



BOTANY DOWNS
Secondary College®

Botany Downs Secondary College

AS91896 & 91897 - Use advanced techniques and processes to develop a digital technologies outcome (Computer Program)- 12 credits

Student Declaration:

I Steven Ros declare that this assessment is my own work, except where acknowledged appropriately (e.g., use of referencing). I declare that I composed the writing and/or translations in this assessment independently, using the tools and resources defined for use in this assessment. I am aware that any breach of this statement or identified academic misconduct will be followed up and may result in disciplinary action.

Signed:

Date: 05/05/2022

1. Getting started

What are you making? What is its purpose? Who are your target users?

I am going to make a coffee app that can be used in a coffee shop to have a more fun way of showing what is in their coffee and how their coffee is made. I want to show how much foam, milk and coffee is in their coffee and also let them pick what kind of coffee they want and also how many sugars they want in their coffee. My target audience is coffee drinkers mostly from 17-30 years of age.

What are the program requirements? (for example, name of the program you will write the code in, variables, functions, libraries etc)

- Tkinter
- Python
- functions
- classes

What project management and version control tools will you be using?

(link to Gantt chart and link to Trello)

The project management tools I am using is trello board and gantt chart so I can manage my codes properly and efficiently.

<https://trello.com/invite/b/uPQzxwWb/fff003ef1f36a080cf1e9b3a9ed2f229/coffee-app>



Development log

4/05/2022	This is the start of the planning stage I am thinking about making an app that can help the user make their coffee with knowing more about their coffee and knowing what's inside it, it could also be used to inform how to make it as well with how much milk, foam and coffee is in the coffee cup. I have started to make my Trello chart
5/05/2022	I have started to design what my app is going to look like on adobe XD and I am thinking of naming it Mocha
6/05/2022	I have come up with a simple design for my code that I think will look good with the colours I have picked

		
9/05/2022	I have decided to change my name from mocha to something more simple using my name like Ros Coffee	
10/05/2022	I have started to make my flowchart and I have been researching on how to make different pages in the code and I have found a video about using classes with make different pages with self.	
11/05/2022	I am having a problem with figuring out how to resize the pages, but I will figure it out soon	
12/05/2022	I found out I need to change the geometry of the classes and list it as self to make it an independent variable.	
13/05/2022	I am working on how to put an image into the front page but it just wont show up so I am thinking about just importing the font I used and use it as a button	
16/05/2022	I am struggling on chagnng the background colour since nothing is working.	
17/05/2022	I have found out that I needed to put in each class, a self.geometry to make it work for that one page, I cant change all of the pages at once	
19/05/2022	I have designed the front page of the program this means I have finished my first component of the app but I will have to find out how to make the buttons work in the next lesson	
20/05/2022	I have completed the look of the button and since there isn't an easy way to code in something transparent I had to make the buttons like this 	
23/05/2022	I am still struggling to figure out why the image I am trying to put in wont work and why it won't show	
24/05/2022	I am still searching on google how to put the image on but nothing is working	

26/05/2022	I am thinking about putting a person profile into my app so the person can have some personality to their coffee app with saying welcome ""
27/05/2022	I am trying to figure out how to add a user input space for my app but it is not going with the other pages.
30/05/2022	I am thinking about not needing this feature since it is only meant to be used one time so they wouldn't need to deal with logging in everytime they visit the place
31/05/2022	I have decided not to go with the personal profiles idea since it cannot be done easily with classes.
02/06/2022	I am still struggling with putting this image into my code since nothing is wanting to work.
03/06/2022	I am still trying to figure out why this iamge isn't working since I am doing everything I can to fix the problem but It wont work
7/06/2022	I have figured out why the image doesn't work, I needed to put self before importing the image into the code for the iamge to know where to go
9/06/2022	Now I am working on the finished page where the customer can press make it and it goes to a coffee cup 
10/06/2022	I have added buttons to go back on the end page and a button to restart
13/06/2022	Now I am working on the finishing up any other code I need to do
17/06/2022	I have finished up the whole code and finished up all the things I need to
20/06/2022	I added some text to the images to show how much is in the cup
21/06/2022	I made an easy way to know what page you are on when you click on it making the button of that page all caps

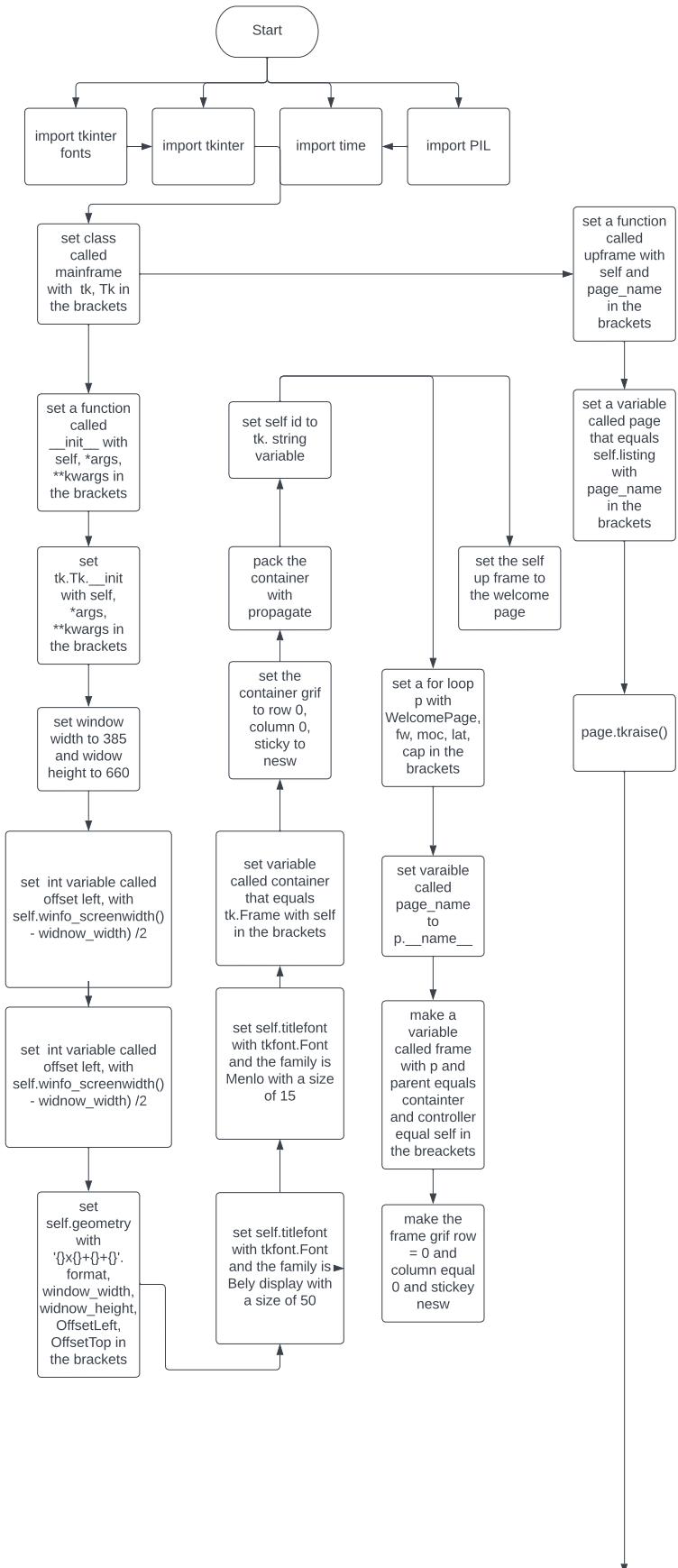
What relevant implications will you consider? and how do you plan to address them? (How you have addressed these can be in another table after you develop the outcome)

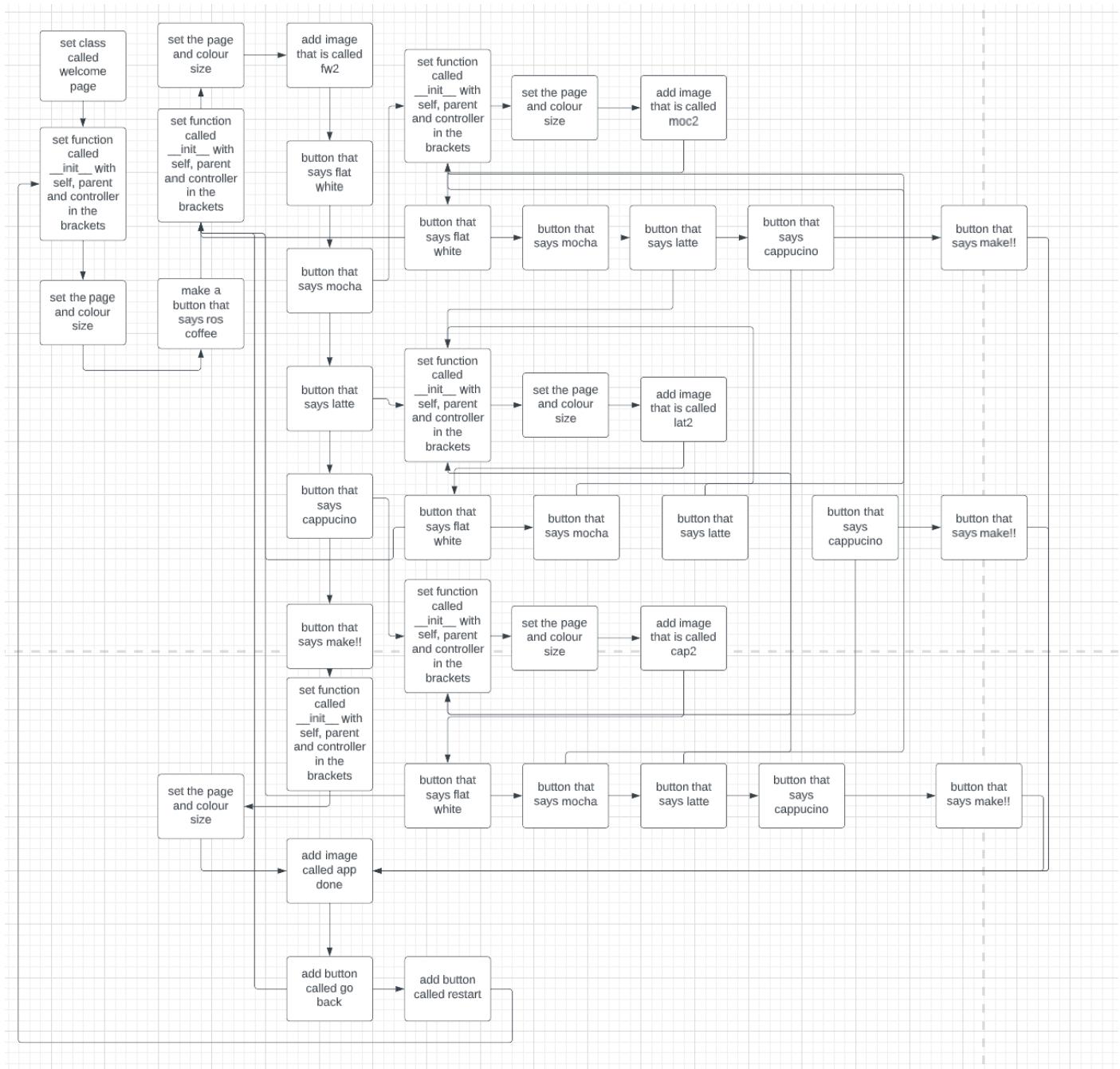
Relevant Implication	Describe	Explain
aesthetic	The looks of the app and how it looks like	I am trying not to make the app too full so I am only putting what is needed on the app. I am having a simple brown background so it is not too bright for the eyes and the font is simple and thin so it doesn't look that bad on the background but also stands out from it. The buttons are also very small and the drawing I drew for the cup is simple and easy to see
Functionality	Does the outcome that I want happen	The buttons work with classes so no matter what happens they stay separate so it wont damage one another. This means that I can individually program where which button goes.
Usability	How easy it Is to use	the app is simple to look through cuase there isn't that many things to see you just need to click some buttons. The image is also really easy to see there isn't notbning to do with the image, it is just information. There isn't anything that is supposed to be learnt in the app I am going to make it is

		very straight froward with how it works
Sustanability and future proofing	Can it be updated and used in the future	The code can be added to since it is just using classes and making new pages is really easy. Each page is its own code since it is in classes so if I change one page it wont change all of the other pages which mean I can add entirely new pages without effecting the other pages.
Health and safety	The users health and safety	Since my code is dealing with regal life drinks I want to make sure the users health and safety is ok, I don't want to give them too much caffeine so I make sure to show what is in their coffee so they know what they are putting into themselves

Decompose list of the components of your project:

(This might be a photo of a mind-map, a typed list, etc)





Wireframe



2. Developing for each component:

These steps will be repeated for each component of your outcome. **Copy and paste the table below** as many times as you need (3 to 6 times would be suitable).

Reminder: you must keep evidence of your trialling and testing, either in a separate document or in this document, under each component table. Evidence could include notes of user feedback, before and after screenshots, testing tables with annotated screenshots and/or screencastify videos.

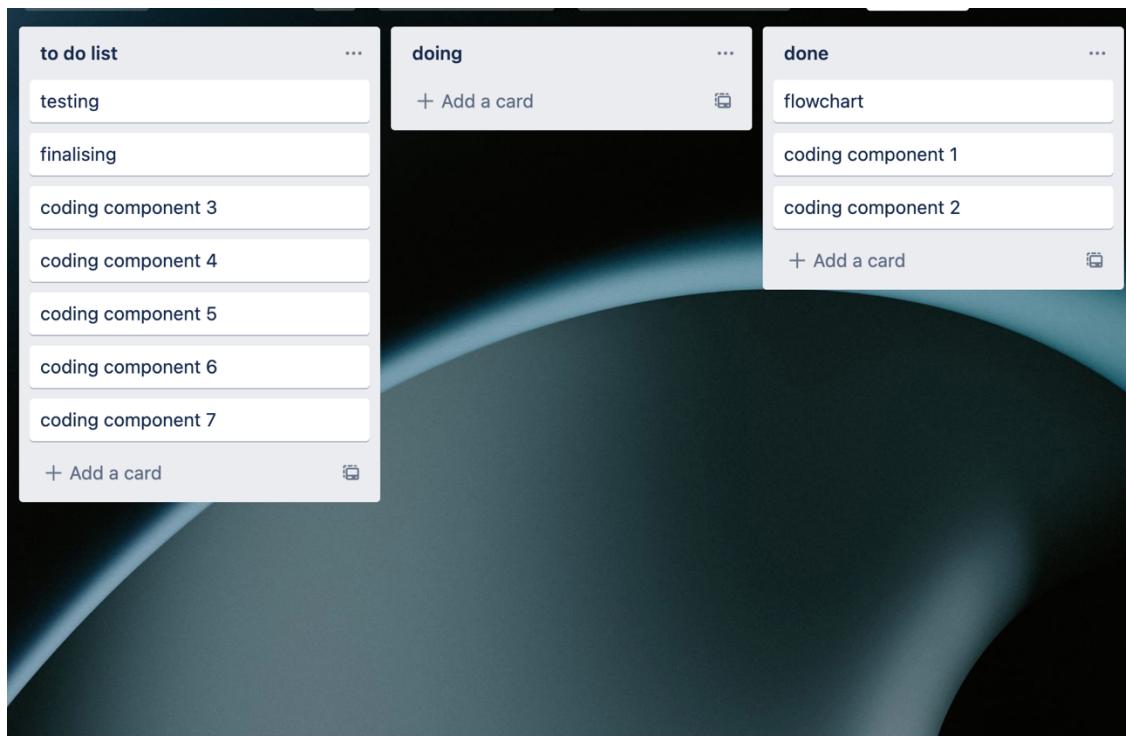
Component 1

What do I want to achieve?	To set up all of the pages so they can be accessed from one place easily using the classes.
Do I plan to trial alternative design or techniques? What are they?	I don't think there would be anything easier than using classes since it can be used really easily and added to really easily.
How did the trialling go? Which design or technique did I choose to use and why?	It went well, everytime I would ask for a page it brings it up.
How did the testing go? Were there any issues in the code? What was the feedback from users?	There wasn't any issues with the code and it pulled it up really fast without lag

Component 2

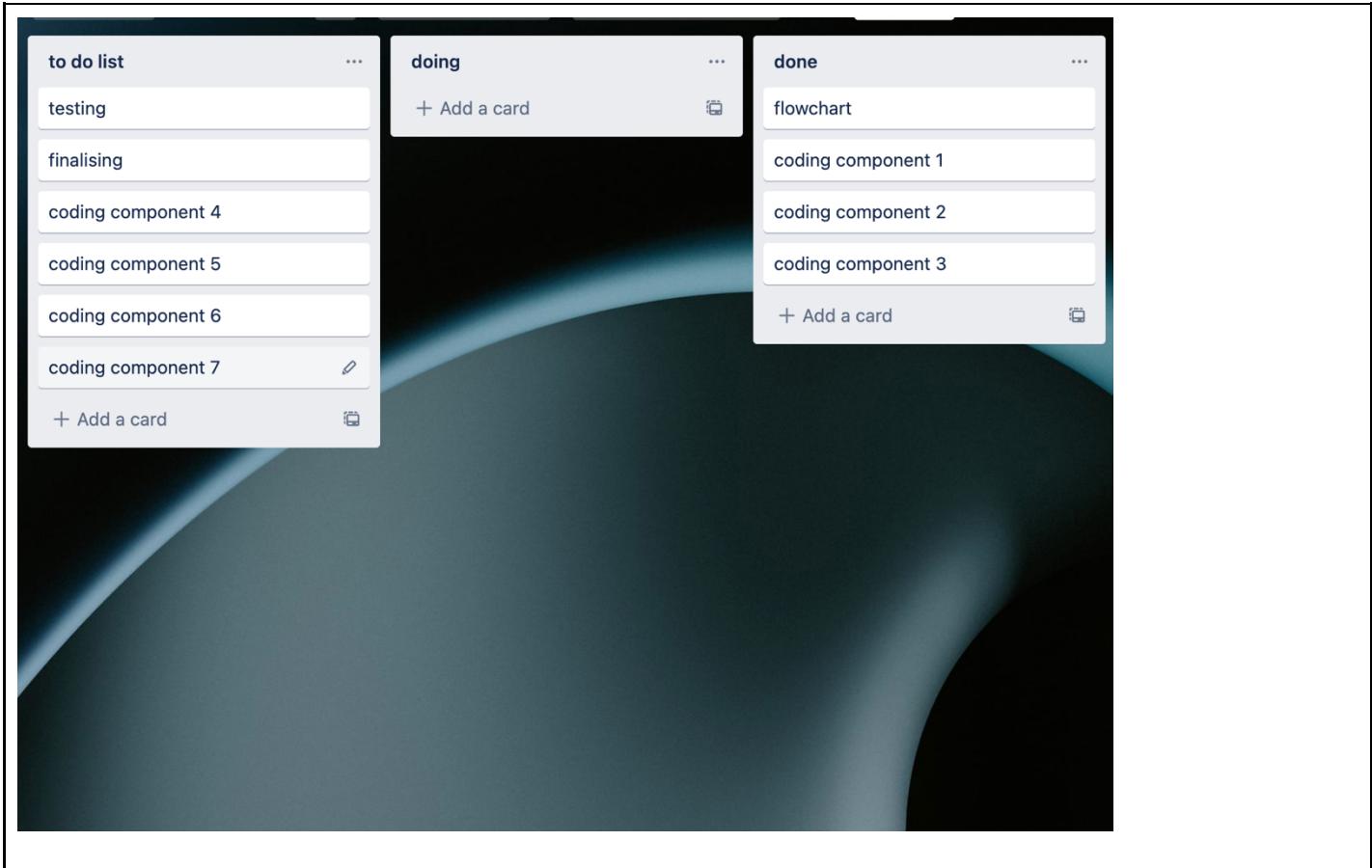
What do I want to achieve?	To click the logo and It for it to go to the coffee screen to select which coffee they want
Do I plan to trial alternative design or techniques? What are they?	I want the logo to be in the middle of the screen and make a button for the logo, use the font of the logo in the button and make the button the same colour as the background so I can just click on to it
How did the trialling go? Which design or technique did I choose to use and why?	Everytime I would open up my app I made sure it started with that starting screen first
How did the testing go? Were there any issues in the code? What was the feedback from users?	It worked everytime since I used container for the pages, I could make it always start with that starting page.

Update of my project management tool at this point (screenshot)



Component 3

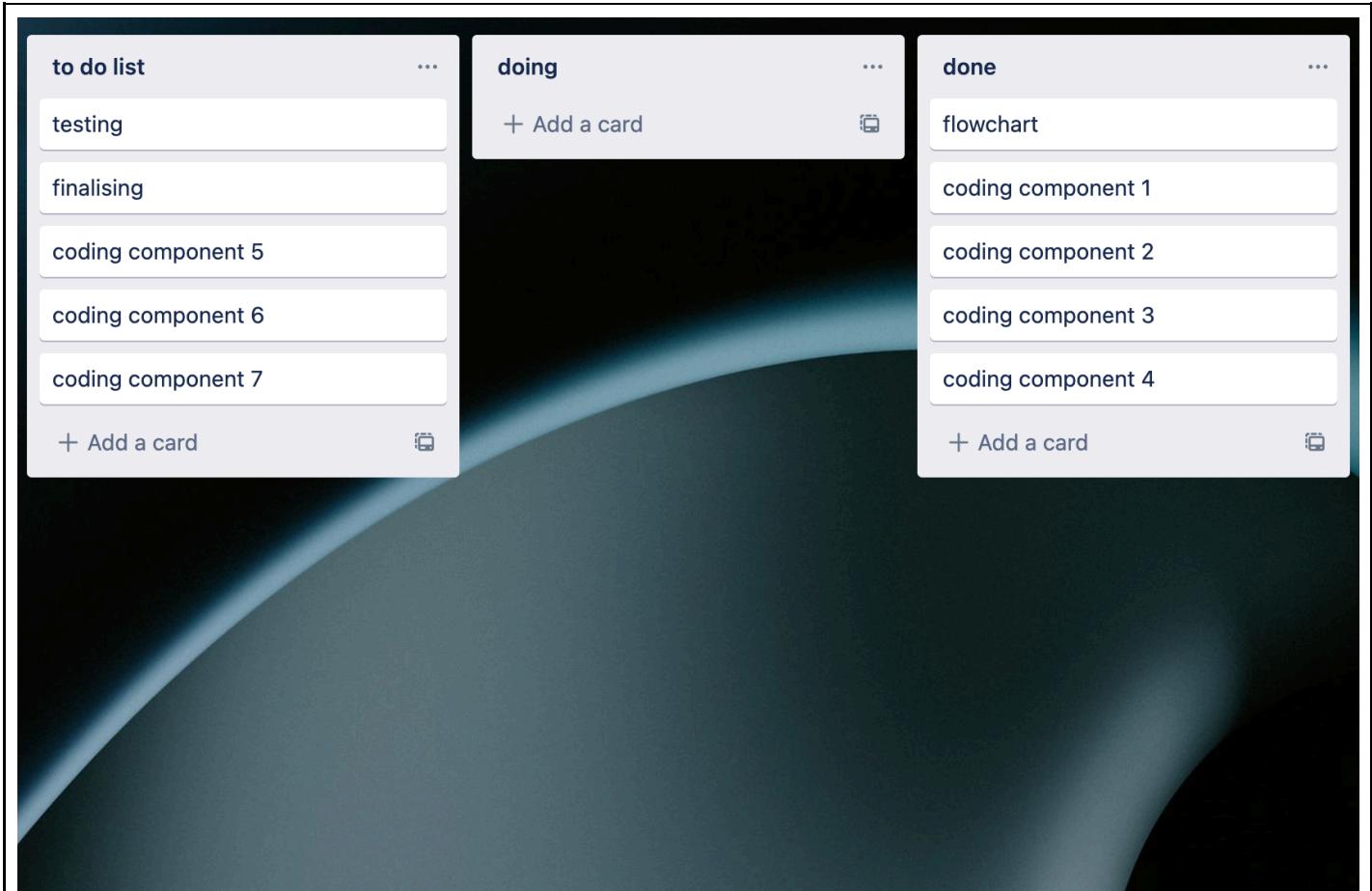
What do I want to achieve?	I want to make another page that is for the flat white, this is going to be the first page that the user comes on
Do I plan to trial alternative design or techniques? What are they?	There is a set design I already made before I made the code so I will be following that. I made it on XD and will be following what I did
How did the trialling go? Which design or technique did I choose to use and why?	I couldn't find out how to put an image into the code and everything I did didn't work, so I went on youtube and google and still nothing worked, so I started to mess around with the code alittle and I found out that I needed to put self infront of the import image code so it the photo would know where to put the code
How did the testing go? Were there any issues in the code? What was the feedback from users?	Everything worked perfectly after I found out how to put the image into the code, it went through to another page really smoothly



Update of my project management tool at this point (screenshot)

Component 4

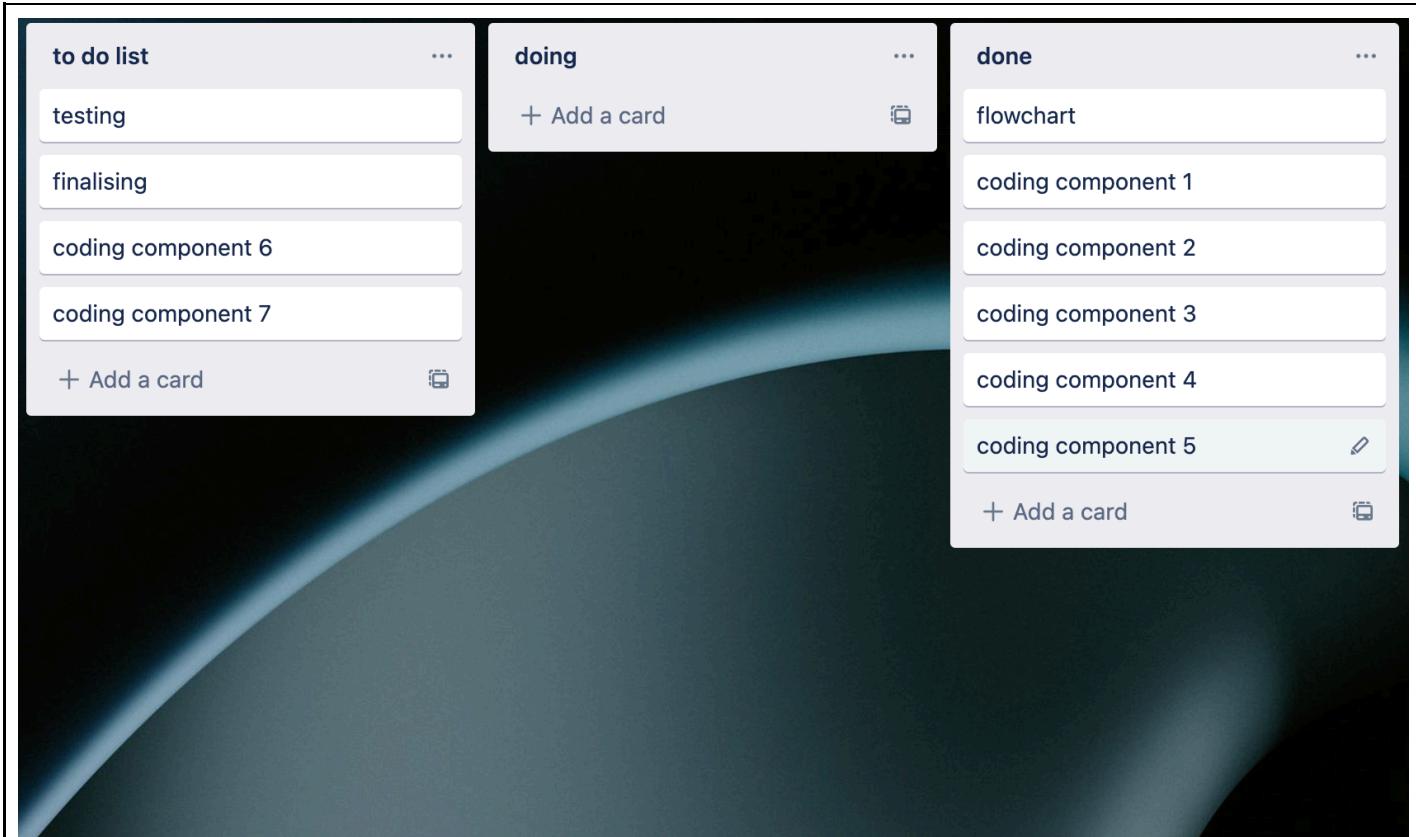
What do I want to achieve?	I want to make a page for the mocha aswell so it'll look like the flatwhite page
Do I plan to trial alternative design or techniques? What are they?	I want the whole app to look the same so it is continuous so I can just copy the same layout from the flatwhite page and use that
How did the trialling go? Which design or technique did I choose to use and why?	Since I already coded this clode and all I would need to change is the image, I just need to copy the same code and change the image, this went really well
How did the testing go? Were there any issues in the code? What was the feedback from users?	There isn't any testing I would need to do expe ct for all the buttons I would need to click on the page so it went well, there are no issues within the code.



Update of my project management tool at this point (screenshot)

Component 5

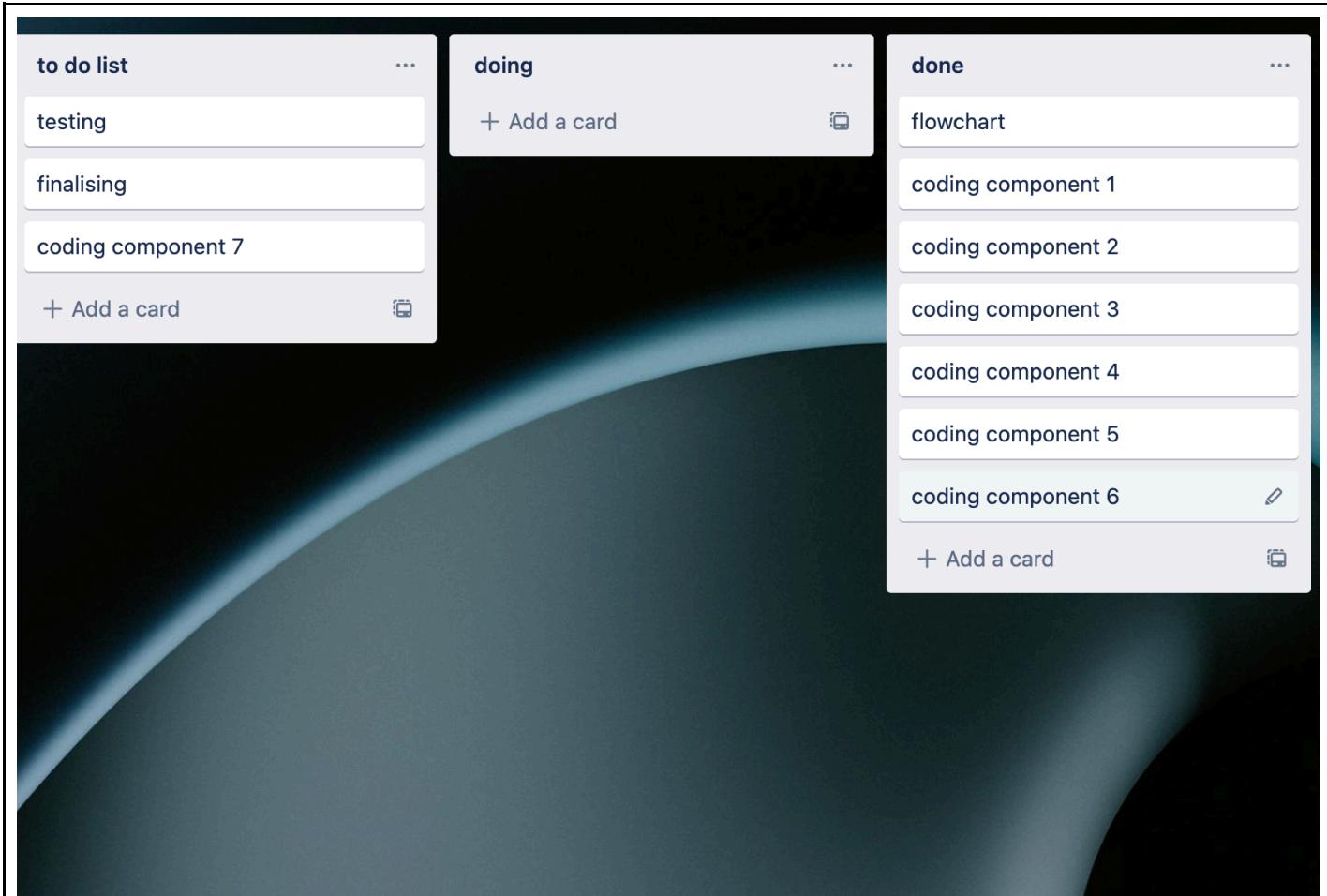
What do I want to achieve?	I want to make a page for the latte cup
Do I plan to trial alternative design or techniques? What are they?	This is similar to the other pages so I don't need to explain much
How did the trialling go? Which design or technique did I choose to use and why?	It's the copy of the other pages but with a different image
How did the testing go? Were there any issues in the code? What was the feedback from users?	It is the exact same as the page before, all the buttons worked and there are no other things I need to work on



Update of my project management tool at this point (screenshot)

Component 6

What do I want to achieve?	This is the last page which is the cappuccino page
Do I plan to trial alternative design or techniques? What are they?	It is the same as the other pages so I don't want it to change much
How did the trialling go? Which design or technique did I choose to use and why?	The trialling went fine since it is the same as the other pages I don't need to change it up much
How did the testing go? Were there any issues in the code? What was the feedback from users?	All the buttons worked fine and it went to all of the pages without any problems

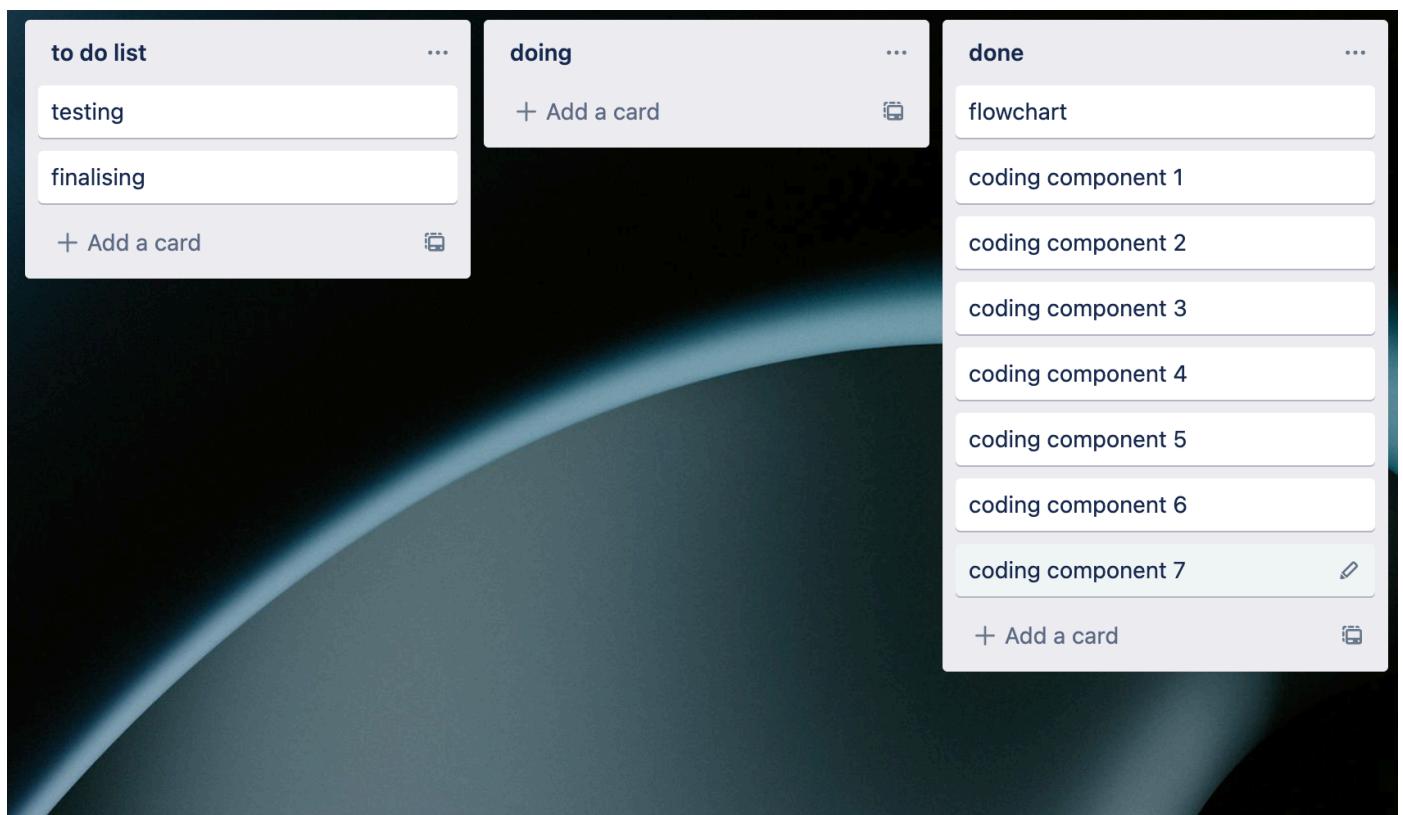


Update of my project management tool at this point (screenshot)

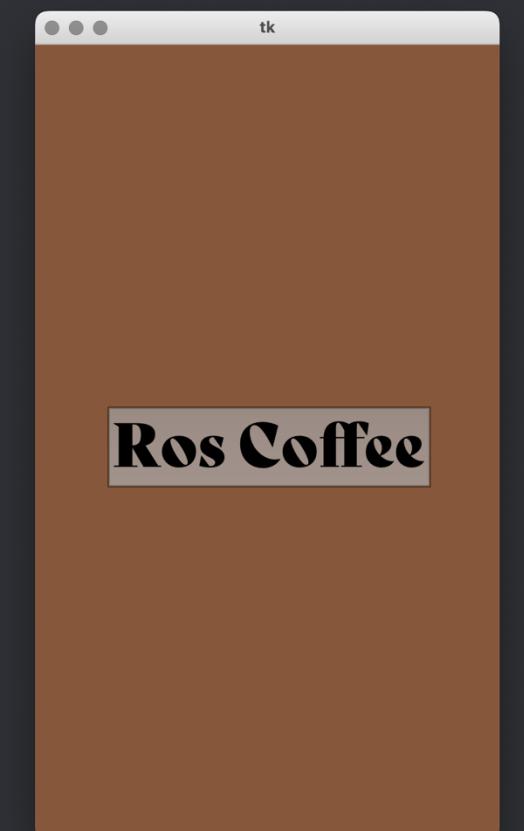
Component 7

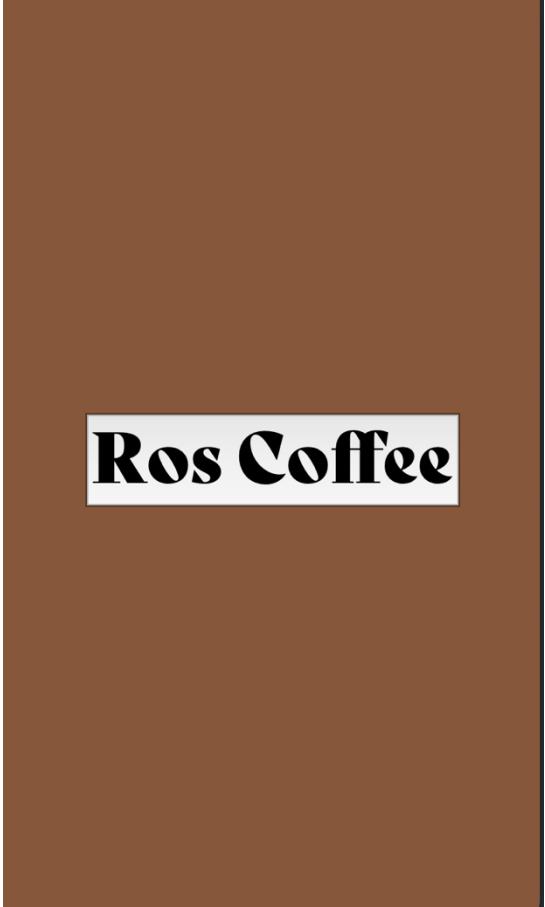
What do I want to achieve?	This is the last page, I want it to show a coffee cup showing that the coffee is being made aswell as 2 buttons, one to go back if the customer made a mistake and another one to restart for a new customer
Do I plan to trial alternative design or techniques? What are they?	I want it to have near the same layout as my other pages so I don't want to change the layout much, it is still going to be using classes like my other pages.
How did the trialling go? Which design or technique did I choose to use and why?	All of the buttons worked fine since I am just copying what I did with the other pages but with less buttons
How did the testing go? Were there any issues in the code? What was the feedback from	The testing went fine since it was the same as the other pages and the restart button[goes back to the start and the go back button goes back to the flatwhite page

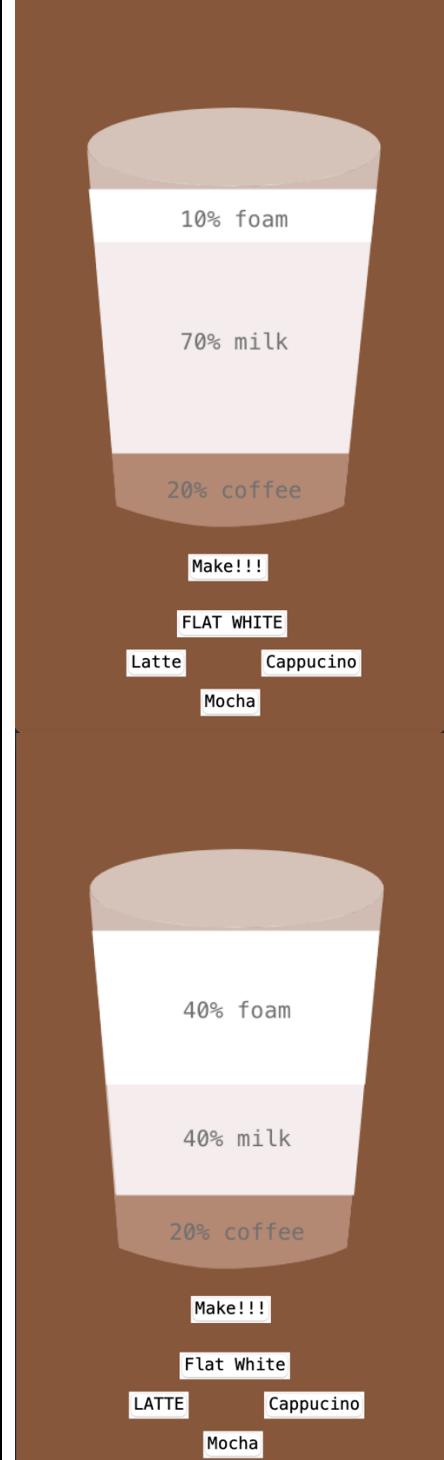
users?

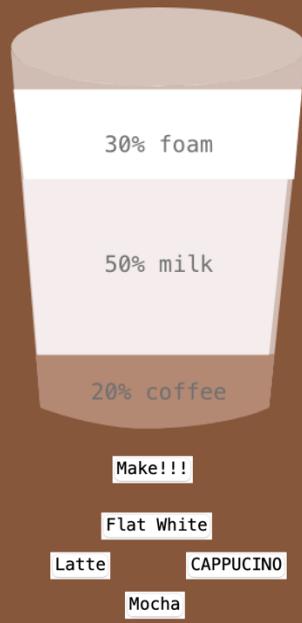
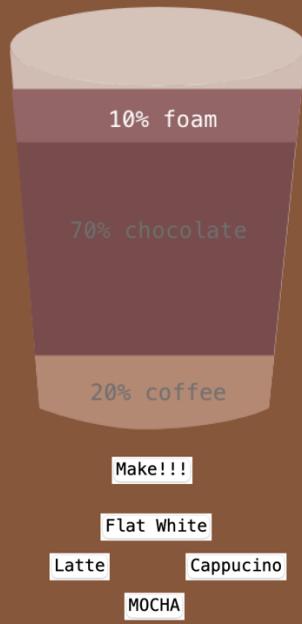


Update of my project management tool at this point (screenshot)

Component 1	
What was tested	Seeing if all the pages are in one container and I can switch through all of the different pages
expected	
	it is supposed to show up the the first page, since I made it always start with this page
boundary	Since I am using tkinter all the boundrys I can find are changing to each page since it can go infinitely
invalid	There isn't any invalid code that can be done
Next steps	To work on the second component which is the first page

Component 2	
What was tested	Going to the first page
expected	 <p>it is supposed to go to this page</p>
boundary	Since I am using tkinter all the boundrys I can find are changing to each page since it can go infinitely
invalid	Not clicking on anything
Next steps	To work on the first page which will be the flatwhite page

Component 3	
What was tested	For the button on the main page to go to the first page which should be the flatwhite page and for all of the buttons to go to each different page
expected	 <p>The diagram illustrates two coffee compositions:</p> <ul style="list-style-type: none"> Top Cup: Labeled "10% foam", "70% milk", and "20% coffee". Below the cup are buttons: "Make!!!", "FLAT WHITE", "Latte", "Cappuccino", and "Mocha". Bottom Cup: Labeled "40% foam", "40% milk", and "20% coffee". Below the cup are buttons: "Make!!!", "Flat White", "LATTE", "Cappuccino", and "Mocha".



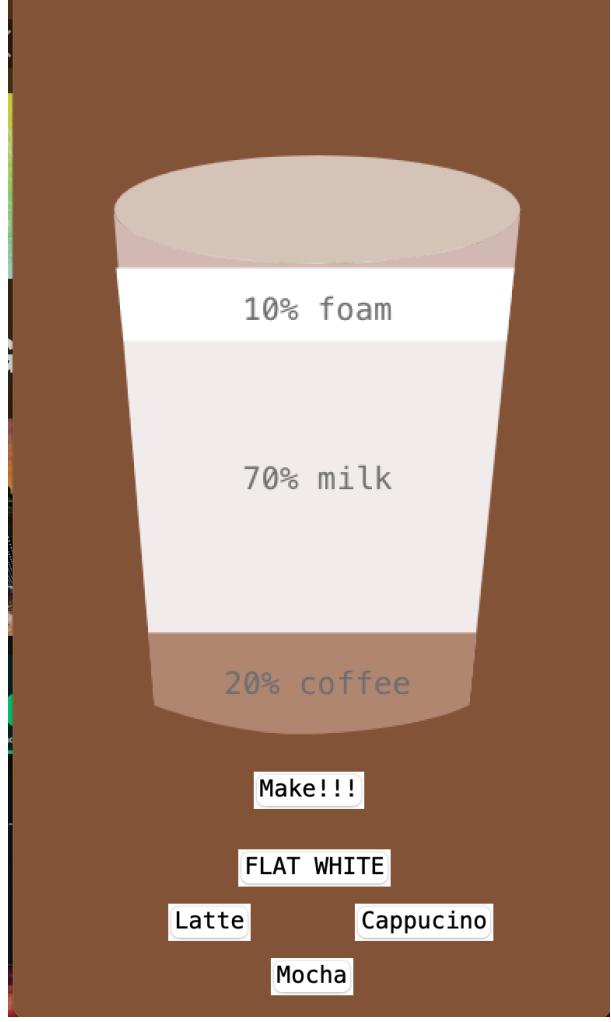
This is what is expected in the code, the first page so I can switch through the different pages

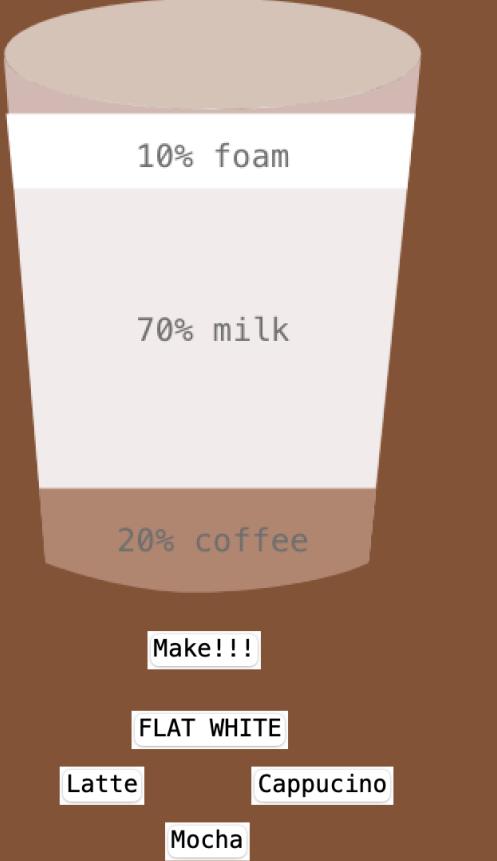
boundary	There are no boundrys since I can go through all of the pgaes infinitly
invalid	There wouldn't be any invalid things that happen since I am just shuffling through all the pages
Next steps	to add the final page to the make button

Component 4		
What was tested	For the make button to go to the final page which should be the finished coffee cup	
expected	 <p>This is the finished page and it is what it should go to when it is done</p>	
boundary	Doing nothing since this is the only page that the app can go to, and the buttons just restart the code which can go infinitely	
invalid	Doing nothing since this is the only page the app can go to	
Next steps	Nothing this is the end of my code	

3. Finishing up

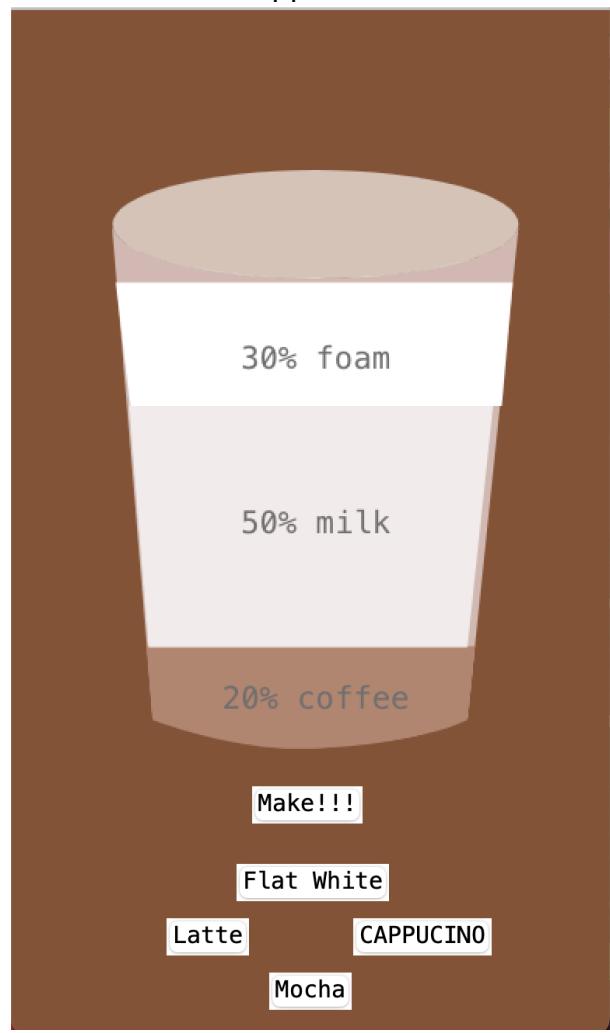
Final test data: *this is done when the entire program is completed*

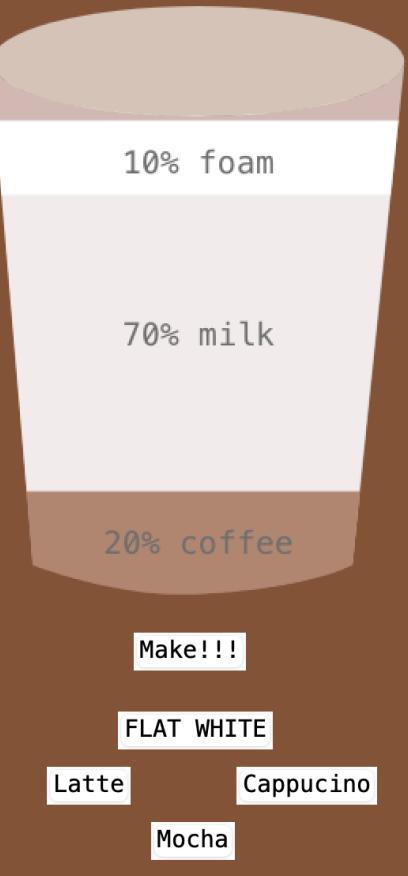
Sample Inputs	Expected Outputs	✓
 To click the ros coffee logo		✓

 <p>10% foam</p> <p>70% milk</p> <p>20% coffee</p> <p>Make!!!</p> <p>FLAT WHITE</p> <p>Latte Cappuccino</p> <p>Mocha</p>	<p>This is when I clicked latte</p>  <p>40% foam</p> <p>40% milk</p> <p>20% coffee</p> <p>Make!!!</p> <p>Flat White</p> <p>LATTE Cappucino</p> <p>Mocha</p>	<input checked="" type="checkbox"/>
<p>To click the buttons latte for it to go to the latte page, the button mocha and for it to go to the mocha page and to click the button cappuccino for it to go to the cappuccino page</p>	<p>This is when I clicked mocha</p>	



When I clicked cappuccino



 <p>10% foam</p> <p>70% milk</p> <p>20% coffee</p> <p>Make!!!</p> <p>FLAT WHITE</p> <p>Latte Cappuccino</p> <p>Mocha</p> <p>Click the make button</p>	 <p>restart?</p> <p>go back?</p> <p>It goes to this page</p>	✓

Add extra rows as needed.

Attach screenshots or videos that show your program works with the sample inputs above.

Relevant implications

For my whole app I wanted everything to be consistant so they all had the same background page and fonts that didn't miss match each other. I also wanted the codes to be something that could be added on to later making it a better app along the line. The app is something that doesn't need a leanring curve since it is already simple enough to understand and I want to be something that can be changed in the future to make it easier to understand the app even more.

How did planning assist in the development of a high-quality outcome?

It helped me spread out the work load to make sure I don't over load myself near the end of the assessment. It also helped me decide what I needed to do earlier in the development stages to ensure I don't have to rush the final product at the end.

How did testing and trialling assist in the development of a high-quality outcome?

It made me realise faults inside the code so I could work on them and make it better looking and easier to use. I had an example of this with the buttons seeing how they would look by trying different fonts until I found the font I wanted to use

4. Final checklist: page 6 of the assessment booklet