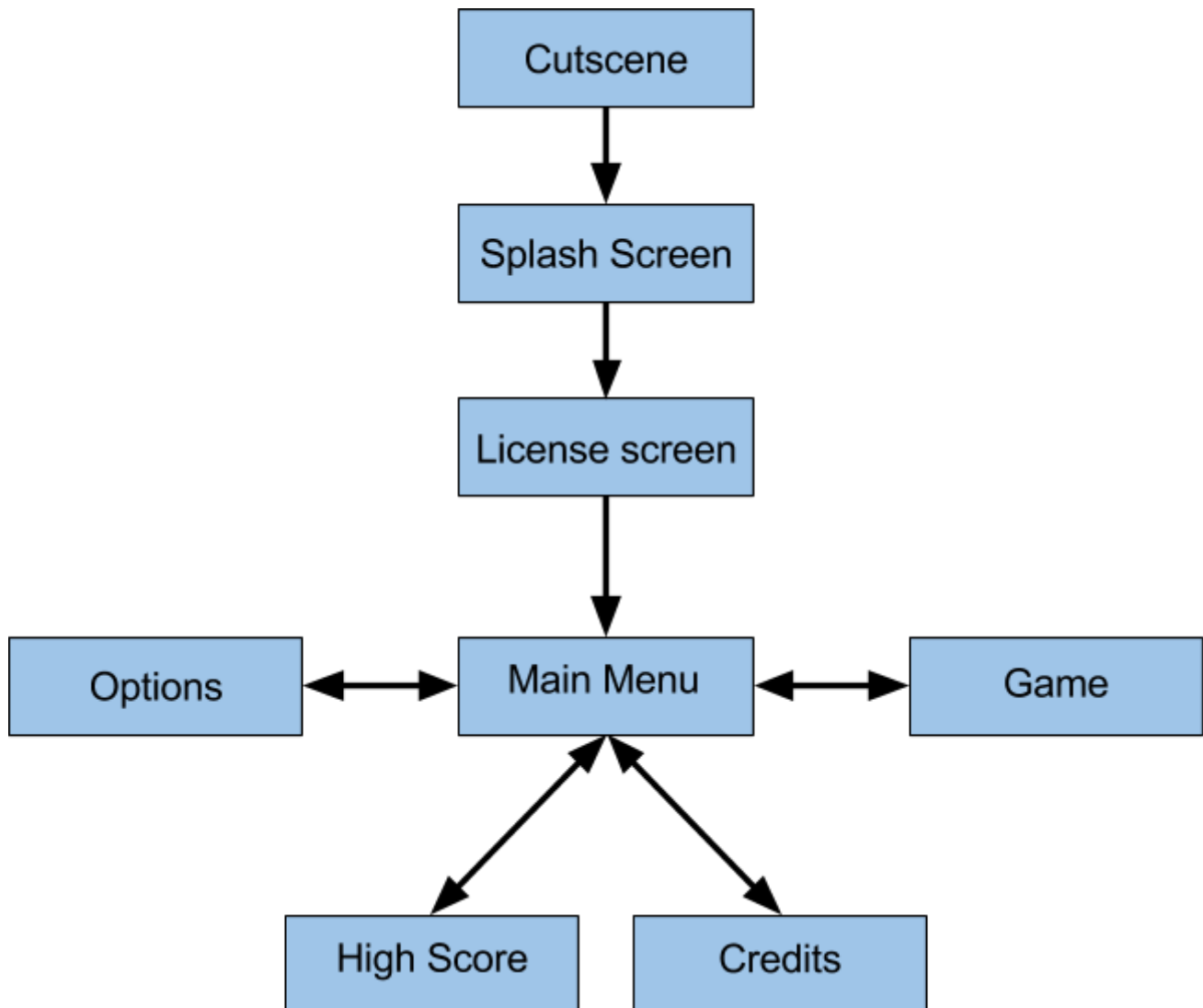
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## Details:

Title: Nom

Theme: Food

Transition Diagram:



Background:

The background will be an image of a tablecloth and will persist through most screens except for the credits.

Titles:

All Title will have a background behind it that has a border made out of breadsticks and celery and other random food elements.

Selecting Options:

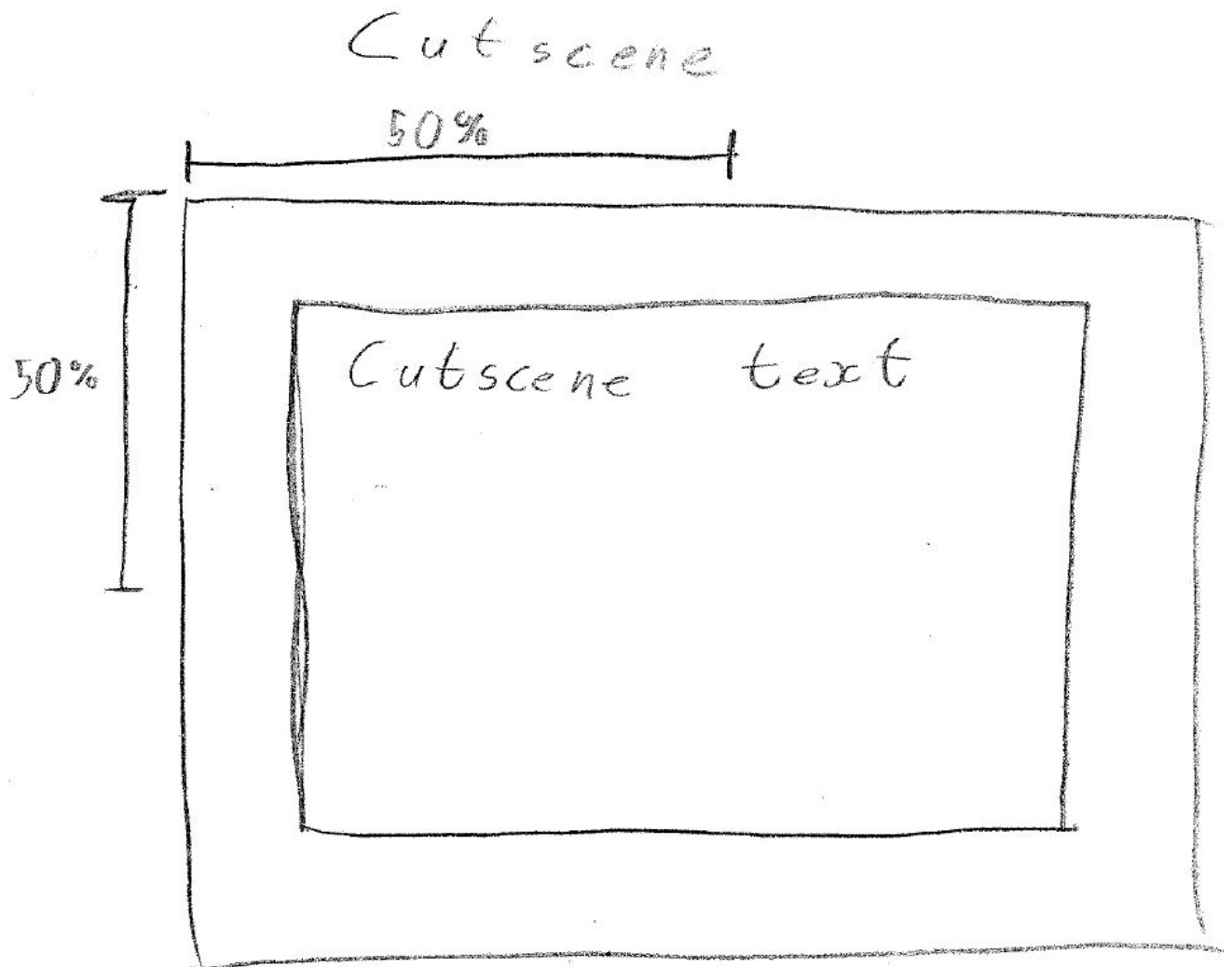
To show what is selected in the menus the text of the selected button will be given a yellow outline while it is selected.

## Cutscene:

### Asset list:

Name	Type	Anchor Point	Feedback
Cutscene Text	Label	Screen 50% width, 50% height	no

### Appearance:



Cutscene Text: Will just be the story text

### Layout:

Note: All elements in this screen will have their origin centred.

### Cutscene text:

This element will be positioned directly in the middle of the screen.

### Transitions:

In(From game start):

After a brief delay text appears being typed on screen until the full story is completed.

Out(To Splash Screen):  
Text Disappears.

**Navigation:**

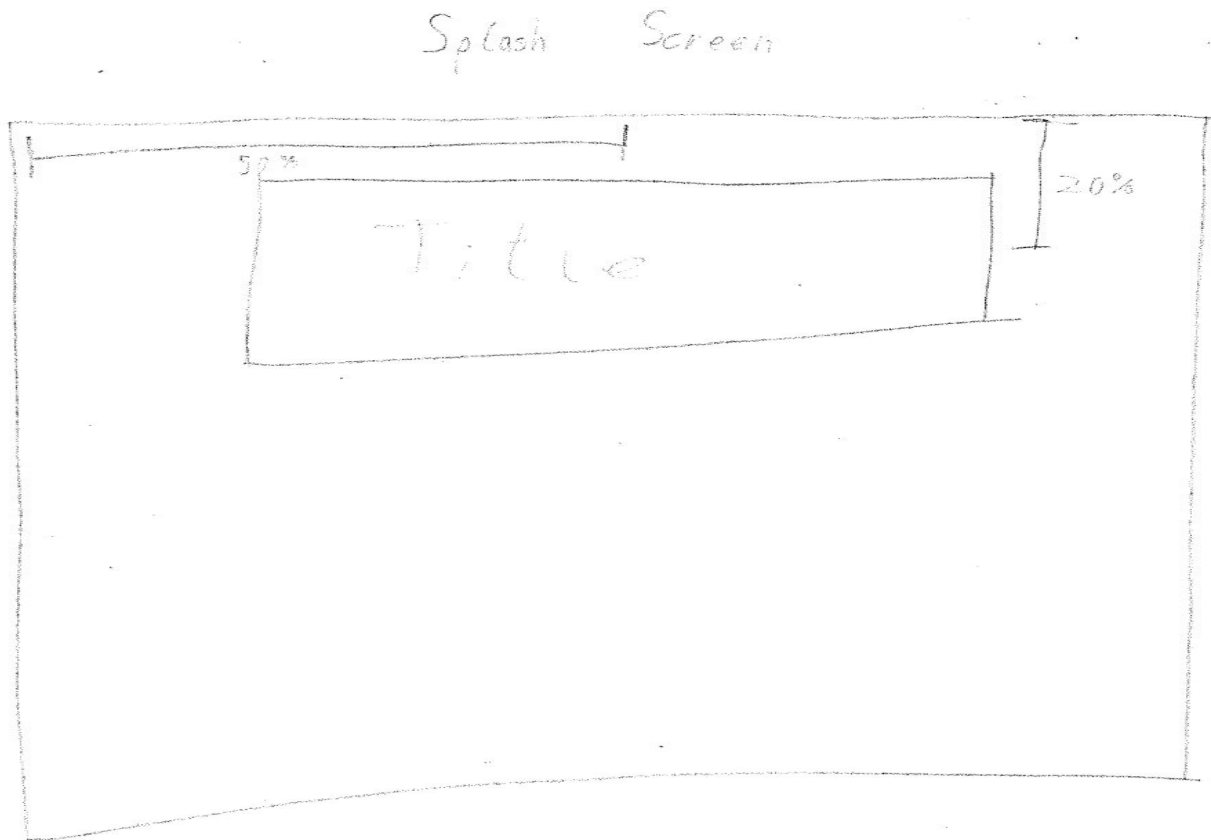
Pressing B will immediately start the transition to the next screen.

## Splash Screen:

### Asset list:

Name	Type	Anchor Point	Feedback
Title	Title	Screen 50% width, 10% height	No
Background	Sprite	Screen 50% width, 50% height	No

### Appearance:



Title: The title will say the title of the game and will have the same background as described in the details section.

### Layout:

Note: All elements will have their origin set in the centre

Title:

Positioned  $\frac{1}{2}$  of screen's width and  $\frac{1}{10}$  height away from the left and top edge.

Background sprite:

Positioned dead centre of the screen.

**Transitions:**

In(from Cutscene):

Title will drop into position from top of the screen. Background persists from previous screen

Out(To License Screen):

Title will exit to the top of the screen. Background persists to next screen

**Navigation:**

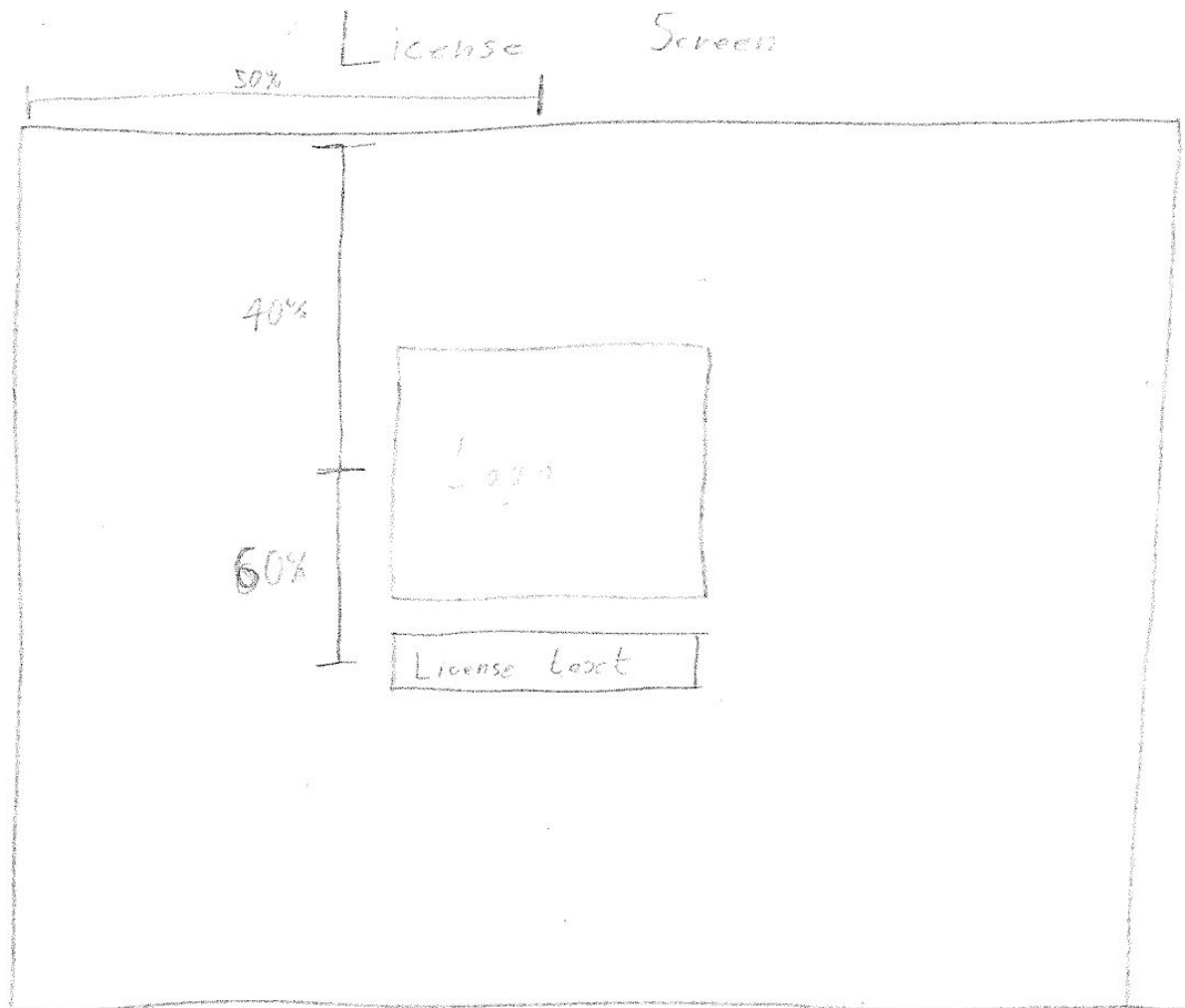
Upon any input transitions out to the next screen

## License Screen:

### Asset list:

Name	Type	Anchor Point	Feedback
SFML Logo	Sprite	Screen 50% width, 40% height	No
License Text	Label	Screen 50% width, 60% height	No
Background	Sprite	Screen 50% width, 50% height	No

### Appearance:



SFML Logo: This will simply be an image of the SFML logo.

License Text: This will be just text detailing the SFML license agreement

### Layout:

Note: All elements will have their origin set in the centre

SFML sprite:

Positioned  $\frac{1}{2}$  of screen's width and  $\frac{2}{5}$  height away from the left and top edge respectively.

License label:

Positioned  $\frac{1}{2}$  of screen's width and  $\frac{3}{8}$  height

Background sprite:

Positioned directly in the middle of the screen.

**Transitions:**

In(from Splash Screen):

Sfml Logo and License text will enter from the bottom of the screen. Background persists from previous screen

Out(To Main Menu):

Sfml Logo and License text will exit to the bottom of the screen. Background persists to next screen

**Navigation:**

Upon any input transitions out to the next screen

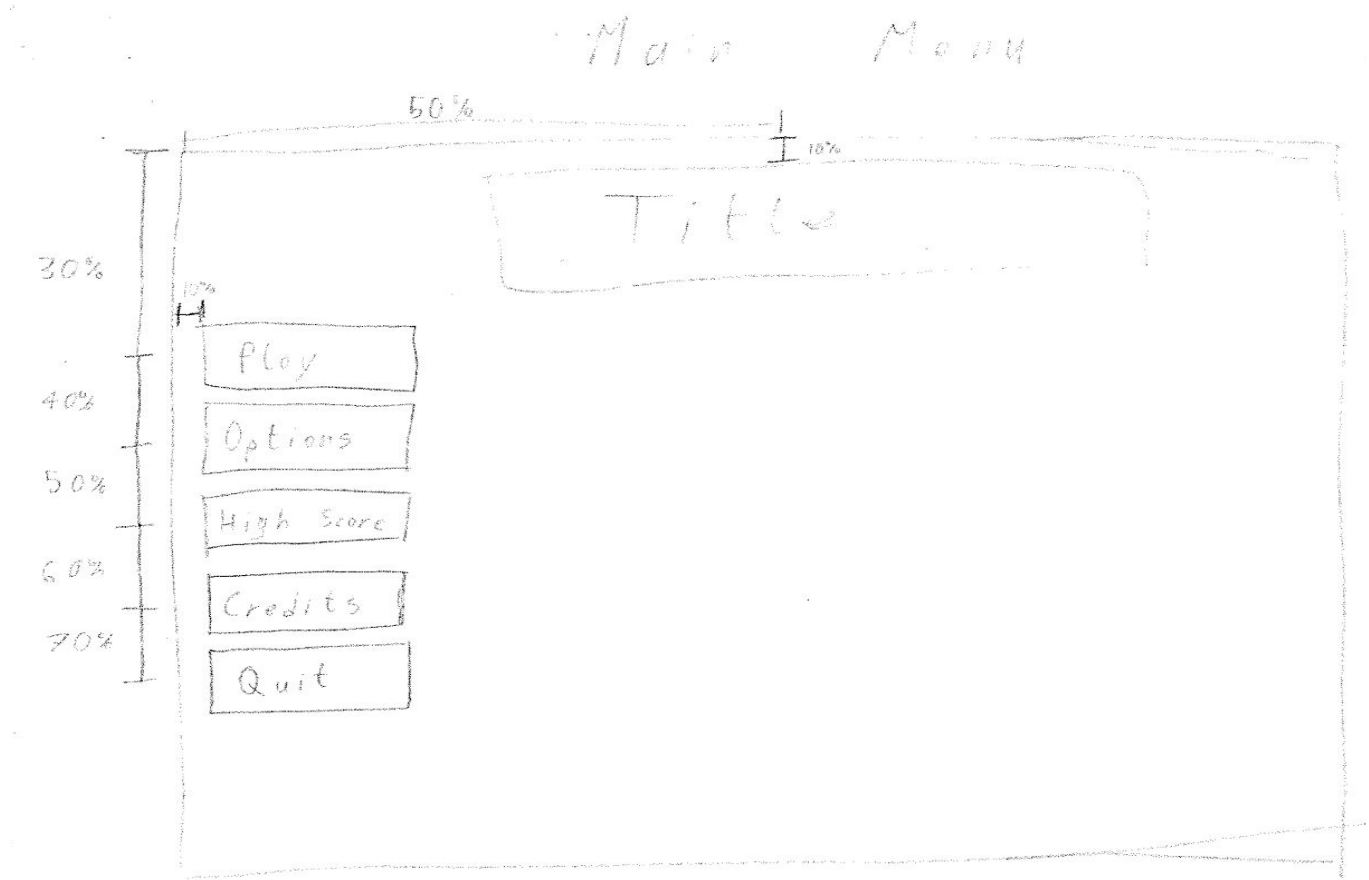


Main menu Screen:

Asset list:

Name	Type	Anchor Point	Feedback
Title	Title	Screen 50% width, 10% height	No
Background	Sprite	Screen 50% width, 50% height	No
Play	Button	Screen 10% width, 30% height	Scales up on selection.
Options	Button	Screen 10% width, 40% height	Scales up on selection.
High Score	Button	Screen 10% width, 50% height	Scales up on selection.
Credits	Button	Screen 10% width, 60% height	Scales up on selection.
Quit	Button	Screen 10% width, 70% height	Scales up on Selection

Appearance:



Title: Will say Main Menu and will have the same background as described in the details section.

Buttons: Each button will have text with the name of whatever screen they will transition to. They will all have a black background behind them and a border made out of cutlery.

**Layout:**

Note: All elements in this screen have the origin set to the centre of itself.

Title:

It will be positioned  $\frac{1}{2}$  of the window's width and  $\frac{1}{10}$  height away from the top and left edge of the screen. The text font size will be set to default medium size for a title (eg labels' medium font could be 16 while titles will use 18).

Title sprite:

It will be positioned on text's x and y coordinates with  $\frac{1}{10}$  of the text's width and height taken away from x and y respectively.

Background:

It will be positioned in the centre of the screen. IE  $\frac{1}{2}$  of screen's width and height away from the left and top edge respectively.

Play button:

Positioned  $\frac{1}{10}$  of screen's width and  $\frac{3}{10}$  height

The label will be positioned exactly on top of the button with same x and y coordinates.

Options button:

Positioned  $\frac{1}{10}$  of screen's width and  $\frac{4}{10}$  height

The label will be positioned exactly on top of the button with same x and y coordinates.

High Score button:

Positioned  $\frac{1}{10}$  of screen's width and  $\frac{5}{10}$  height

The label will be positioned exactly on top of the button with same x and y coordinates.

Credits button:

Positioned  $\frac{1}{10}$  of screen's width and  $\frac{6}{10}$  height

The label will be positioned exactly on top of the button with same x and y coordinates.

Quit button:

Positioned  $\frac{1}{10}$  of screen's width and  $\frac{7}{10}$  height

The label will be positioned exactly on top of the button with same x and y coordinates.

**Transitions:**

In (from License screen, Main Game, Options, High Score and credits)

Title will drop down into position from the top of the screen. The bottoms (play, options, high score, credits, quit) will come in from the left of the screen.

Out(To Main Game, Options, High Score, Credits and Quit)

Same animation when transitioning in except reversed.

**Navigation:**

Play:

1. Down changes selection to Options.
2. A starts transition to main game.

Options:

1. Up changes selection to Play
2. Down changes selection to Options.
3. A starts transition to Options Screen.

High Score:

1. Up changes selection to Options
2. Down changes selection to Credits.
3. A starts transition to High Score Screen.

Credits:

1. Up changes selection to High Score
2. Down changes selection to Quit.
3. A starts transition to Credits Screen.

Quit:

1. Up changes selection to Credits
2. A starts transition out and exits the program.

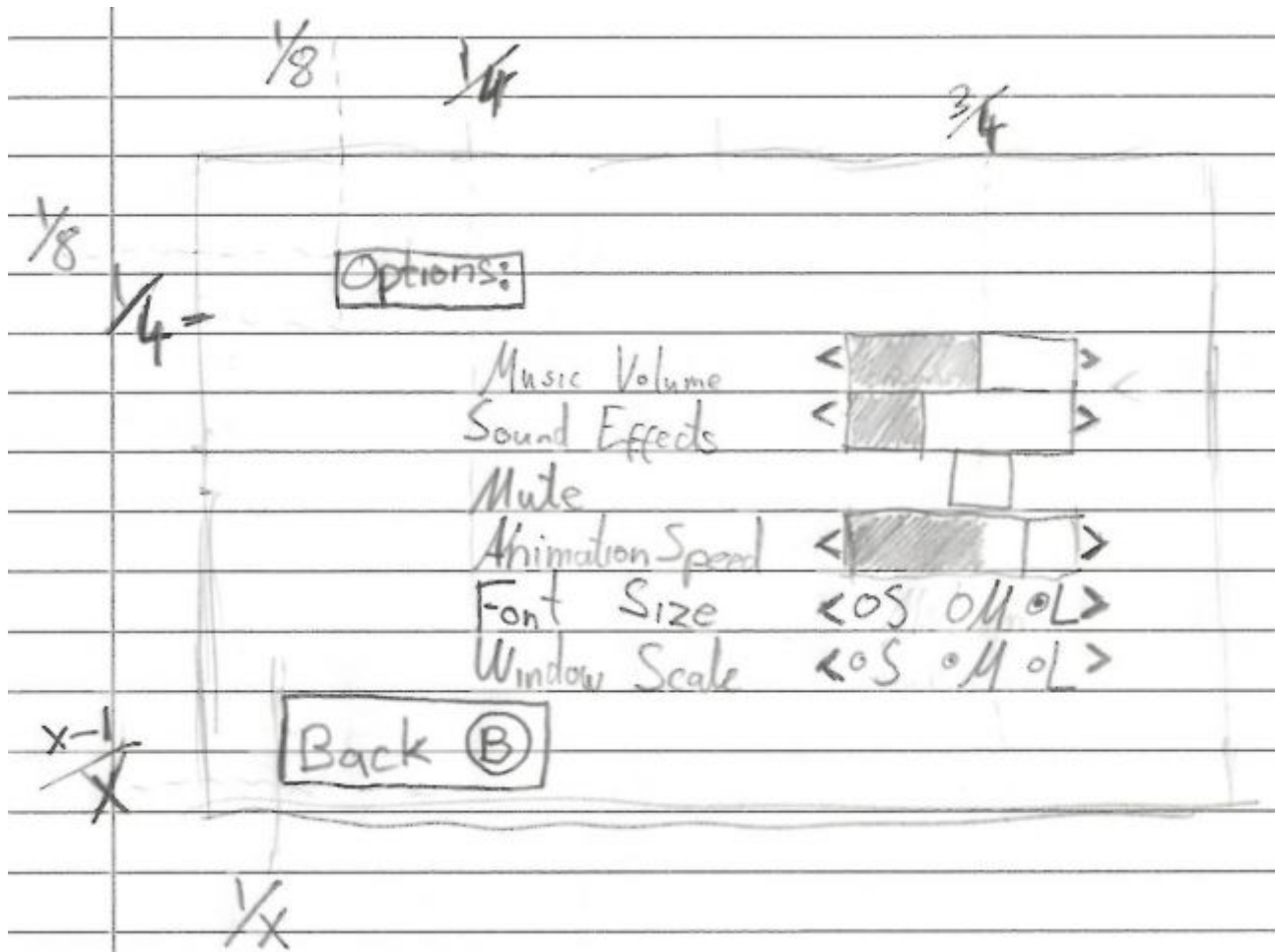
## Options Screen:

### Asset list:

Name	Type	Positioning	Feedback
Options	Label	$\frac{1}{8}$ width+height of the window from the top and left edge	N/A
Options	Sprite	Label's x/y - $\frac{1}{10}$ of label's width and height	N/A
Music	Label	$\frac{1}{4}$ width+height of the window from the top and left edge	Yellow outline appears around the text
Music	Slider	X: $\frac{3}{4}$ of window's width from the left edge - $\frac{1}{2}$ of the rectangle's width Y: same as label's	The colour in the box moves to the left or right as its changed
Sound Effects	Label	X: above label's x pos Y: $\frac{1}{10}$ of above label's height + label's y pos + label's height	Same feedback as described for previous label
Sound Effects	Slider	Same as slider above	The colour in the box moves to the left or right as its changed
Animation Speed	Label	Same as label above	Same feedback as described for previous label
Animation Speed	Slider	Same as slider above	The colour in the box moves to the left or right as its changed
Mute	Label	Same as label above	Same feedback as described for previous label
Mute	Checkbox	Same way as sliders but using its own width and corresponding label's height	A red X will appear in the box when "A" button is pressed. It will disappear when the X is already there
Font	Label	Same as label above	Same feedback as described for previous label
Font	Radio button	X: $\frac{5}{8}$ , $\frac{3}{4}$ , $\frac{7}{8}$ of window's width + radius Y: Uses label's	Circle's fill colour will change to black and the one that was previously black will turn white
Scale	Label	Same as label above	Same feedback as described for previous label
Scale	Radio button	Same as font radio buttons	Same as the previously described for radio buttons
Back	Label	$\frac{1}{X}$ of window's width from the	Same feedback as described for

		left edge and $(X-1)/X$ of window's height - label's height from the top edge	previous label
Back	Sprite	Label's x/y - 1/10 of rectangle's width/height respectively	N/A

### Appearance:



Note: This sketch is slightly incorrect, Mute and Animation Speed should be switched, including the slider and checkbox.

Options Label: will simply say "Options"

Music Volume: The label will simply say "Music Volume", The slider will have a dark grey background with white arrows on either side and a white box on top of it that slides back and forth.

Sound Effects: The label will simply say "Sound Effects", The slider will look the same as the music slider

Animation Speed: The label will simply say "Animation Speed", The slider will look the same as the music slider.

Mute: The label will say "Mute" and the checkbox will be a dark Grey box with a white Border, if the checkbox is set to active there will also be a slightly smaller grey box inside it.

Font Size: The label will just say "Font Size". The Radio buttons will be a dark Grey circle with a white outline. The radio button that is currently active will have a smaller white circle inside of it.

Scale: The label will say "Window Scale". The radio buttons will be identical to the Font Size ones.

Back: The text on the button will say "Back". There will be a black background behind it with a white outline.

### **Layout:**

Note: Origin of all elements will be unchanged in this screen.

"Options:" label will be positioned  $\frac{1}{8}$  of the window's width and height away from the top and left edge of the screen. The text font size will be set to default medium size.

Options sprite:

It will take the text object's x and y coordinates with  $\frac{1}{10}$  of the text's width and height taken away from x and y respectively.

First label (Music) will be positioned  $\frac{1}{4}$  of window's width and height away from top and left edge respectively. The size of text will depend on the font setting but default will be medium.

Every label underneath the first will follow this positioning:

X: above label x position

Y:  $\frac{1}{10}$  of first label's height + above label's y pos + above label's height

This will allow for the option screen to always look the same and be spaced out no matter of the window's size.

Music slider:

It will be two rectangle shapes. First drawn will be the rectangle shape that has a black outline and white fill colour. It will be positioned  $\frac{3}{4}$  of window's width away from the left edge -  $\frac{1}{2}$  of the rectangle's width on the X and it will have same Y position as the corresponding label. Its width will be subject to change while coding, it should be long enough to allow for 8-10 noticeable changes but short enough not to go over the label and/or off screen, but height will be equal to the height of the corresponding label.

A colour changing, depending on the value of the setting, rectangle will be drawn over the previously mentioned rectangle. Its size will be set to the rectangle underneath with X (size of the outline) taken away from width and height so it fits inside the rectangle. Its X and Y coordinate values will be set to the background rectangle but have previously mentioned outline size added to both axes.

Sound Effects slider:

Set up the same as the previous one but using Y value of the corresponding label.

Animation Speed slider:

Set up the same as the previous one but using Y value of the corresponding label.

Mute checkbox:

It will be a white square with a black outline. It will be positioned in the same way as the above rectangles. It will use corresponding label height as width and height.

Font & Window radio buttons:

3 circle shapes with white fill and white outline. Outline will be a  $\frac{1}{4}$  of circle's radius. Radius will be equal to a  $\frac{1}{4}$  of corresponding label's height. First circle will be located  $\frac{5}{8}$  of window's width + radius. Second circle will be positioned  $\frac{3}{4}$  of window's width + radius and same value as the first circle. Third circle will be located  $\frac{7}{8}$  of window's width + radius.

Slightly to the right,  $\frac{1}{4}$  of circle's radius, will be corresponding letters. The letters will be same font size as the labels.

Back label:

It will be positioned (to be decided)  $X - 1/X$  of window's width and  $1/X$  of window's height from the top and left edge of the screen - text's height.

There will be a small sprite of the "B" button. Its position will be same on the y axis as the text's while on the x axis, it will be text's x pos + width +  $1/10$  of width (spacing between end of text and sprite).

Back sprite:

It will be positioned on same x/y axis as the text but -  $1/10$  (label's + sprite's width) and  $1/10$  label's height.

### **Transitions:**

In(From Main Menu):

Options, Music, Sound Effects, Animation Speed, Mute, Font, Scale and Back and their labels will move in from the left side of the screen into position.

Out(To Main Menu):

Same animation as when transition in except reversed.

### **Navigation:**

From Music:

1. Up changes selection to Back
2. Down changes selection to Sound Effects.
3. Left/right moves the slider in that direction

From Sound Effects:

1. Up changes selection to Music.
2. Down changes selection to Animation Speed.
3. Left/right moves the slider in that direction

From Animation Speed:

1. Up changes selection to Sound Effects.
2. Down changes selection to Mute.
3. Left/right moves the slider in that direction

From Mute:

1. Up changes selection to Animation Speed.

2. Down changes selection to Font.
3. A toggles the checkbox true/false

From Font:

1. Up changes selection to Mute.
2. Down changes selection to Scale.
3. Left/right moves the Radio button selection left/right

From Scale:

1. Up changes selection to Font.
2. Down changes selection to Back.
3. Left/right moves the Radio button selection left/right

From Back:

1. Up changes selection to Scale.
2. A begins transition to Main Menu.

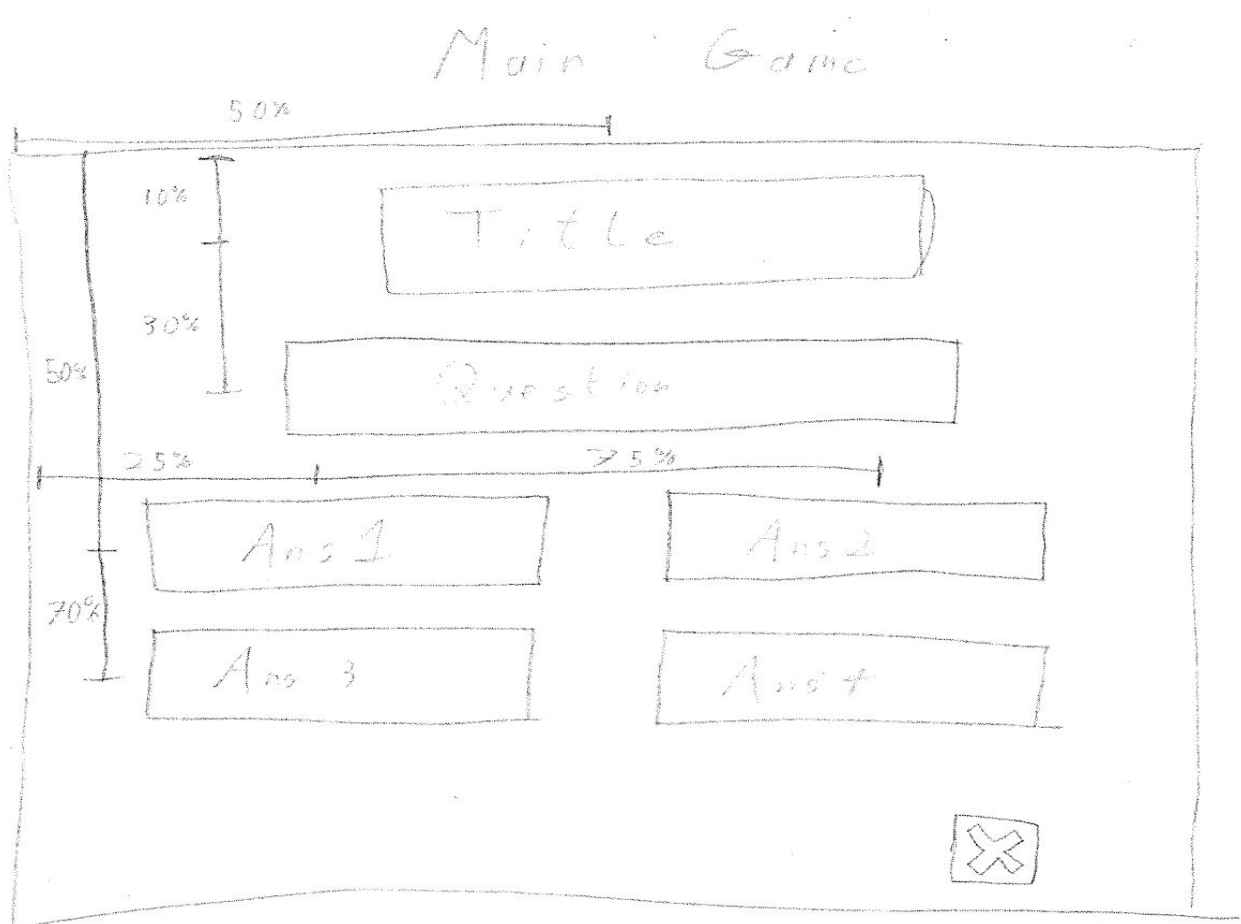


# Main Game Screen:

## Asset list:

Name	Type	Anchor Point	Feedback
Background	Sprite	Screen 50% width, 50% height	no
Title	Title	Screen 50% width, 10% height	no
Question	Label	Screen 50% width, 30% height	no
Ans1	Button	Screen 25% width, 50% height	Scales on Selection
Ans2	Button	Screen 75% width, 50% height	Scales on selection
Ans3	Button	Screen 25% width, 70% height	Scales on selection
Ans4	Button	Screen 75% width, 70% height	Scales on Selection
Quit to Menu	Button	Screen 80% width, 90% height	Scales on Selection

## Appearance:



Title: The label will just say the title of the game and have the same background described in the details section

Question: The label will have the question that it gets from a pool of questions & answers. It will have a black background behind it that has a outline made of cutlery.

Answers: Each answers text will be taken from the question & answer pool and will have the same background as the question.

Quit To Menu: The text will be left blank and it will have a sprite of a large bright red "X" on a dark red background

### **Layout:**

Note: All elements in this screen have the origin set to the centre of itself.

Background:

Sprite that will be positioned in the centre of the screen. IE  $\frac{1}{2}$  screen's width and height away from the left and top edge.

Title:

It will be positioned  $\frac{1}{2}$  of the window's width and  $\frac{1}{10}$  height away from the top and left edge of the screen.

Question label:

Positioned  $\frac{1}{2}$  of screen's width and  $\frac{3}{10}$  height

Ans1 button:

Positioned  $\frac{1}{4}$  of screen's width and  $\frac{1}{2}$  height

Ans2 button:

Positioned  $\frac{3}{4}$  of screen's width and  $\frac{1}{2}$  height

Ans3 button:

Positioned  $\frac{1}{4}$  of screen's width and  $\frac{7}{10}$  height.

Ans4 button:

Positioned  $\frac{3}{4}$  of screen's width and  $\frac{7}{10}$  height.

Quit button:

Positioned  $\frac{8}{10}$  of screen's width and  $\frac{9}{10}$  height

### **Transitions:**

In (From Main Menu)

Ans1 and Ans3 move into position from the left of the screen. Ans2 and Ans4 move in from the right of the screen. QuitToMenu moves in from the bottom of the screen. Title and question move in from the top of the screen.

Out (To Main Menu)

Same animation when transitioning in except reversed.

**Navigation:**

From Ans1:

1. Right moves selection to Ans2
2. Down moves selection ro Ans3

From Ans2:

1. Left moves selection to Ans1
2. Down moves selection to Ans4

From Ans3:

1. Right moves selection to Ans4
2. Up moves selection to Ans1
3. Down moves selection to Quit to Menu

From Ans4:

4. Left moves selection to Ans3
5. Up moves selection to Ans2
6. Down moves selection to Quit to Menu

From Quit:

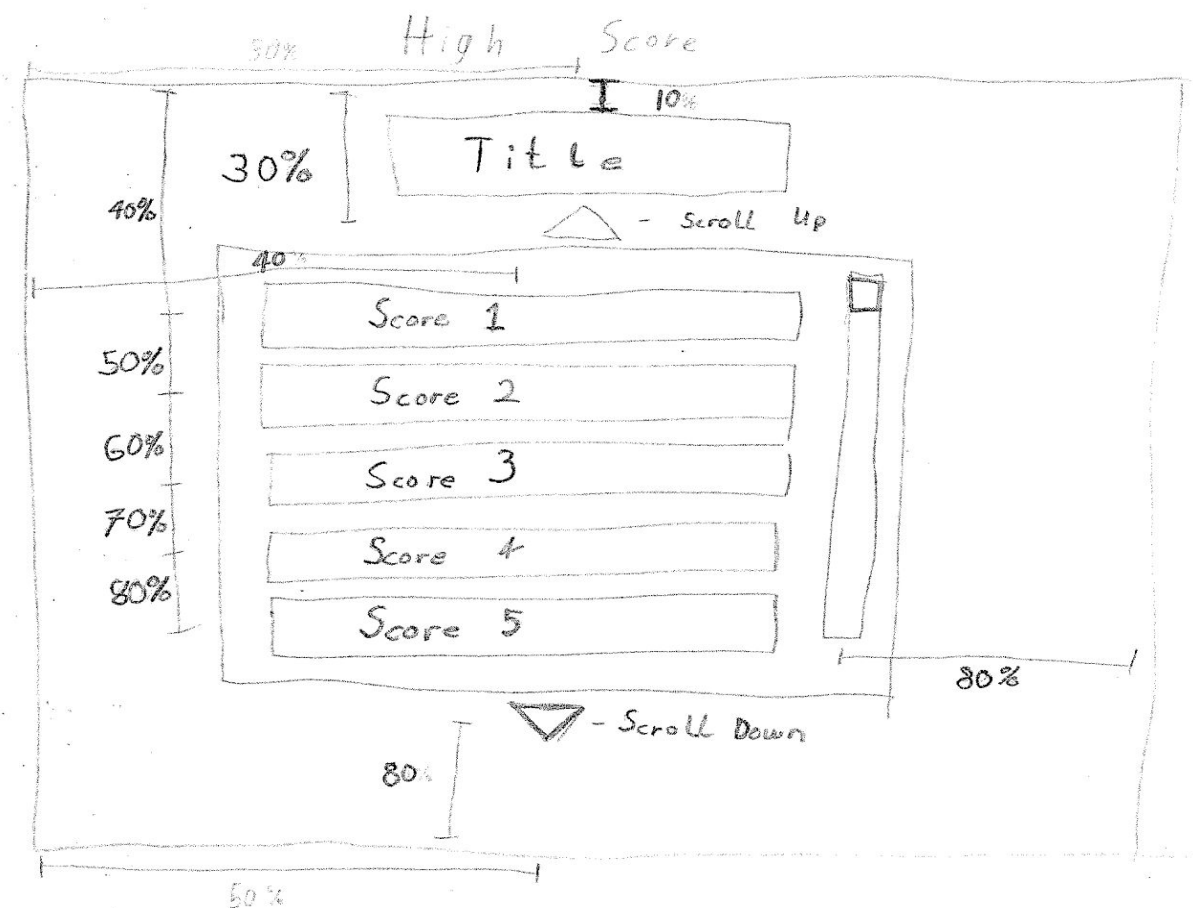
1. Up Moves selection to Ans4
2. A starts the transition back to the main menu

## High-score Screen:

### Asset list:

Name	Type	Anchor Point	Feedback
Title	Title	Screen 50% width, 10% height	no
Scroll Up	Button	Screen 50% width, 30% height	Scale up on Selection
Scroll Down	Button	Screen 50% width, 80% height	Scale up on Selection
Scrollbar	Scroll Bar	Screen 80% width, 55% height	no
Score 1-*	Label	Screen 40% width, 40% height and each one after is 10% more than previous	no
BackToMenu	button	Screen 80% width, 90% height	Scale up on Selection
Border	Sprite	Screen 40% width, 65% height	no
Sorting	Radio Buttons	Screen 90% width, 40% height	Moves as the sorting value increases/decreases

### Appearance:



Title: Will say "High Score" and have the background as described in Details

ScrollUp/ScrollDown: both of these will simply be Red triangles pointing up or down.

Border: This will be a black background behind all of the score labels with an outline made of cutlery.

Scrollbar: The scroll bar will have a dark grey background with a white box on top of it that slides Up and Down.

Score Labels: Each label will just be set the appropriate score after it's been sorted.

Sorting: The label will just say "Sorting". The Radio buttons will be a dark Grey circle with a white outline. The radio button that is currently active will have a smaller white circle inside of it. Each button will have a label beside it saying what each button is for.

BackToMenu: The text will be left blank and it will have a sprite of a large bright red "X" on a dark red background

### **Layout:**

Note: All elements in this screen have the origin set to the centre of itself.

Title:

It will be positioned  $\frac{1}{2}$  of the window's width and  $\frac{1}{10}$  height away from the top and left edge of the screen.

Scroll Up button:

Positioned  $\frac{1}{2}$  of screen's width and  $\frac{3}{10}$  height

Scroll Down button:

Positioned  $\frac{1}{2}$  of screen's width and  $\frac{8}{10}$  height

Scrollbar slider:

Positioned  $\frac{8}{10}$  of screen's width and  $\frac{11}{20}$  height.

Score label:

Positioned  $\frac{4}{10}$  of screen's width and height

Back to menu button:

Positioned  $\frac{8}{10}$  of screen's width and  $\frac{9}{10}$  height

The label will be positioned on top of the button with same x and y coordinates.

Border sprite:

Highscore border will be positioned  $\frac{4}{10}$  of screen's width and  $\frac{13}{20}$  height

Sorting label:

Text that labels the area where the sorting radio buttons will same position as the label of the radio button but - 1/10 of screen height above the first radio button.

Sorting radio buttons:

Circles with white outline and black fill colour, when selected, positioned 9/10 of screen's width and  $4/10 + (\text{circleNo} * 1/10)$  height away from the left and top edge of the screen.

### **Transitions:**

In(from main menu):

Scroll up, ScrollDown, ScrollBar, Border and all the scores move in from the left side of the screen into position. Title moves from the top of the screen into position and BackToMenu moves in from the bottom of the screen. Sorting will move in from the right of the screen

Out(to Main Menu)

Scroll up, ScrollDown, ScrollBar, Border and all the scores move back out through the left of the screen. Title moves out through the top of the screen and BackToMenu moves out through the bottom of the screen

### **Navigation:**

From ScrollUp:

1. Down moves selection to ScrollDown

From ScrollDown

1. Up moves Selection to ScrollUp
2. Down moves selection to BackToMenu

From QuitToMenu

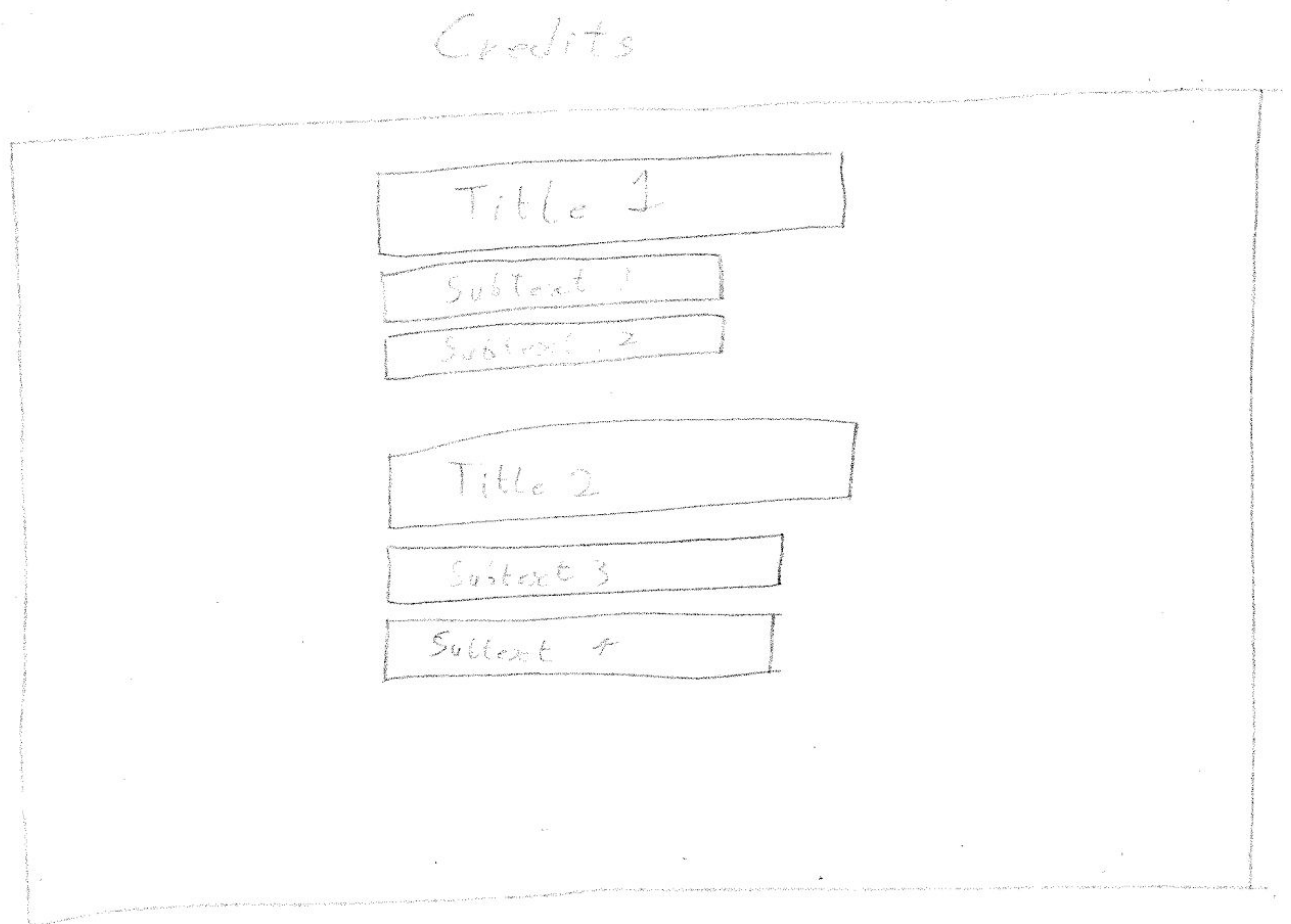
1. Up moves selection to ScrollDown
2. A starts the transition back to the main menu

## Credits Screen:

### Asset list:

Name	Type	Anchor Point	Feedback
Title 1-*	Label	50% screen width	no
Subtext 1-*	Label	50% screen width	no

### Appearance:



Title: each title will have it's text set to whatever is given to it from the yaml file.

Subtext: Will work the same as Title except smaller.

### Layout:

Note: origin set to the centre of each element.

### Titles:

They will be positioned in the middle of the screen on the x axis. They will be first rendered off the screen, below the bottom edge of the screen, and scroll up.

### Subtitles:

They will have same position as the titles but on the y axis be slightly under it so they're not obstructing each other. IE Subtitle will be title's y pos + 1.5 \* title's height.

**Transitions:**

After a brief delay starts cycling through the credits which scroll up from the bottom of the screen once the list of credits have been exhausted then changes back to the main menu

**Navigation:**

Pressing any key starts transition back to main menu