Testing Documents

Table of Contents

1 Use Case Testing

Use Case Testing

Use Case	Situation	Result
1	User registers	User successfully registers and directed to their profile screen
2	User logs in	User is directed to their profile page
3	User starts drawing on start drawing page	User touch input on screen is working correctly
4	User changes paint colour	Paint object correctly changes colour
5	User sets background for a specific frame	Background image is set and background button changes to "Remove background" in the frame
6	User adds new frame	New frame is loaded onto screen and previous frame is saved
7	User presses play button	User brought to Play Animation screen and animation begins to play

8	User adjusts frame rate speed	Animation frame rate speed is adjusted based on user input
9	User restarts animation	All frames are reset to a blank screen
10	User uploads video	Selected video is uploaded to our server and inserted into our database
11	User saves animation	Current animation on screen is saved onto SD card on user's phone
12	User goes to public animations button	Animations stored on the server are loaded onto the screen, along with their rating and description
13	User goes to Blockly drawing screen	Brings you to the correct split screen mode of code blocks and an output empty page respectively.

2 Usability Testing

1st Phase of user testing

During our first phase of user testing we found out a number of key issues which our users felt needed changing.

One of them was how our "Set Background" was implemented. This feature initially just set the background of the frame the user was on when they selected this button. From our users responses we found that they felt that the background should be set for the entire animation, rather than the user having to set the background for each frame automatically. This showed us how important user testing was going to be for our app, as we were still thinking of using features as software engineers rather than how the user would interpret things.

Another important point we learned from this phase of testing was where to position the play button. We initially had it hidden inside our menu bar on the top of the screen. We thought that this was a good idea as it freed up space on the page, but users found it a bit difficult to find the button. We have since moved the play button so it's visible on the screen.

Final Phase of user testing

Questionnaire

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The application layout is easy to use					
You didn't have to stop and figure out how a feature worked					
I liked how the onion skinning was done automatically					
The app was smooth and fluid to use					
I would use this app again					
I would recommend this app to a friend					

Would you prefer an eraser feature to remove errors or did you like the undo button we had ?

_____

How did this animation app compare to any other similar apps you may have used ?

_____

Which features were you impressed with the most ?

_____

Are there any features you would have liked to have been included ?

_____

Where there any big flaws in the design of the app ? Could you intuitively figure out how to navigate through the application ?

_____

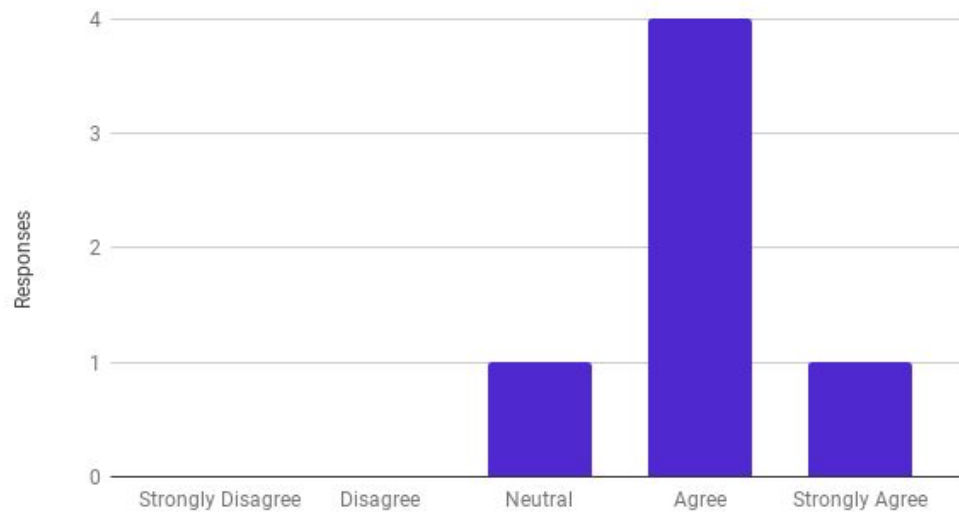Any additional feedback would be greatly appreciated:

_____

_____

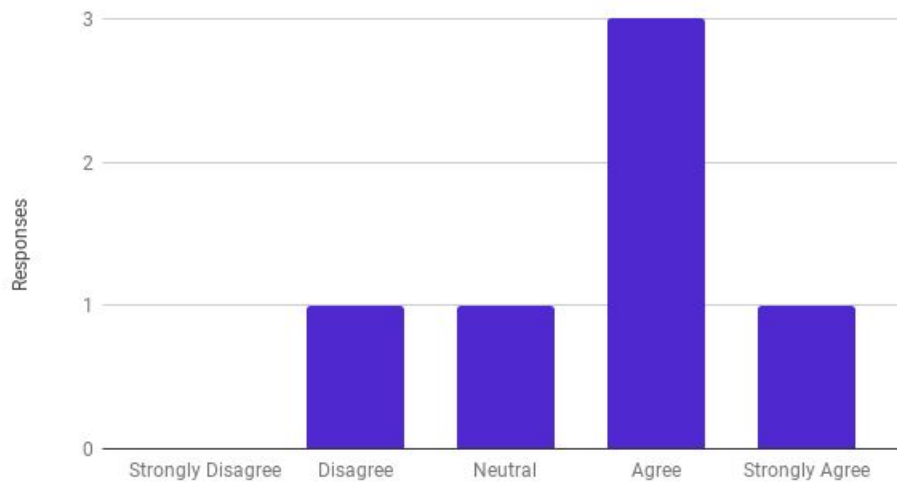Questionnaire Responses

Question 1

The layout of the app was easy to use

The majority of users found the app easy to use and were able to intuitively use the features and buttons.
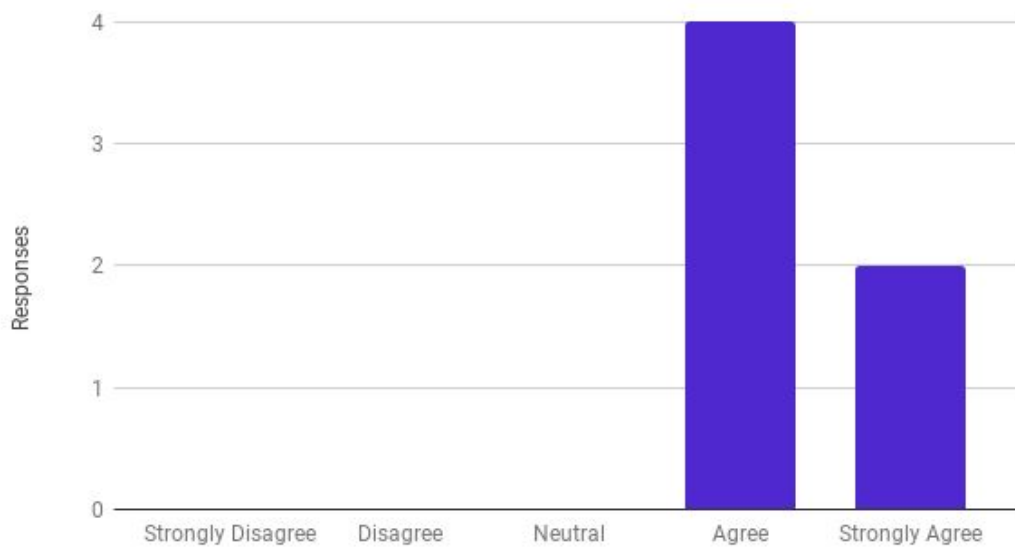
Question 2

You didn't have to stop and figure out how a feature worked

As you can see the majority of users were able to intuitively work out what each feature did. One user though struggled to find where the play button was located. We have subsequently moved it to a more prominent position on the screen.
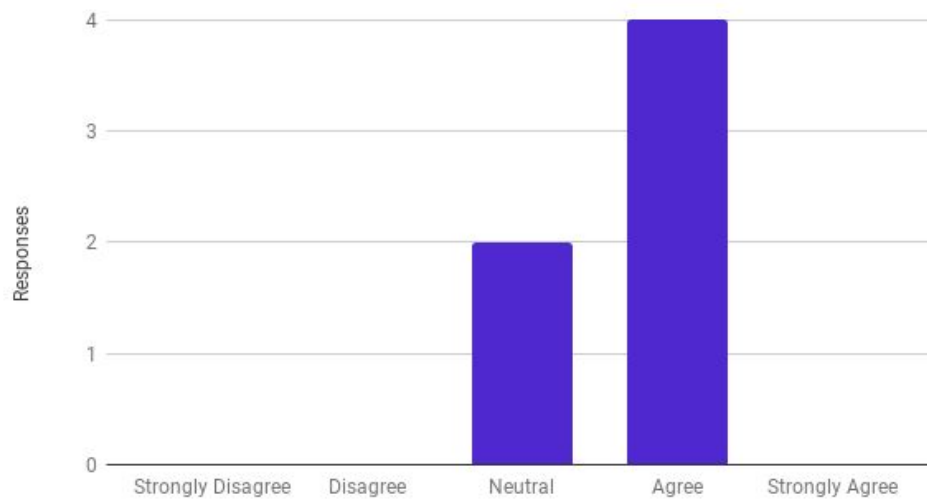
Question 3

I liked how the onion skinning was done automatically

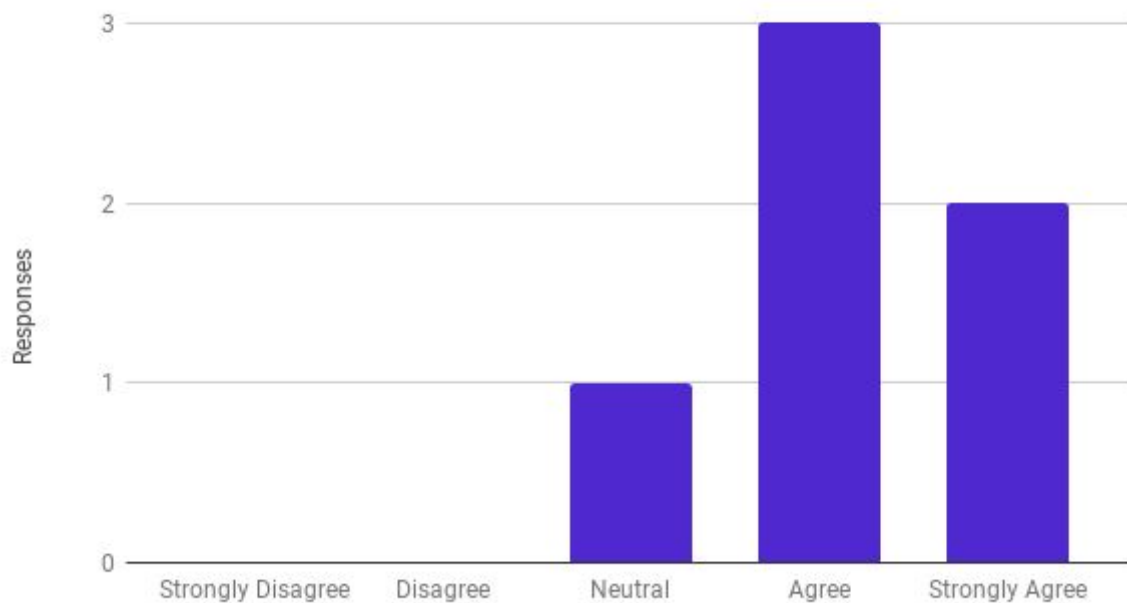All users were happy with the automatic nature of the onion skinning process.

Question 4

The app was smooth and fluid to use

Most users found it comfortable with the design of the app and where able to move fluidly between screens
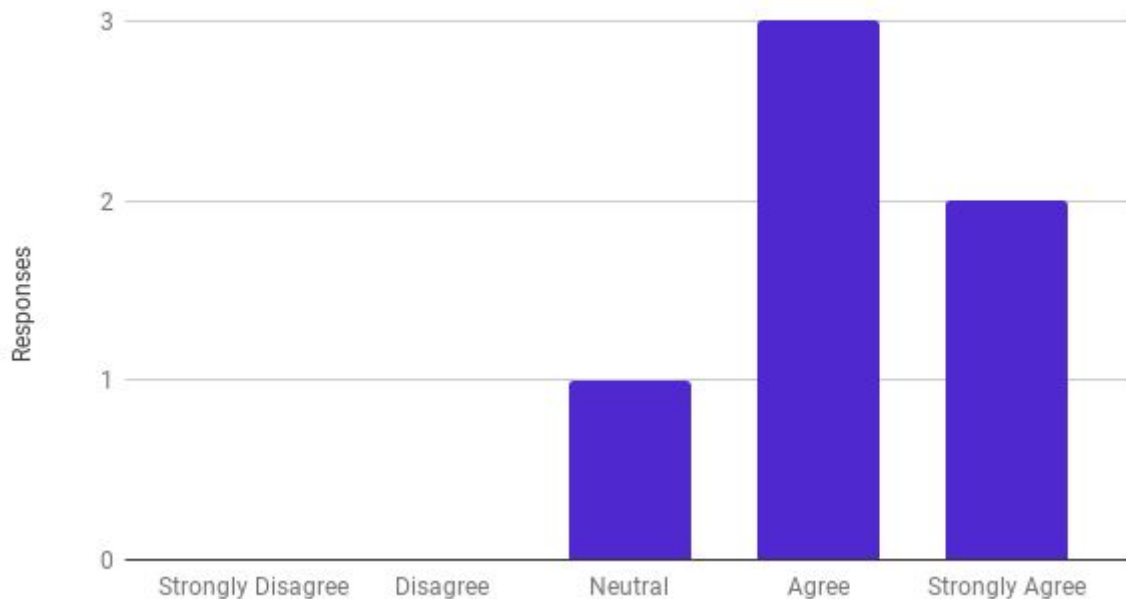
Question 5

I would use this app again

Almost all users would use the app again.

Question 6

I would recommend this app to a friend

Almost all users would recommend this app to a friend.

User Response Questions

Would you prefer an eraser feature to remove errors or did you like the undo button we had ?

No, I thought the undo button worked well

No the undo button was ok

Yes, I'm used to erasing objects rather than pushing a button

Yes, I enjoy the aspect of rubbing stuff out on the screen

No, I thought the undo button was easier to use than an eraser

I didn't see any difference between the two

Include both options

How did this animation app compare to any other similar apps you may have used ?

Better laid out than other drawing apps i've used.

Less clunky than others. Onion skinning feature was very nice and helpful.

Other apps allow you to drag and drop objects in the drawing which your app doesn't have, other than that I thought it was a lot easier and quicker to use than some others. Onion skinning very handy to have

I was very quickly able to start creating animations which I thought was better than other similar apps

I haven't used any other drawing apps, but liked the whole layout of this app. Liked that it wasn't just about drawing, you could see other people's animations as well

I enjoyed the section where I could see and rate other people's animations. That was quite different to other drawing apps. It created a bit of a "social media feel" to the app.

Which features were you impressed with the most ?

Onion Skinning

Public Animations page.

Rating the videos

Onion Skinning

Liked being able to get my animation rated by others

Onion Skinning

Are there any features you would have liked to have been included ?

Drag and drop objects in the drawing

Being able to add in objects like people or houses into the drawings
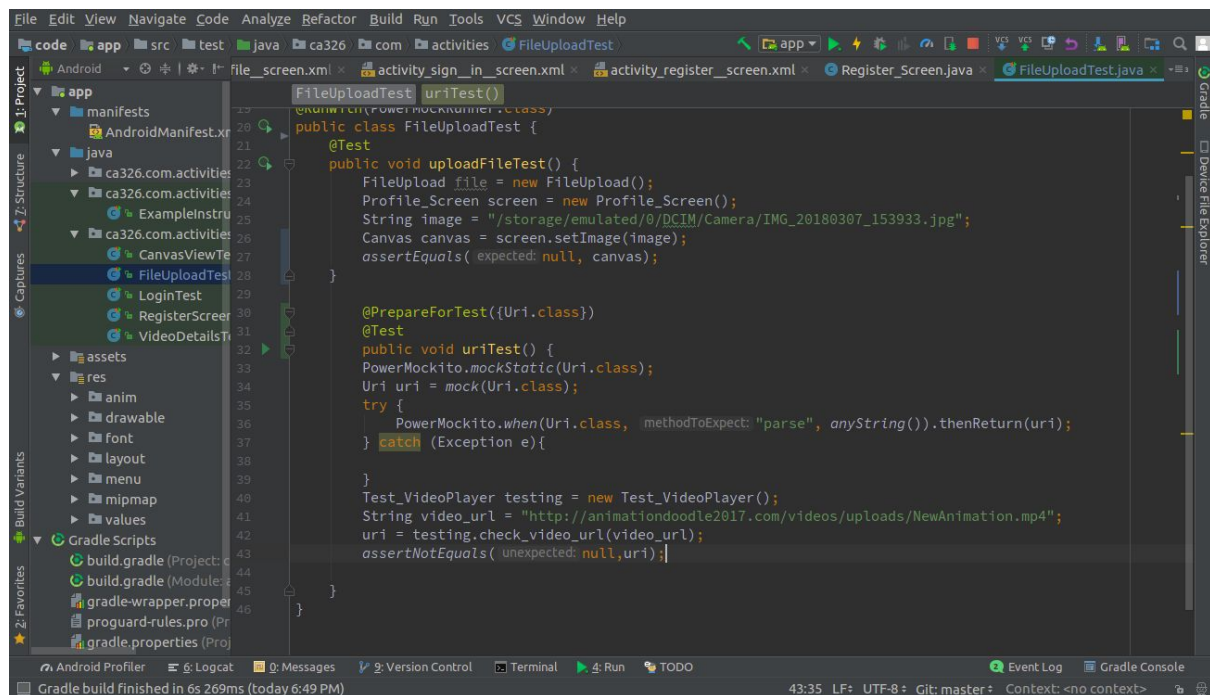
Being able to move objects with my fingers

Can't think of any

A feature that makes the paint brush turn charcoal

3 Unit Testing

Uri bug

During our unit testing we found an important bug related when our video url links were being stored in the database. Certain videos weren't playing properly due to Uri parsing issues.


Video rating bug

We also found a bug related to how the videos ratings were changing. When no rating took place our rating counter was still being incremented. This was reducing the average of the video even though no rating had been given. This was dramatically reducing the rating of the video, and we couldn't understand why until we had implemented the unit test for this feature. We then found and fixed the problem easily
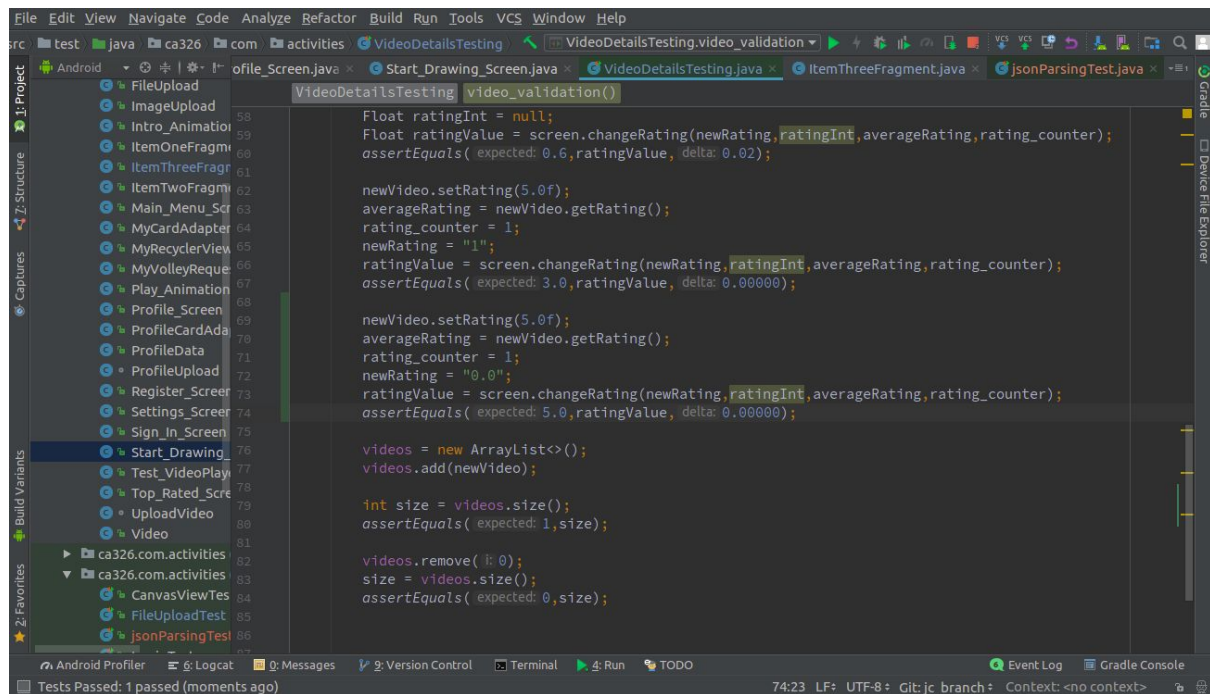
5 Heuristic Testing

We are using Schneiderman's 8 golden rules to help guide us through the design of our application.

Strive for consistency

We have ensured that the design and layout of our app remains consistent throughout. We have used consistent colouring throughout all screens in the app.

Offer informative feedback

We offer informative feedback to users when they input incorrect data in the login fields. As you can see in the pictures below, when a user inputs an incorrect email or password input. This helps the user to see where they are going wrong and to correct it.
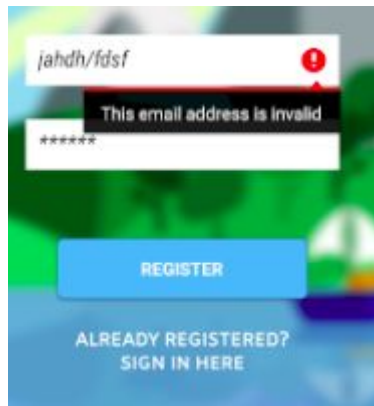
Design dialogs to yield closure

When a user completes a task the app relays the result of the command to the user. This enables the user with the confidence and knowledge that their task was completed. They are no longer wondering if their actions were received or not. An example of this can be seen when a user logs in , uploads an animation.