Buster Collins Year 3 Semester 1 Reflective Report



Contents

Introduction
Digital Winchester (Final Year Project)
Project Objectives
Tasks & Milestones4
Achievements
Challenges22
Use of my time
Dissertation23
Project Objectives
Tasks & Milestones23
Achievements
Challenges
Use of my time
Printed Portfolio
Project Objectives
Tasks & Milestones
Achievements43
Challenges43
Use of my time
New Website
Project Objectives
Tasks & Milestones51
Achievements53
Challenges53
Use of my time53
Reflective Report Gantt Chart54
References54
Bibliography58

Introduction

This semester had a slightly heavier workload than the previous semester and the last few years. There was a lot of stress and pressure riding on this final semester, but after talking with the lecturers and going through my feedback from the previous semester, I was able to identify my strengths and weaknesses. By working with the lecturers closely, I held out hope I will be able to complete this semester with a very good grade and without too much stress!

Digital Winchester (Final Year Project)

(ASIABIM, 2016) (GRAPHISOFT, 2021)

Project Objectives

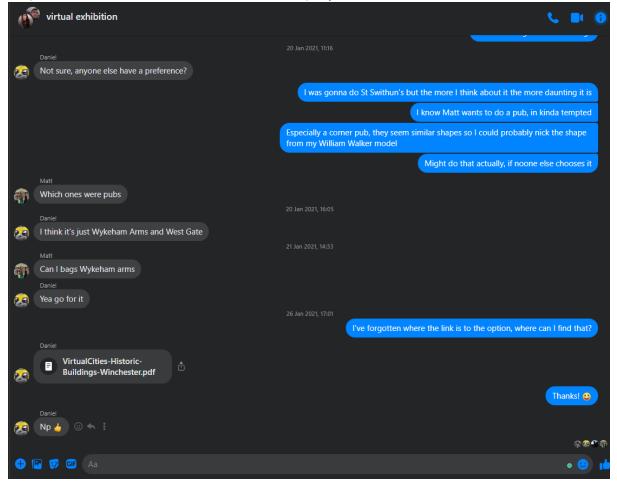
Unable to find work placements, or any solo client work, I was given the opportunity to work alongside multiple students on creating models of existing, famous buildings around Winchester. I was given a list of buildings that I could put my name to create.

		Commonwealth	
9 The Close or Cathedral Offices (see Wainscot Book for details)	Cathedral Close	Built 1661-4 on site of former house which was demolished by 1646. 1926-1931 used as Cathedral School	Built/2ndYr JW
10 The Close (see Wainscot Book for details)	Cathedral Close	Medieval 13 th Century Undercroft still exists. Used to be 'Old Bake- house' or 'Old Kitchen of the Pryory'. In 17 th Century was a Canon's house.	May be included with 9 The Close model from Joe Walsh
11 The Close (see Wainscot Book for details)	Cathedral Close	Medieval House for a Canon. Demolished in mid nineteenth century, garden allotted to 10 and 12 The Close	
12 The Close (see Wainscot Book for details)	Cathedral Close	Erected after the Restoration (1666?) on site of an earlier house for the 12 th Canon (Prebend) – original house was aligned with 10 and 11 The Close. Additional wing added to later house in 18 th century	
Wolvesey Palace		Medieval	
St Swithun upon Kings Gate		Medieval	
Guild Hall			
Wykeham Arms			
West Gate		Medieval	
Paternoster House			

I wanted to claim St Swithun upon Kings Gate, which no one seemed interested in doing, but after other students did not claim any tasks, except for Wykeham Arms, I decided I would complete the West Gate instead. As such, I would leave options open for other students, and only put my name down to West Gate, having every intention to move onto St Swithun upon Kings Gate, should nobody else claim the task.

Tasks & Milestones

All students deciding to work on the Digital Winchester project from our academic year decided to create a group chat on Facebook messenger, where we could help each other with our work, and claim projects.



We collectively thought that the West Gate task was referring to the West Gate pub, as such, I thought I would be suited to this task, as I had already modelled the

William Walker pub, another famous Winchester multi-layered corner pub, previously.



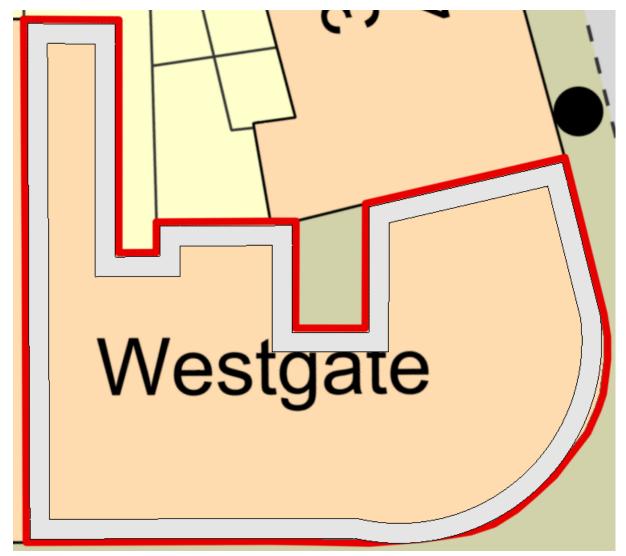
It was a very different shape to the West Gate pub, but shared some features, such as the middle floor extrusion, similar time period and different paints for different levels.

I asked Dr Debs Wilson, the lecturer coordinating this task, where I could find, if possible, a floor plan for the West Gate pub.

		buildings? I	,		iildings we're making for the Winch ıb, but couldn't find the measurem	-
? .	pub may have floor plans and	i might be abl made interna l elevations or	l/external changes which	would need plar od place to try.	uncil planning website - the nning permission, and therefore If you have trouble, let me e marking deadlines 🙂	
					26/01 19:37 Awesome I'll have a look and ge	et back to you!
? .	Deborah Wilson okay cool 🙄	26/01 19:40				
		up in Archi You were ri		he plan, thank y	ve any measurements on it! I'm no ou for pointing me in the right dire t let me find the plan!!	_

She suggested that I look at the Winchester City Council planning website (https://planningapps.winchester.gov.uk/online-

applications/applicationDetails.do?activeTab=documents&keyVal=Q15Z6NBPHTW0 0), where I found the floor plan that I was looking for, after a little digging.



(Winchester City Council, 2019)

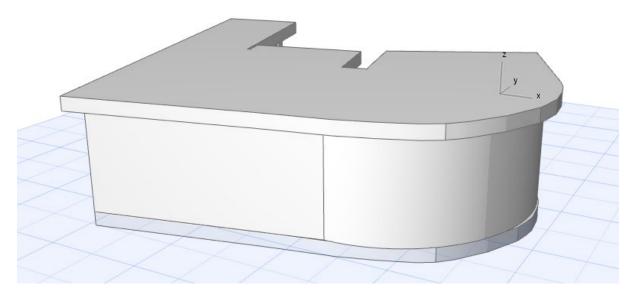
As I was not able to go to the site itself, as requested by the University to stay home for this semester due to COVID, I had to work on these models from the resources I could find at home, namely images from the DuckDuckGo (https://duckduckgo.com) search engine, along with some websites I found for a

good view of the site. I used this method for all of the subject models.



(stayinabpub, 2021)

I used this floor plan and image to create a scaled drawing of the West Gate pub in ArchiCAD, using a slab below, followed by tracing a wall around the outer sketch of the slab, as taught to us by our CAD lecturer, Vaneshrie Moodley.



Once I had gotten this far, I realised that when signing up to the task, the document said the West Gate was in the Medieval Era.

The prestigious Westgate Pub with Rooms sits in a commanding position at the top of historic Winchester high street, in the heart of the city and a short stroll from the fortified medieval gateway after which it was named. The perfect destination for a quiet drink, private party, a romantic dinner for two or a chilled weekend away.

(The Westgate, 2021)

I then realised that the pub was not the task in question on the document, and that it was referring to the stone archway next to the pub. However, I continued to complete the model to get some practice with ArchiCAD, and in case they did actually want the pub as a model.



I didn't have much of an issue with this model, as ArchiCAD is quite intuitive when it comes to create modern-looking buildings, even ones with large curves, and my skills from Revit were able to translate well into the new software. The only new features used were the additions of the decorative columns on the walls and the chimney tubes along the top. However, there are existing tools in ArchiCAD that allow for the creation of these things, with a simple click-to-place system, very similar to Revit's object placing tool. As such, this was quite easy to pick up, and with some fiddling I was able to include these parts to the model, which was the finishing touch.





After completing what I thought were the final renders, I noticed that some textures were missing from only some windows and doors.



I realised that these windows and doors had been cloned at some point, while I was working on the separate walls for the ground floor and other floors. I believe this problem came while I was copying the shape of the wall from the ground floor onto the first floor and above, however I am still unsure. I was easily able to fix this problem by carefully selecting the overlapping assets and deleting them from the model, leaving behind the correct, textured assets, completing the model.

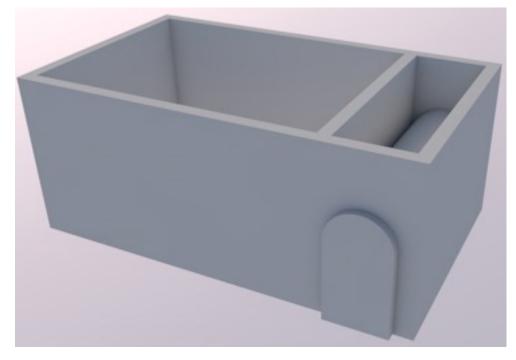


After completing the pub, I then moved on to create the medieval West Gate itself:

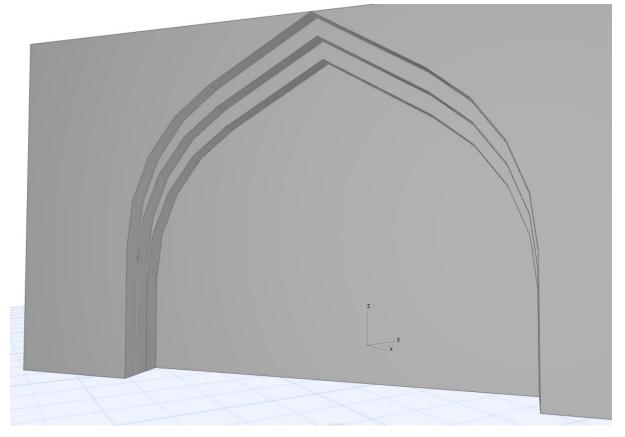


For this, I was using the images I had found here: <u>https://www.tripadvisor.co.uk/Attraction_Review-g186300-d261023-Reviews-</u> <u>Westgate_Museum-</u> <u>Winchester_Hampshire_England.html#photos;aggregationId=101&albumid=101&filte</u>

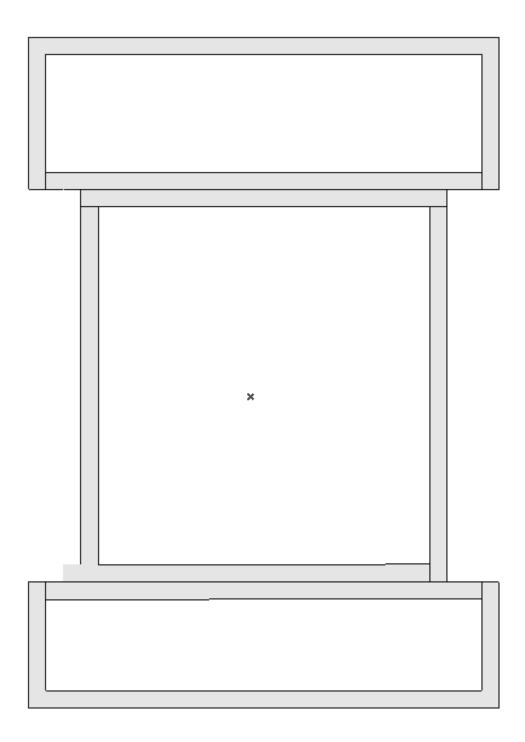
<u>r=7&ff=294266088</u> for reference. (TripAdvisor, 2011)

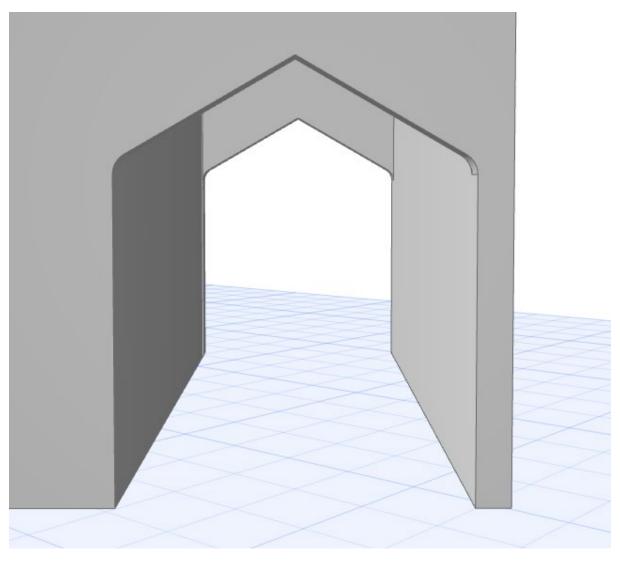


My initial idea was to use subtraction to create the arched doorways through wall. However, I soon found that the door tool had an in-built empty door frame setting, that I could resize to create huge archways.



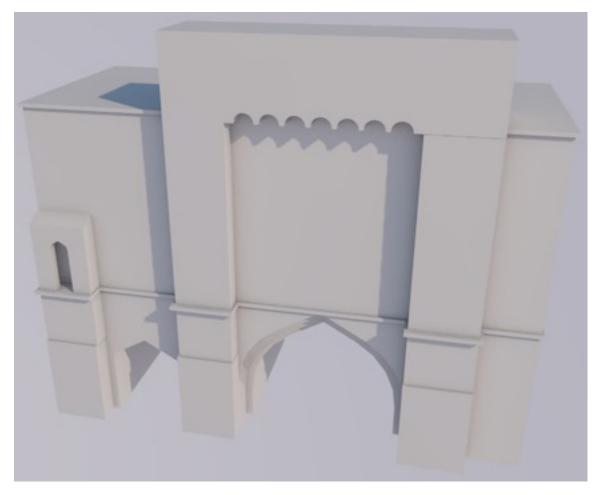
Using this knowledge, I could create walls moving inwards in increments, and create smaller doorways on each, to the same effect found on the existing building.





This method worked for the smaller archway, however, it would not produce the exact same look as the existing building, even though the preview images of the doorway showed it looking exactly how I would expect it to. I could not create this door perfectly, and as such, had to move on, getting it looking as close to as possible, which the client was happy with me doing.

I didn't have much issue with this model, primarily using the same tools as I used for the pub. I used a few new tools, such as resizing cut-out doorways, and changing the size of roofs, for the little slate tops of the arches around the side, as well as some subtraction on the roof block. (YouTube, 2012) Which was all just a case of selflearning, using trial and error from the tools that I already knew, with an official ArchiCAD YouTube tutorial for when I got really stuck. This video was not completely relevant, but it allowed me to find and solve the minor problem of converting the box to a morph, once I realised what to look out for.

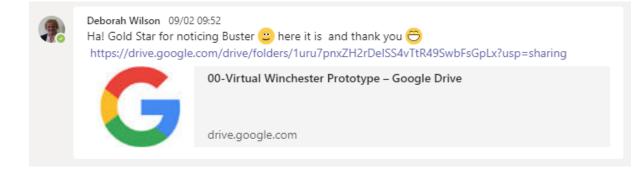


After sending these models to Dr Debs Wilson, I was able to get them signed off and was then asked if I could create another building for the project. I agreed, and began work on St Swithun upon King's Gate, after uploading the models to the designated Google Drive folder, as requested.



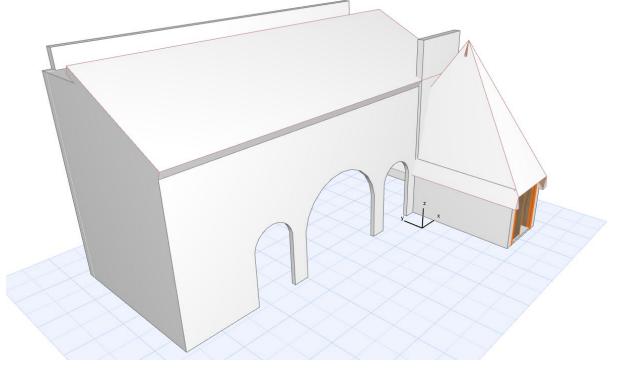
Deborah Wilson 08/02 11:30

Wow Buster!! they look brilliant, well done - how did you find ArchiCAD as opposed to Revit? I will set up a Google Drive folder and share the link with you, these are so good, thank you Buster. Did you fancy starting/doing another building?



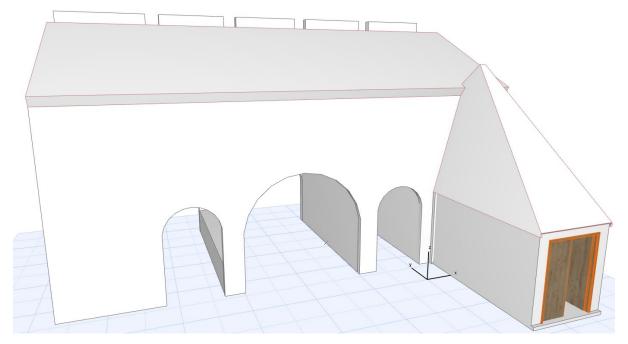
I was able to create St. Swithun upon King's Gate very easily, using the same methods learned from the two previous models.

The only new issue I has with this model, was the usage of the roofing.

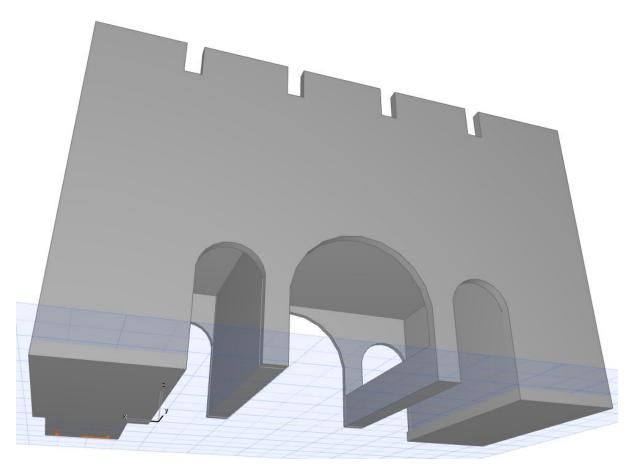


Firstly, I had to learn how to properly produce a single plane roof. Which was relatively easy to learn, thanks to some simple online tutorials. (GRAPHISOFT, 2018;YouTube, 2018)

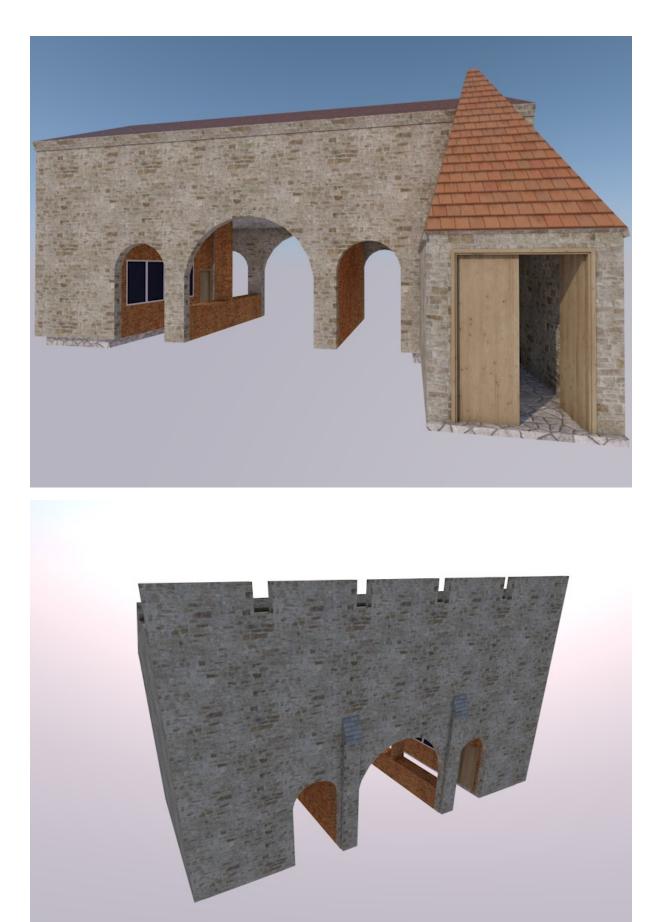
As you can also see in the image, the roof of the hut outside also caused many problems, such as clipping along the connecting point on the tip and some dodgy extrusion around the overhand. I was able to fix these problems by playing around with the angle and extrusion height, to make it look how the building should look, as well as looking much more clean.



For the different heights along the back wall, to create the archer slits, I simply used different walls and increased the height of the few I would need to, creating the effect.



This produced the final result, as seen on my final renders.



I then uploaded the models, including their textures, to the Google Drive.

Eal	Idara
F O	luers

Medieval West Gate St. Swithun upon King's G
Shared with me > 00-Virtual Winchester Prototype > Building Assets Completed > St. Swithun upon King's Gate 👻
Xou're running out of storage (96%). Soon you won't be able to upload new files to Drive and send or receive emails in Gmail.
Folders
St Swithun upon King's Ga
Files
St Swithun upon King's Ga

Achievements

The greatest achievement of this module was learning and understanding the usage of ArchiCAD, using it to create the models with detail and textures all in one place, and allowing this model to be exported to a website As an fbx with the textures and detail attached, all through one software.

Challenges

As it was a new software, the project took slightly longer than expected, and came with many technical drawbacks. However, these problems were often fixed using trial and error, which better helped me understand the program. Whenever I got really stuck, I was able to find help online, and would contact my peers if necessary!

000 0111	,											
Digital Winchester	1	2	3	4	5	6	7	8	9	10	11	12
Choosing a task												
Planning the task												
Looking for references												
Creating the models												
Submitting models to client												
Alterations												
Submission												

Use of my time

Dissertation

Breakout rooms to better our questions. Changing my interview questions and survey questions on the fly as responses show stuff I have overlooked.

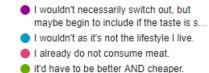
Project Objectives

After a successful literature review last semester, I needed to continue the momentum into the methodology and primary research analysis this semester. I began by planning my questions and who I would interview for the semester, deciding to get a very early start, to make sure I get a chance to interview absolutely everyone. I thought I would start by interviewing an executive of MeaTech and then use this knowledge to interview others.

Tasks & Milestones

After writing up my questions for the interview, we had a lecture on how to conduct ourselves in an interview, and how to better phrase our questions. With this information, I was able to tweak my questions and produce different questions, tailored to each person I would interview. I sent multiple emails to MeaTech but received no response and so had to begin interviews with less knowledge, but still able to question people on their views of what Bio-printed meat could bring about. Realising interviews would leave my knowledge quite limited, I created a survey for a more varied response from anyone. I had my questions checked by my lecturers before sending the survey, but after the first few responses came through with unhelpful results, I quickly realised I had overlooked some wording on my questions and answers.





(N/A was not an option, before I added it, based on the couple responses given saying this.)

24%

I also received some messages from respondents to the survey, who gave me some really helpful tips to change before I got more responses!

 Post Reply: [Academic] Thoughts on bio-printed meat (All welcome)

 Image: the state of the state

I changed the survey based on this feedback, which allowed me to get much better results when the majority of responses came through. Some responses also helped me change my interview questions, as it allowed me to think more strategically about what extra information I would like to gather.

- Do you believe bio-printed meat would be better environmentally, ethically and economically than traditional meat? What about compared to cultured meat? Do you think it could have an impact on people's mental health? Both workers and consumers?

- Do you think that bioprinted meat could bring about more jobs to counterbalance the loss of jobs if this replaces the traditional meat industry?

A little later, I decided it would be interesting to find the ages of respondents, however, I added this very later and only received a couple of results to this question. However, this was still helpful. I then wrote my methodology including the altered questions and survey.

I found it hard to find the time to interview people during the pandemic, as I could not arrange to see people face-to-face, and was concerned with how I would record the meetings. I was able to interview my parents, as my mother is pescatarian and my father would never consider cutting out meat. For face-to-face interviews I was able to use the Otter AI app and website. (Otter, 2021) I was unsure how to progress with online interviews. The plan is to record the interview on OBS (Jim, 2016) and import the audio file into Otter for the transcript, which I can then use to quote in my research analysis.

I decided to have my first online interview with my older sister. I was not planning on interviewing my sister, for fear of it being subjective and biased, however, when the topic came up about my dissertation, she seemed very interested in it, with strong views for both arguments. As someone I could trust, that has completed a University Dissertation previously, I thought she could help me solve my dilemma of how I would record the interviews online. My sister suggested she uses the Otter app to record her talking, while I ask her the questions through the medium of Zoom (Zoom, 2011), so that she receives the accurate transcript from the interview, which could then be send to me, to be used. I agreed this was the most accurate way to record the interviews. However, it was more effort than I had hoped to put the interviewee through when conducting the interview.

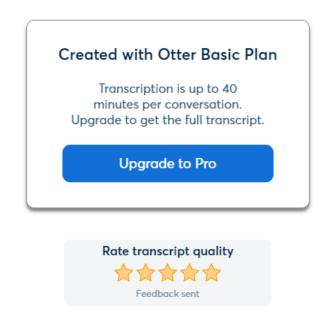
A couple of respondents preferred me to record the interview and create my own transcript. I was able to record these interviews as planned, recording with OBS (Jim, 2016) and use my free uploads into Otter to create a transcript from the recording.

The downside to this was that the uploaded transcript was still cut off at the 40 minutes mark,



Speaker 1 39:55

Yeah, it works the same way as a 3d printer. Where instead of using a 3d printer running on plastic, it will be a separate bio printer. Typically, for protein fibre and stuff, I would match it into the physical amount of MSU. Like shapes the lattice structures, they actually, yes, actually build up into what you like wherever you can imagine, actually make a piece of steak or bacon, exactly how it would feel and exactly how it would look. Bye for now, and then I'll say like what I was saying earlier, munching on your beef. Now, it wouldn't be possible with cultured meat, it would be like we've coated me it would just be all gooey, then it would have to process have to have that in a sausage with this take a bit longer. And it would have to go for a couple more stages, but it would get to the point where it looks and has the same texture and therefore should have exactly the same taste as any other type of meat the problem?



To get around this I had to use a second free upload, which I now knew would get cut off at the 40-minute mark. I was able able to use adobe premiere pro to speed up the recording to fit within 40 minutes so that I could use the transcript in its entirety.

			message.txt			Ŧ	
	Clip Speed / Duration	×					
T.	Speed: 112.01 % . Duration: 00:40:00:00 -] 6					
:00:00	Reverse Speed Maintain Audio Pitch Ripple Edit, Shifting Trailing Clips Time Interpolation: Frame Sampling OK Cancel		00:20:00:00	00:25:00:00	00:30:00:00	00:35:00:00	00:40:00:00 00:45:
	lested Sequence 01 [V]		ا محمد معاور الم البريد . المحمد بعادر الم البريد . المحمد المعادر الم البريد .	ыл худ - с - х ВесПайн Ir - год БесПайн	and frank the state of the second s	ر سُر کرد. دیکھ کھک دیکھ دیکھ دیکھ دیکھ کے ایک دیکھ کھک دیکھ کھک دیکھ کھک دیکھ کھ دیکھ دی	hMarrasha aharrasha hIMarrasha aharrasha NIMarrash

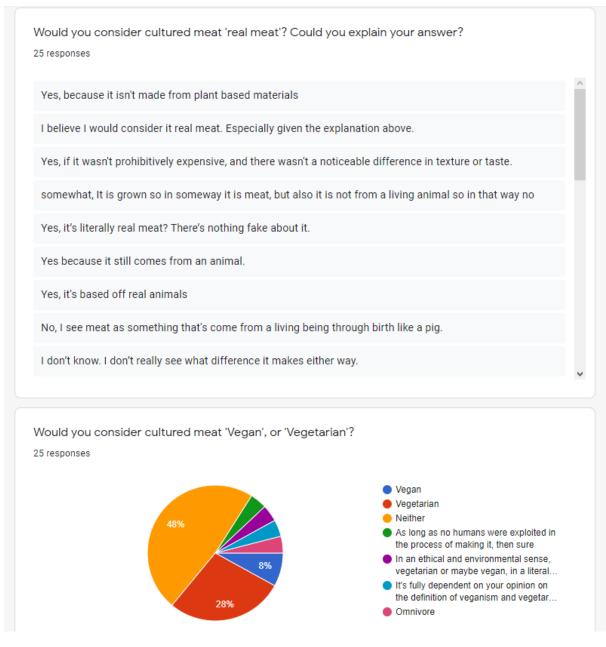
This allowed me to comfortably attain a transcript for all of my interviews.

The next talk was to begin writing my Results & Analysis section. To begin, I had to move all of my transcripts over to my dissertation, which I chose to upload in bulk into my appendix.

Keith Collins' I	nterview (Meat Eater, 53)	
	Answer	Interpretation
Do you have a drive to eat meat? What is it that deters you from veganism and vegetarianism?	Nothing deters me from vegan or vegetarianism. I don't think I eat a lot of animal product. I have a very varied diet. So, some days I'm vegan some days I'm vegetarian. Some days I fish. Some days I eat meat. So, I have a fgity galgaged diet. So, the question was, could I reduce my yeah meat intake. Yeah. Yes, I could reduce it. But I like the taste of meat.	The taste of meat is too enjoyable to pass up.
Have you heard anything about cultured meat?	l don'i know a lot about cultured meat. No.	No.
How does cultured meat make you feel? How would you say it is different than traditional meat?	Not that good: Because it's not what I'm used to. I haven't tried it. But obviously, traditionally, I know the origin of it, and I know what it should look fike. I know what it should taste like. I know the texture and smell before it's cooked. The smell during cooking smell after cooking. So I I am aware of what normal meet, how norma meet cook the different types of normal meet. Whereas, the meat that you're talking about, I got no knowledge of it, so it would be completely new to me.	Negative connotations, due to lack of knowledge. Different because there's no knowledge of it.
Does the idea of cultured meat bring about any positivity?	Not really, no	No positivity at all

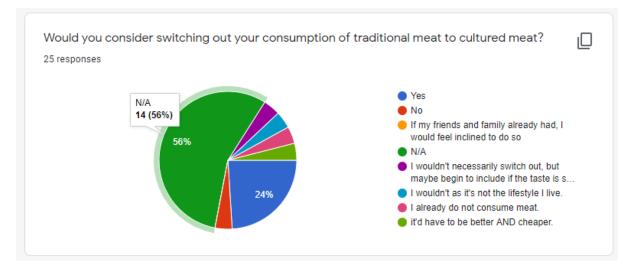
This took a lot longer than I was expecting it to, as the automatically generated transcript made a lot of mistakes, which I then had to manually rectify for all of the interviews. After writing up the response to each question, I also summarised what was said so that it would be easier to analyse later. I included this interpretation alongside the respondents' own answer so that readers could fully understand how I interpreted each of my responses, in the eventuality that an academic reading my dissertation would disagree with an interpretation I had made.

I then planned the analysis of my quantitative data from my survey.



For this, I intended to cross-tabulate the responses for each question with what dietary group the respondents were a part of. I did not know how to do this to begin with, as I had not planned a question asking if the respondents were vegan, vegetarian, etc.

I did, however, contain a question asking if respondents would switch their consumption of meat to bio-printed meat. Those that did not consume meat responded with "N/A", so I was able to get an idea of the numbers.



However, this did not show me what respondents answered what question for the written responses, so I was not able to effectively cross-tabulate my data without guessing, which I was not prepared to do.

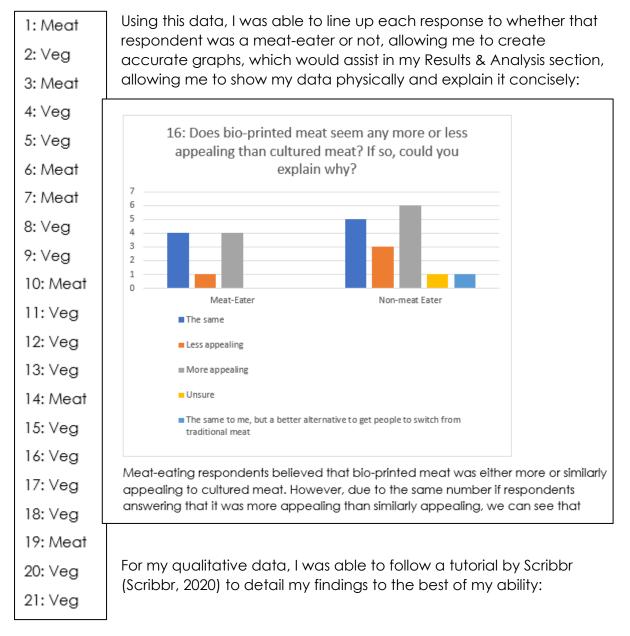
I first decided that I would look through my data to find where people had mentioned being vegetarian and vegan and make a note of the non-meat eaters, until I found 15 respondents.

No, I'm vegan.			
No, I'm vegetarian			

However, I found this idea was time-consuming and was not guaranteed to find all of the results. Luckily, I was told that google forms had a feature to find which respondent answered what.

Would you consider switching out your to cultured meat? View options 🗸	consumption of traditional meat
• N/A	
14 ungraded responses	()
Add feedback	/ 0
• Yes	
nses	/ 0
Response 3	/ 0
Response 6	
Response 7	
Response 14	
Response 19	/ 0
Response 23	
I wouldn't necessarily switch out, but maybe begin to in	clude if the taste is simular

As such, I was able to determine which respondents were non-meat eaters and which were, which I made a note of:



My opening question for non-meat-eating interviewees asked why they decided to change their diet to no longer include meat. Respondents answered that they felt uncomfortable with the quantity of meat produced. Knowing that every morsel of meat used to be alive was sickening and unappetising, coupled with watching videos showing the negatives of meat (an example given was 'The Most Important Speech You Will Ever Hear' (Yourofsky, 2010)) was the inspiration to stop consuming meat.

For meat-eaters, I attempted to understand if there was a drive to eat meat. Respondents enjoy the taste of meat and find less 'interest' and 'variety' in vegetarian alternatives. There was an agreement that there is a pressure from society, as it is so commonplace and well-advertised. Respondents stated that we are taught a healthy diet consists of meat, however, nobody said that they themselves believe that Meat is healthy, in and of itself. There were a couple of examples given of society controlling this narrative, pointing out that in some parts of

I then continued to use the Scribbr tutorials to help me finish writing my discussion and conclusion.

To complete my Abstract I found a research article I had used as part of my secondary research and followed their information and template to write my abstract as academically as possible:

Exploring consumers' attitude towards cultured meat in Italy.

M. Mancini, F. Antonioli · Published 2019 · Business, Medicine · Meat science

Cultured meat may be a novel food that would overcome the limits of conventional meat production. This paper assesses the willingness to try, buy and pay for cultured meat among a sample of Italian consumers, unveiling the attitudes towards an engineered food on the part of a consumer oriented in favour of the Mediterranean diet. A survey was conducted by submitting a questionnaire to 525 Italian consumers. Consumers showed higher agreement with the statements concerning positive externalities than the intrinsic characteristics of cultured meat, and more than half of the respondents (54%) stated that they would be willing to try cultured meat. The profile for a potential consumer of cultured meat was young, highly educated, somewhat familiar with cultured meat, a meat consumer and willing to reduce meat consumption. However, the survey findings may be biased by the unavailability of the product on the market and the information provided to the respondents focused on the potential benefits of cultured meat. Collapse

(Mancini & Antonioli, 2019)

I then sent this finished draft off to Dr Debs Wilson for some final adjustments before submission, while there was still time.

Achievements

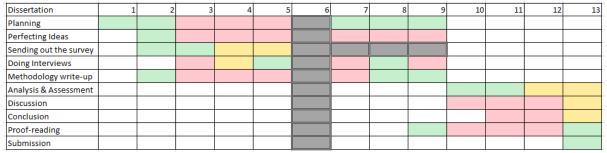
Against the odds, I was able to force myself out of a funk that was preventing me from completing my work, which allowed me to complete my first draft. Able to

keep up the momentum, I was able to complete all of my work and gain feedback within time, to allow me to submit my best work for the final submission.

Challenges

Once the semester ended, I felt as though I had a lot more work to complete than I was comfortable with, causing me to put myself under an extreme amount of stress, which affected my sleeping schedule, made me completely restless, having trouble sleeping and made me extremely agitated. Once I came to the conclusion that these issues were likely due to the stress of the work, I dedicated as much time as possible to finishing my work, so that I could comfortably rest, while I had a second pair of eyes reading through my draft. This would allow me to return to the work fresh, able to rectify my mistakes with a clear head.

This was very soon after returning to University, where I thought it would be a better place to focus my attention. However, living with other students that don't clean up their mess, play loud music while trying to work, and talk very loudly until very late at night, made it difficult to focus on work and did not help with my stress. I was able to find ways to distance myself from distraction using my own loud music and by communicating with my household.



Use of my time

Printed Portfolio

Project Objectives

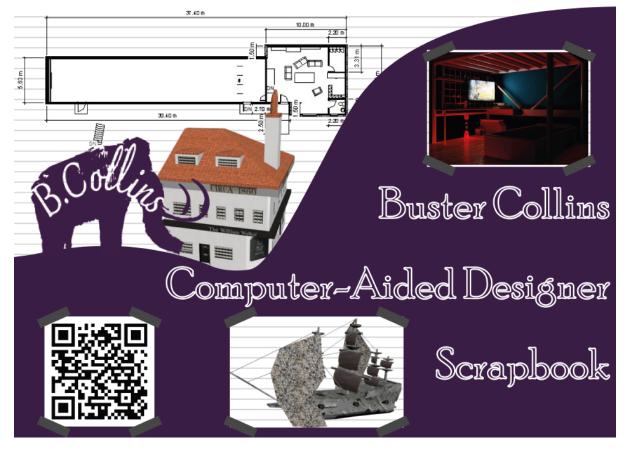
For this project, I was tasked with creating a print portfolio, that I could physically print and send to the lecturers to be marked, as well as use it in the future for potential employers.

This module had a confusing start, as many of us were unsure what we were being tasked with doing. There was mention of creating an e-pub, or interactive pdf document, as well as the printed portfolio, but we had previously been told that this module would be on perfecting our online portfolio. However, after a few weeks, we settled in and found out that the module was to produce all of these things, and be

directed in each, creating an overarching brand for all of our portfolios, to make ourselves look, and present ourselves, as professionally as possible.

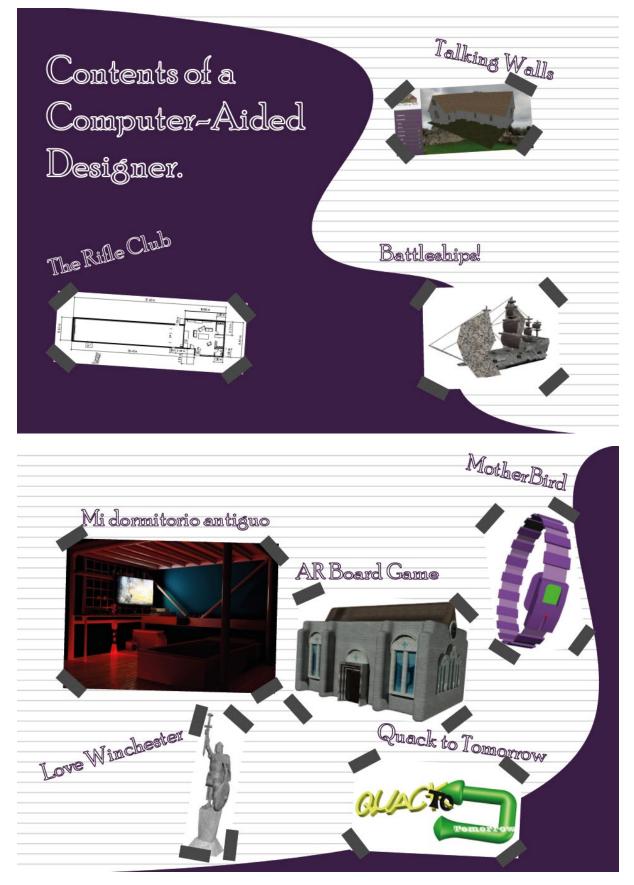
Tasks & Milestones

I began right away, creating a cover for my print portfolio.

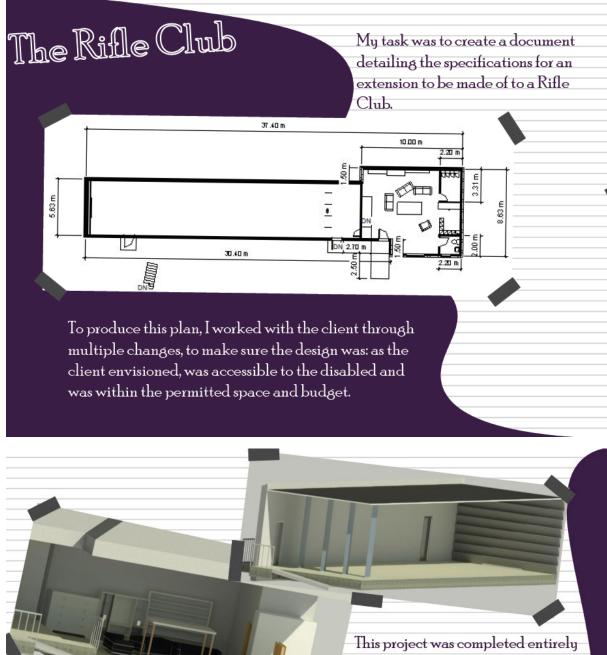


I aimed to have my cover show a similar theme as my website, staying true to my brand, while also being interesting and fun to look at, but equally informative.

Soon after this design, we were given a brief In-Design tutorial by our lecturer, Ian Lock, who suggested we used In-Design to produce our portfolio. He taught us how to effectively use Master Pages to produce an on-going style throughout our document.



I created this background (only the lined paper effect and swirly purple lines) in Illustrator, to be used as a continual theme throughout my portfolio:



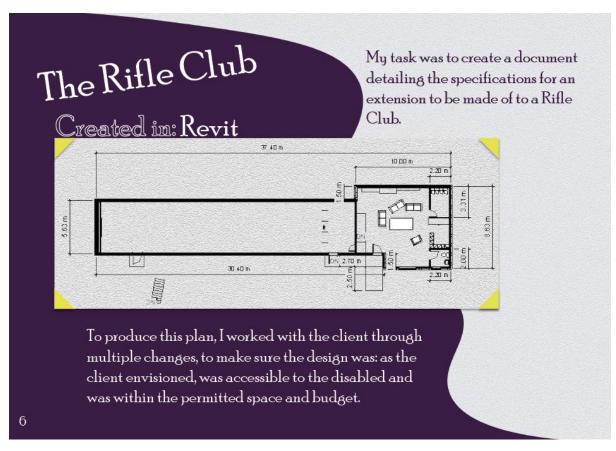
in Revit, as such, I used Revit's own renderer to produce some 3D Visualisations of the building to be sent to the client with a titleblock.

I kept to the scrapbook theme throughout the entire portfolio, keeping a lined paper effect and tape throughout, for a fun effect. However, I asked some friends and my

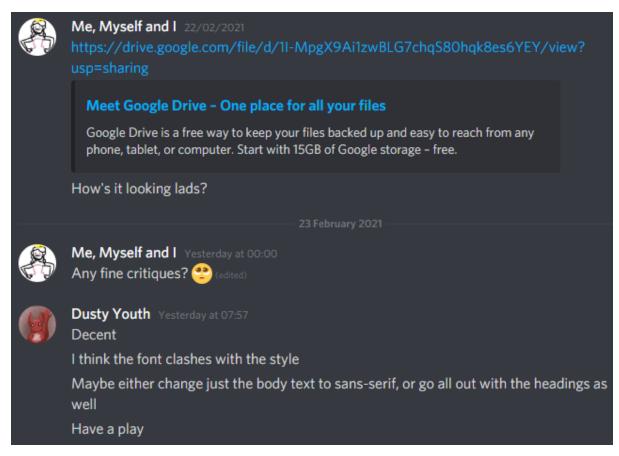
lecturer, Ian Lock, what they thought, and they came back with similar criticisms about it being slightly too unprofessional and a bit too detailed in certain, unimportant areas, distracting from the work itself.

(Cal	lan Lock 18/02 12:06
6	Hi again Buster, this is certainly a fun design. In essence the scrapbook style is quirky, shows some
	personality and stops it looking too corporate (not that that's a bad thing of course). There is a good
	range of projects on show, and it sounds as though you have a few more to add too. I'll give you
	some feedback as if I was grading it, but I can rarely look at other people's design content (as
	opposed to project content) without thinking if I would do it like that myself, but I try hard not
	to. There are a few things I would recommend, but you don't have to agree or make changes if you
	feel strongly that they work for you, but design work is very subjective, and there are some rules and
	principles that designers tend to keep in mind. So, in no particular order, I appreciate that you are
	going for a scrapbook feel, but I don't feel that the lines in the background are helping at all, sorry!
	The emphasis should be on the the projects and your descriptions, but I find the lines a distraction.
	You could try making them very feint? How about a textured paper effect subtly in the background
	instead. For example, on page 8 the statue on the right hand side would look far more effective if on
	a transparent background, meaning you can see the background behind it (and not tilting if I'm
	honest, statues don't tilt unless being pulled over by protesters). The lines just highlight that it is a
	squared-up image with a white background. Be careful of using stroked or outlined type: that
	process can distort letter shapes and when smaller can be harder to read and you may run into print
	legibility issues. If you've stroked that text in InDesign, you can choose whether the stroke sits on the
	outside, inside or centre of the path itself, that may make a difference too. Personally I'm not a huge
	fan of stroking/outlining text. Having project titles at different angles can be effective, perhaps inside
	a graphic shape, or a sticker, as you might in a scrapbook, but too many and too frequent can be
	waring, so use prudently. The corner tabs around each picture, again, is a fun device to keep up the
	theme, but I wonder if these could be a bit more subtle. Maybe little triangles in a discreet colour
	with a small drop shadow to give the impression they have been stuck on the page? Your contents
	spreads over 2 pages, but I guess you'll include page numbers then too? It's good to see
	a description of each project but they could be a bit smaller on the page. There are a few typos here
	and there, make sure you pick those up at some point. I found a sample textured background and
	had a little play with page 8, to show some of the points I've made above, attached here. But you've
	made great process for week 6, and I'm happy to chat further if that helps. Well done.
	page8_alt.pdf ····
	18/02 12:36
	Thanks Ian! All very good points, thank you for the input!! 😇 I'll definitely take it on board and
	make some adjustments based on your input now while I add the last projects, thank you! 🖯

As such, I was able to change some of the aspects of my design, directing focus more towards my work, and looking easier to navigate.



After sending the new look to some of my friend, Lewis Raggett I was given some more tweaks to make, to make it easier to read and understand.



The Rifle Club

Created in: Revit

5.63 n

My task was to create a document detailing the specifications for an extension to be made of to a Rifle Club.

2.20 m

3.31

10.00 m

50 m

To produce this plan, I worked with the client through multiple changes, to make sure the design was: as the client envisioned, was accessible to the disabled and was within the permitted space and budget.

30.40 m



m 04. TC

After making all of the adjustments suggested that I agreed with, I was much happier with the look and feel of my portfolio, so I sent the new look back to my lecturer for any further opinions.

Yesterday 20:25 Hi Ian!! Just checking what you thought of the new design? Your last suggestions were really helpful! I was wondering if there's anything else you'd suggest changing? 😁



At around this time, I was looking for job placements for the coming year. To apply, I was required to send a portfolio, along with my CV and cover letter. For this, I asked Dr Debs Wilson, the contact between myself and the potential employers, to help look over my portfolio and CV. Debs suggested some good changes, helping me work on a new CV, as well as, more importantly for this module, tweak my portfolio. These tweaks involved removing the contents page, changing the displayed projects to more relevant tasks, and some formatting changes, such as squaring text and moving images away from the edges.



I then sent these changes to lan, to gain more potential improvements, which brought me to the fifth version of my portfolio:







07948574655 bustercollins@live.co.uk Find me on Instagram & LinkedIn

This was the start towards the final design of my portfolio, with a new, more professional contents page with clickable links, smaller text, squared images, etc. As

well as a final, contact page. These changes were done to look better on an A4 print.

Moving back to University, I changed workspaces, and as such, had to spend some time fixing all of the broken links within the InDesign workspace, to get the images to work correctly. I also decided that the document should have more interactivity, so I created a button to turn return the reader to the contents page:

However, the image looked very much like it should be used to flip to the previous page, which was commented on by lan:



Realising the design was not intuitive, I instead decided to cause that button to move the view to the previous page, and included a mirrored button to move to the

next page:



Still thinking the idea for the button to return the reader directly to the contents was

necessary, I decided to add a more functioning arrow to the document:

Which I felt was a big vague but did not know how to explain it any better.

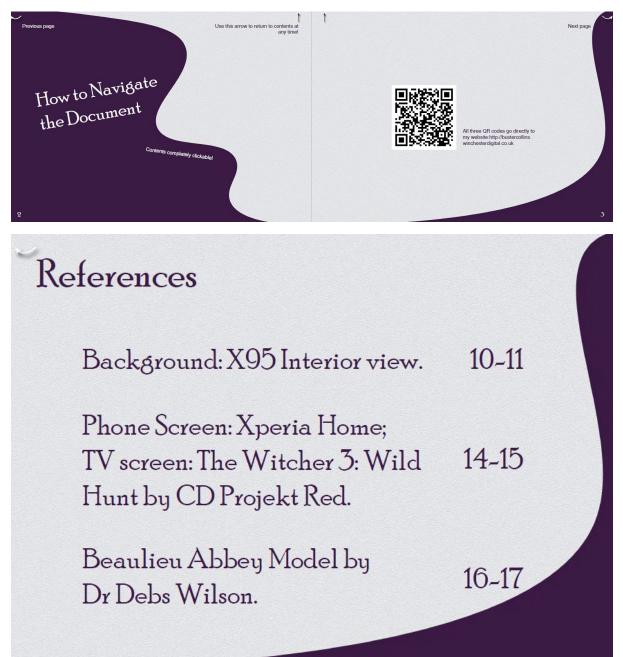
I soon found some bugs in the document:



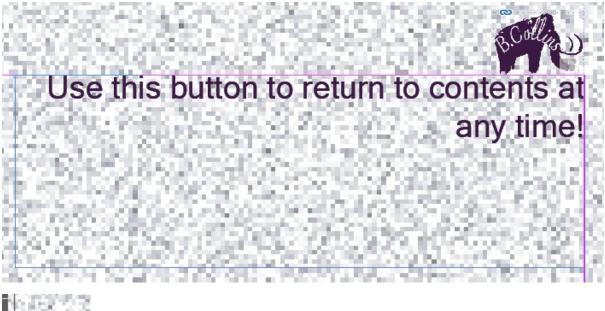
The most noticeable being that the corners of the images would export as behind the images themselves, which I was able to solve by editing the layering and recreating the buttons to determine the hierarchy of the images, as well as some links being missing, or directing to the wrong page.

After fixing these bugs, I was looking for more recommendations to perfect my idea, and my lecturer, Vaneshrie Moodley recommended a reference page, as well as a

"how to use this document" page, to make the portfolio more accessible and professional:



When taking these images for this reflective report, I realise that the colour of the arrow was off for my references page, and thought I could use a house image instead of a generic up arrow to return to my contents, however, I thought that creating a house vector would be time consuming and still vague, so I decided to use my logo instead:





Achievements

Working closely alongside others allowed me to produce my best design and showcase my best work. I was then able to use this portfolio immediately to help me apply for potential jobs and placements, which left a lasting impression, and allowed me to explain my work expertly and impress potential employers.

Challenges

I feel as though my ideas for designs can sometimes be impractical and unprofessional, as such, I was sure to create a portfolio draft as soon as possible to send off for feedback to perfect my original idea, to keep my creativity and style, while allowing my work to be displayed professionally without being distracting.

Before sending my portfolio off to be printed, I decided to wait for my friends, to find good reviews of different printing places. I would do this, so I knew the best place to print my work. However, my friends left this until last minute, causing myself to also wait too long, in a lapse of judgement. As such, when printing I would be unable to get a second print in the event anything would go wrong. On top of this, they all sent their work off to print together while I was not around, and as such I was late to the desired time for printing. As such, I would not be able to make any adjustments to the print if there is an issue with the printing, and I would have to redesign aspects of my portfolio to make it available for print on a slightly smaller page size. This was easy enough to do and took me a few hours:

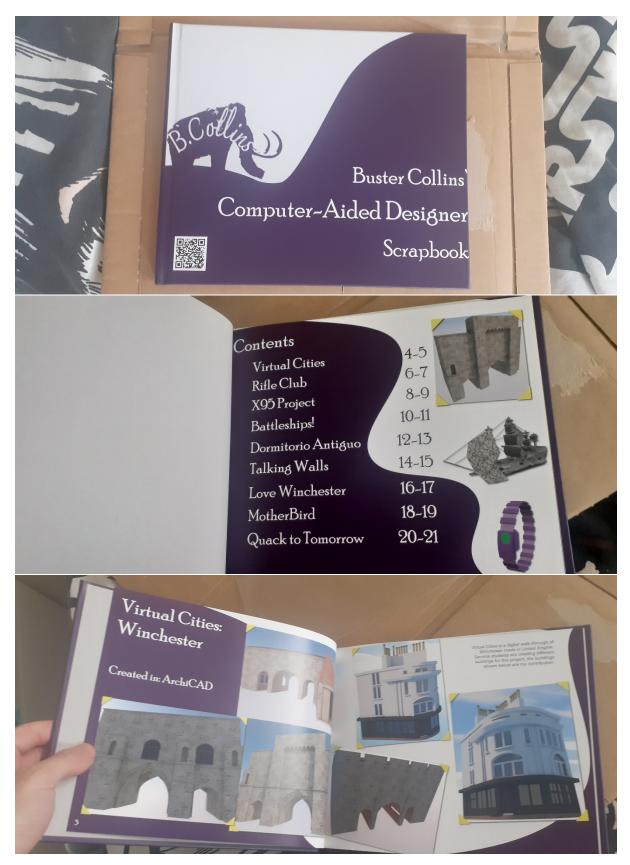


This included removing the second, unnecessary part of my contents page for print, as well as squashing the images and making them slightly smaller, while keeping to the original design. Once I was happy with how the new design looked, I was able to send it off for print with Blurb (Blurb, 2021). This was recommended to me by other designers that could not print through their own connections.

As an alternative option, and as a back-up, I would also complete a print from another company, with the original design, being with only a PVC cover, using a loop binding system to bring the pages together, instead of the hardback option that Blurb boasts. This will allow me to have the choice of which portfolio I would prefer to submit, after seeing which print and design is presented best.

Several days after sending off my work to be printed, I realised the work I had sent had incorrect page numbers on the contents page. Due to the nature of the print requiring a page to be deleted, I had forgotten to change the new page numbers for the contents page. This mistake was overlooked by myself as well as my friend who I has asked to proofread the new version of my portfolio. As it was a very small and ridiculous mistake it was very easy to miss. As soon as I realised, I immediately changed the document to fix the mistake. In an attempt to rectify this problem, I contacted Blurb Support (Blurb, 2021) right away in an attempt to change the incorrect pages before it would be printed, as the status was still in the "In production" stage. If the mistake can be corrected, that would be ideal. If it cannot be rectified I will be forced to use my back-up print with the very original design as mentioned previously. Due to time constraints because of waiting around for friends, and the wish to not spend any more money on printing, I decided I would keep the print no matter what. I will then continue to use this expensive, incorrect print at interviews, where I can tell the story of my blunder to would-be employers and explain how I attempted to deal with the issue.

Once the printed version had arrived I realised that the grouping of the text had been slightly affected due to the change in size of the pages, as well as the aforementioned numbering of the pages being slightly off, due to the deletion of a page by the print. I also found that my logo was not designed to be printed:

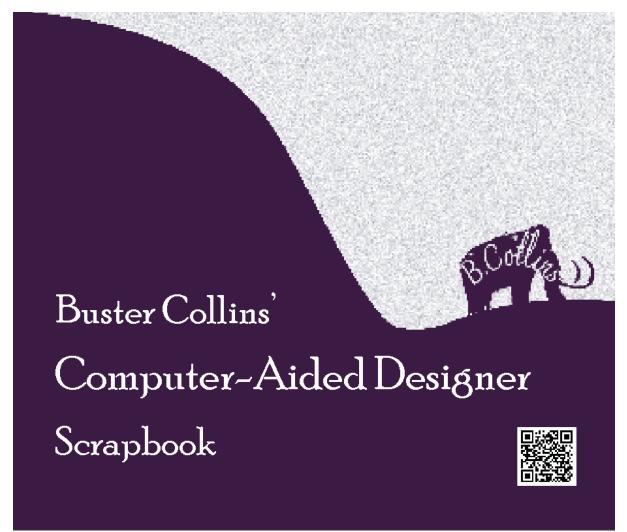


As such, I had many ideas on how to perfect my design for a second version.

I then created this version to display on my website with a printable version that was easily accessible, to show I had considered a better print version, now knowing what

to change thanks to seeing a real print, making the perfect adjustments. If there is enough time after completing these adjustments for a re-print, I will spend money on a re-print and hope it arrives in time.

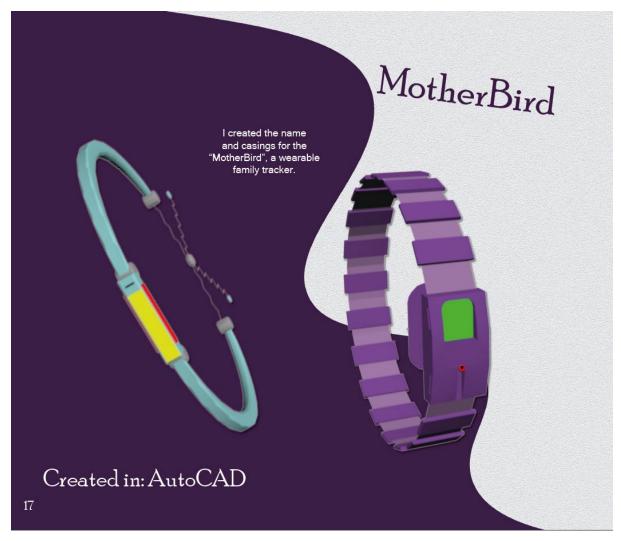
A few design changes were also tweaked to better suit the print, such as flipping the covers so that the design bleeds into the spine of the book:



I also moved a lot of the text further from the edge of the document, so that the text will be easier to read, now factoring in the crease of the book:

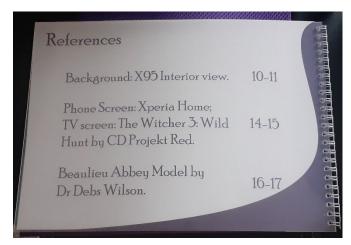


As well as making the images from some of my earlier projects smaller, along with my logo, completing the design:

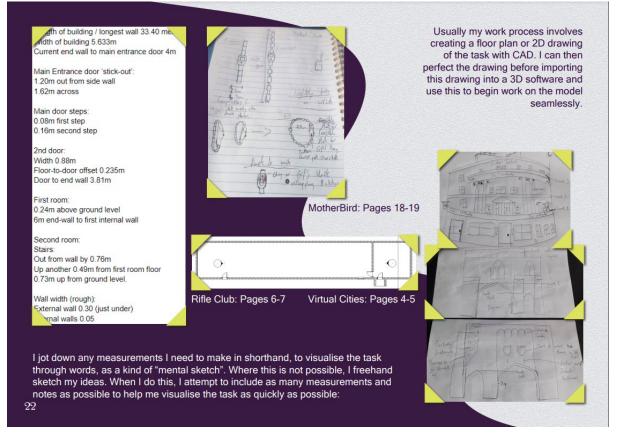


This then allowed me to order a re-print of the portfolio so that I could submit and use the new version of the portfolio that was correct.

Upon receiving my second, A4 loop binder version of the portfolio (my alternative print), I found that it was missing the back cover, due to having an uneven amount of pages.



To rectify this, I added a new page, giving me the ability to also show my sketches and explain my work process to potential employers:



As such, I will attempt to submit both copies of my portfolio, or will lean towards using the A4 printed document with the loop binders as it is my original design and includes more content.

Use of my time

Printed Portfolio	1	2	3	4	5	6	7	8	9	10	11	12	13
Idea generation													
Template													
Importing Projects													
Second opinions													
Alterations													
Interactive changes													
Print Changes													
Printing													
Mailing portfolio													
Submission													

New Website

Project Objectives

Last semester, it was announced that Designer, 3D Artists and CAD Students would be allowed to use WordPress and other professional external sources to create our websites through a third party. Once this was an option, I was approached by students from my cohort, Lewis and Simon, who offered to create my portfolio website as a chance to collaborate and practice their new learned languages, respectively for backend and frontend development.

Create a new Po	ost						
Date Created	Post title	Project	Post Type	Actions			
02/12/2020	Dissertation	Dissertation	text	View	Edit	Delete	
20/01/2021	The Start	Rifle Club Extension	image	View	Edit	Delete	
20/01/2021	Existing Building	Rifle Club Extension	image	View	Edit	Delete	
20/01/2021	The second step	Rifle Club Extension	image	View	Edit	Delete	
20/01/2021	Email Exchange	Rifle Club Extension	image	View	Edit	Delete	
20/01/2021	Changes made	Rifle Club Extension	image	View	Edit	Delete	
20/01/2021	Finishing Touches (or so I thought)	Rifle Club Extension	text	View	Edit	Delete	
20/01/2021	Final requests	Rifle Club Extension	image	View	Edit	Delete	
20/01/2021	Final finishing touches	Rifle Club Extension	text	View	Edit	Delete	
20/01/2021	The Idea	FoodMood - Case Study and Idea	text	View	Edit	Delete	
22/01/2021	Initial Logo	FoodMood - Case Study and Idea	image	View	Edit	Delete	
22/01/2021	Final Logo	FoodMood - Case Study and Idea	image	View	Edit	Delete	
22/01/2021	The App	FoodMood - Case Study and Idea	image	View	Edit	Delete	
22/01/2021	Some minor adjustments	FoodMood - Case Study and Idea	image	View	Edit	Delete	
22/01/2021	Printed Submission	FoodMood - Case Study and Idea	image	View	Edit	Delete	
22/01/2021	Patrol Boat (2x1)	Battleships!	image	View	Edit	Delete	
22/01/2021	Next, the Submarine (3x1)	Battleships!	image	View	Edit	Delete	
22/01/2021	Aircraft Carrier (4x1)	Battleships!	image	View	Edit	Delete	
22/01/2021	Destroyer? (5x1) I barely know her	Battleships!	image	View	Edit	Delete	
22/01/2021	Dinghy	Battleships!	image	View	Edit	Delete	
22/01/2021	Timelapse	Crafted by ដើងថ្ងៃនាំរាំនេនtudio	text	View	Edit	Delete	

As such, Lewis created a database for me to easily upload and store my work,

while Simon would create a website to display the work uploaded to my database on a professional and functional display, fully customizable to how I would like it to look.

Tasks & Milestones

The tasks were simple, from very early on in the semester, I was periodically porting over my old websites from my old website to the database. This proved a difficult challenge, as Lewis had not added an 'edit' or 'delete' function to my database, so there was little room for mistakes, without having to recreate the post. It did not take long and before long, I had uploaded all of my work to the database, all that was left was to wait for Simon to begin work on the front-end website itself.

However, when Simon came to create the website, he realised there was no data being pulled from the database for the projects. After a quick look, Lewis realised he had made a typo in my database and my text values were not being saved. He corrected this mistake, resulting in me having to retype all of my work. At this time, Lewis created the edit and delete functions so I could check my work was being uploaded correctly and I could remove any posts made that I had made a mistake in.

However, while working back through the second uploads, I realised that once I had recreated a post, the saved images would disappear and the formatting of the images, shown by the 'post type' and 'post layout' tab, would be reset on every edit:

Post Title	Project
The second step	Rifle Club Extension ~
Post Type	
Image	~
Post Layout	
Text Over Media	~
B I U S 19 4> H1 H2 ⊟ ⊞ X2 X2 ⊡ ⊡ +¶ Normal \$ Heading	3 🔹 🔺 🎉 Sans Serif 🗧 🗄 🖉 🕒 🖪
The next task is to make the rifle club fit the new specification. For this, I bumped the walls out by 1.5m would be using for the new rooms. These measurements were given by the client, in person, after their	
Image	
Crafted by Red Squirrel Studi	0

As such, I would have to reupload all of my images and be sure to reselect the post type and post layout every time I would edit a post. I told Lewis and he was quickly able to stop it from overwriting itself and allow the edits to merge.

With this completed, I let Simon know that all of the information would then be readily available, and as such, was able to continue with completing the rest of my work while waiting.

My plan was to have my website completed by mid-April, so that there would still be time to ask my lecturers for feedback before final submission, however, after being assured there would be enough time to complete the front-end development of the website throughout the entire semester, as the semester ended, Simon was finding less and less to complete the "Couple of days work" he assured me was left of the website. As such, I planned to add the necessary additions to my own website in the eventuality that he would not complete the website, although the website is still in active development. By submission I will have a backup website ready to upload, as well as the completed professionally done website.

Once the external developer of my website had created the front end of my portfolio, it was already May and too late to comfortably go through my work with lecturers and work with the developer to create the necessary changes. As such, for submission, I will have to use my own, old website, with the recommended additions and changes being made, to the best of my ability, to achieve the best result, with minimal risk of something going wrong for submission. Once the new website designed by Simon Wesley Jr.

(https://www.redhexhive.co.uk) had been completed, I sent this version of my website to my lecturer, Vaneshrie Moodley, to see if it was too late for advice and tweaks to be made before submission, or if I should continue with my original plan or using my old website, which had been signed off on as being good for submission, or if the new website would be more appropriate. I then submitted my own website, realising that I had received worse feedback for the outsources version and any changes would need to be run through a middleman, which would take too much time. Instead I opted to submit my own website, where I can fix anything that goes wrong and that I find while there is still time.

Achievements

Working in a team with people of different skill sets, being sympathetic to setbacks, and moving on without being disheartened by problems arising.

Challenges

Unexpected setbacks occurring, that could not be helped on my end, but that affected me. I was able to keep a level head and complete the work throughout the arising issues, allowing me to produce the best possible, final result, that I was happy with, within the time frame.

· · · · ·						1							í l
Website	1	2	3	4	5	6	7	8	9	10	11	12	13
Importing projects													
Waiting for dev													
Adding to my old website (precaution)													
Proof-reading													
Second opinion													
Alterations													
Submission													

Use of my time

Conclusion

Learning from the previous mistakes from my previous years and previous semester, I was able to work closely in conjunction with my lecturers through all of my modules, as best as possible, to create designs and write-ups that I was happy with, that would allow me to attain the best grades possible.

This semester, I also realised that I have too much faith in co-workers and cannot expect them to complete aspects of work that are of no benefit to them, even if it comes at detriment to me. As such, I have had to work independently to complete all of the work on both fronts, as I would create personal back-ups in the eventuality of other co-workers being unable to complete what they said they could in time, which proves me to save me at the end. The only true set-backs occurring this semester were due to waiting on others, which could have been avoided should I have acted independently from the beginning, rather than accepting offers of potential help from co-workers and them failing to complete said work, resulting in all submitted work being completely my own and independently, including my website and choice of portfolio print.

Reflective Report Gantt Chart

Reflective Report	1	2	3	4	5	6	7	8	9	10	11	12	13
Doing the work													
write-up													
proof reading													
Alterations													
Submission													

References

Amazing Hotels: Life Beyond the Lobby, The Torridon, Scotland. 2020. [Film] Directed by Charlotte Bridger. England: BBC.

ASIABIM, 2016. *Joining Wall Segments*. [Online] Available at: <u>https://asiabim.wordpress.com/2016/06/27/joining-wall-segments/</u> [Accessed 2021].

Biswas, W. K., Graham, J., Kelly, K. & John, M. B., 2010. Global warming contributions from wheat, sheep meat and wool production in Victoria, Australia – a life cycle assessment. *Journal of Cleaner Production,* September, 18(14), pp. 1386-1392.

Blurb, 2021. *Blurb.* [Online] Available at: <u>https://www.blurb.com</u> [Accessed 2021].

Blurb, 2021. *Help center*. [Online] Available at: <u>https://support.blurb.com/hc/en-us?return_to=%2Fhc%2Frequests</u> [Accessed 2021].

Bryant, C. & Barnett, J., 2018. Consumer acceptance of cultured meat: A systematic review. *Meat Science*, 143(1), pp. 8-17.

Carbon Stock Editor, 2019. *CO2 emissions and the production of meat*. [Online] Available at: <u>https://www.carbonstockstudy.com/co2-emissions-and-the-production-of-meat/</u>

Carlota, V., 2019. *3D printed meat, is the future of meat meatless?*. [Online] Available at: <u>https://www.3dnatives.com/en/3d-printed-meat-040620194/#!</u>

Cassidy, E. S., West, P. C., Gerber, P. S. & Foley, J. A., 2013. Redefining agricultural yields: from tonnes to people nourished per hectare. *Environmental Research Letter*, 8(1), p. 034015.

Cultured Beef, 2013. *What is Cultured Meat*. [Online] Available at: <u>https://culturedbeef.org/what-cultured-meat</u> [Accessed 12 October 2020].

Cultured Beef, 2015. *What is Cultured Meat.* [Online] Available at: <u>https://culturedbeef.org/what-cultured-meat</u> [Accessed 22 October 2020].

Department of Climate Change, 2006. Australian Methodology for the Estimation of Greenhouse Gas Emissions and Sinks. *Australian Government, Canberra*.

EarthlingEd, 2020. *Earthling Ed @earthlinged - Instagram*. [Online] Available at: <u>https://www.instagram.com/earthlinged/</u> [Accessed 2020].

Ewing-Chow, D., 2019. *Is Cultured Meat The Answer To The World's Meat Problem?*. [Online] Available at: <u>https://www.forbes.com/sites/daphneewingchow/2019/06/20/is-cultured-meat-the-answer-to-the-worlds-meat-problem/#2d0569674468</u> [Accessed 21 October 2020].

Exa Cognition, 2020. *Cultured Meat: Lab Grown Meat Has Just Been Approved For Sale.* [Online] Available at: <u>https://www.youtube.com/watch?v=f7BqsG6AKGI</u> [Accessed 2021].

FAO, 2011. *World Livestock 2011 Livestock in food security*. 1st ed. Rome: Food and Agriculture Organization of the United Nations.

GRAPHISOFT, 2018. *Create a Single-plane Roof on the Floor Plan*. [Online] Available at: <u>https://helpcenter.graphisoft.com/user-guide/76471/</u> [Accessed 2021].

GRAPHISOFT, 2021. User manuals. [Online] Available at: <u>https://helpcenter.graphisoft.com/user-guide/</u> [Accessed 2021].

IPCC, 2006. N2O emissions from managed soils, and CO2 emissions from lime and urea application. *IPCC Guidelines for National Greenhouse Gas Inventories, The Intergovernmental Panel of Climate Change, Geneva 2, Switzerland,* pp. 1-54.

Jim, 2016. *Open Broadcaster Software*. [Online] Available at: <u>https://obsproject.com</u> [Accessed 2021].

Kastner, T., Rivas, M. J. I., Koch, W. & Nonhebel, S., 2012. Global changes in diets and the consequences for land requirements for food. *PNAS*, 109(18), pp. 6868-6872.

Li, Y., Filimonau, V., Wang, L.-e. & Cheng, S., 2020. Tourist food consumption and its arable land requirements in a popular tourist destination. *Resources, Conservation and Recycling*, 153(1), p. 104587.

Mancini, M. & Antonioli, F., 2019. Exploring consumers' attitude towards cultured meat in Italy.. *Meat Science*, 150(1), pp. 101-110.

Mancini, M. C. & Antonioli, F., 2019. Exploring consumers' attitude towards cultured meat in Italy. *Meat Science*, 150(1), pp. 101-110.

Marcu, A. et al., 2015. Analogies, metaphors, and wondering about the future: Lay sense-making around synthetic meat. *Public Understanding of Science*, 5(24), pp. 547-562.

Mattick, C. S., Landis, A. E., Allenby, B. R. & Genovese, N. J., 2015. Anticipatory Life Cycle Analysis of In Vitro Biomass Cultivation for Cultured Meat Production in the United States. *Environmental Science & Technology*, 19(49), pp. 11941-11949.

Mohorčich, J. & Reese, J., 2019. Cell-cultured meat: Lessons from GMO adoption and resistance. *Appetite*, 143(1), p. 104408.

Mosa Meat, 2019. *HOW IT'S MADE*. [Online] Available at: <u>https://www.mosameat.com/technology/</u> [Accessed 22 October 2020].

Mourtisen, O. G. & Styrbæk, K., 2017. *Mouthfeel*. 1st ed. New York: Colombia University Press.

Murphy, S. V. & Atala, A., 2014. 3D bioprinting of tissues and organs. *Nature Biotechnology*, 32(1), p. 773–785.

OBS, 2020. *OBS Studio*. [Online] Available at: <u>https://obsproject.com</u> [Accessed 2021].

Oosterhuis, N., 2018. Bioreactor design for cultured meat, where to go?, s.l.: s.n.

OpenLearn, 2019. *Eating for the Environment*. [Online] Available at: <u>https://www.open.edu/openlearn/nature-environment/eating-the-environment/content-section-0?active-tab=content-tab</u> [Accessed 2020].

Otter, 2021. *Otter*. [Online] Available at: <u>https://otter.ai</u> [Accessed 2021].

Otter, 2021. Otter is where conversations live. [Online] Available at: <u>https://otter.ai</u> [Accessed 2021].

Roman, S., Sanchez-Siles, L. M. & Siegrist, M., 2017. The importance of food naturalness for consumers: Results of a systematic review. *Trends in Food Science & Technology*, 1(67), pp. 44-57.

Scott, E., Kallis, G. & Zografos, C., 2019. Why environmentalists eat meat. *PLoS ONE*, 14(7), p. e0219607.

Scribbr, 2020. How to Write a Dissertation Results Section | Scribbr 🌮. [Online] Available at:

https://www.youtube.com/watch?v=WP4gDG0q63k&list=PLjBMY3HggCpCdtW5RKMqE2GEM_hDQy WzD&index=11

[Accessed April 2021].

Shahbandeh, M., 2019. *Global meat market value 2018 & 2023*. [Online] Available at: <u>https://www.statista.com/statistics/502286/global-meat-and-seafood-market-value/</u>

Siegner, C., 2019. *Plant-based meat market forecast to reach \$85B by 2030, report says.* [Online] Available at: <u>https://www.fooddive.com/news/plant-based-meat-market-forecast-to-reach-85b-by-2030-report-says/559170/</u>

[Accessed 22 October 2020].

Siegrist, M. & Hartmann, C., 2020. Perceived naturalness, disgust, trust and food neophobia as predictors of cultured meat acceptance in ten countries. *Appetite*, 155(1).

Southey, F., 2020. Cultured Chicken Hybrid: KFC develops 3D-printed nuggets from chicken cells and plants. [Online]

Available at: https://www.foodnavigator.com/Article/2020/07/20/KFC-develops-3D-printed-

<u>cultured-meat-hybrid-nuggets-for-Russian-market</u> [Accessed 22 October 2020].

Southey, F., 2020. *Cultured Chicken hybrid: KFC develops 3D-printed nuggets from chicken cels and plants.* [Online]

Available at: <u>https://www.foodnavigator.com/Article/2020/07/20/KFC-develops-3D-printed-</u> <u>cultured-meat-hybrid-nuggets-for-Russian-market</u>

stayinabpub, 2021. *THE WESTGATE*. [Online] Available at: <u>https://stayinapub.co.uk/the-westgate-winchester-hampshire/</u> [Accessed 2021].

The Westgate, 2021. *The Westgate*. [Online] Available at: <u>https://www.westgatewinchester.com</u> [Accessed 2021].

Tomiyama, A. J. et al., 2020. Bridging the gap between the science of cultured meat and public perceptions. *Trends in Food Science & Technology*, October, 104(1), pp. 144-152.

TripAdvisor, 2011. Westgate Museum. [Online]

Available at: <u>https://www.tripadvisor.co.uk/Attraction_Review-g186300-d261023-Reviews-</u> Westgate_Museum-

Winchester_Hampshire_England.html#photos;aggregationId=101&albumid=101&filter=7&ff=29426 6088

[Accessed 2021].

Tuomisto, H. L. & Mattos, M. J. T. d., 2011. Environmental Impacts of Cultured Meat Production. *Environmental Science & Technology*, 14(45), pp. 6117-6123.

Vegan.com, 2012. Why Go Vegan? The Top Reasons Explained. [Online] Available at: <u>https://www.vegan.com/why/</u>

Verbruggen, S., Luining, D., Essen, A. v. & Post, M. J., 2018. Bovine myoblast cell production in a microcarriers-based system. *Cytotechnology*, 70(1), pp. 503-512.

Wilks, M., Hornsey, M. & Bloom, P., 2021. What does it mean to say that cultured meat is unnatural?. *Appetite*, 156(1), p. 104960.

Wilks, M. & Phillips, C. J. C., 2017. Attitudes to in vitro meat: A survey of potential consumers in the United States. *PLOS ONE.*

Wilks, M., Phillips, C. J. C., Fielding, K. & Hornsey, M. J., 2019. Testing potential psychological predictors of attitudes towards cultured meat. *Appetite*, 136(1), pp. 137-145.

Winchester City Council, 2019. *Planning*. [Online] Available at: <u>https://planningapps.winchester.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=Q15Z6NBPHTW00</u> [Accessed 2021].

Yourofsky, G., 2010. *The Most Important Speech You Will Ever Hear*. Georgia Tech university: ADAPTT.

YouTube, 2012. The ARCHICAD MORPH Tool - Subtracting Element Geometries from a Morph. [Online] Available at: <u>https://www.youtube.com/watch?v=1kPohlbYcgY</u> [Accessed 2021].

YouTube, 2018. *Trimming to Roof - ARCHICAD Training Series 3 - 15/84*. [Online] Available at: <u>https://www.youtube.com/watch?v=7Wsl0ZursCg</u> [Accessed 2021].

Zhang, G. et al., 2020. Challenges and possibilities for bio-manufacturing cultured meat. *Trends in Food Science & Technology*, 97(1), pp. 443-450.

Zoom, 2011. *Zoom*. [Online] Available at: <u>https://zoom.us</u> [Accessed 2021].

Bibliography

Amazing Hotels: Life Beyond the Lobby, The Torridon, Scotland. 2020. [Film] Directed by Charlotte Bridger. England: BBC.

ASIABIM, 2016. Joining Wall Segments. [Online] Available at: <u>https://asiabim.wordpress.com/2016/06/27/joining-wall-segments/</u> [Accessed 2021].

Biswas, W. K., Graham, J., Kelly, K. & John, M. B., 2010. Global warming contributions from wheat, sheep meat and wool production in Victoria, Australia – a life cycle assessment. *Journal of Cleaner Production*, September, 18(14), pp. 1386-1392.

Blurb, 2021. *Blurb*. [Online] Available at: <u>https://www.blurb.com</u> [Accessed 2021].

Blurb, 2021. *Help center*. [Online] Available at: <u>https://support.blurb.com/hc/en-us?return_to=%2Fhc%2Frequests</u> [Accessed 2021].

Bryant, C. & Barnett, J., 2018. Consumer acceptance of cultured meat: A systematic review. *Meat Science*, 143(1), pp. 8-17.

Carbon Stock Editor, 2019. *CO2 emissions and the production of meat*. [Online] Available at: <u>https://www.carbonstockstudy.com/co2-emissions-and-the-production-of-meat/</u>

Carlota, V., 2019. *3D printed meat, is the future of meat meatless?*. [Online] Available at: <u>https://www.3dnatives.com/en/3d-printed-meat-040620194/#!</u>

Cassidy, E. S., West, P. C., Gerber, P. S. & Foley, J. A., 2013. Redefining agricultural yields: from tonnes to people nourished per hectare. *Environmental Research Letter*, 8(1), p. 034015.

Cultured Beef, 2013. *What is Cultured Meat.* [Online] Available at: <u>https://culturedbeef.org/what-cultured-meat</u> [Accessed 12 October 2020]. Cultured Beef, 2015. *What is Cultured Meat*. [Online] Available at: <u>https://culturedbeef.org/what-cultured-meat</u> [Accessed 22 October 2020].

Department of Climate Change, 2006. Australian Methodology for the Estimation of Greenhouse Gas Emissions and Sinks. *Australian Government, Canberra*.

EarthlingEd, 2020. *Earthling Ed @earthlinged - Instagram*. [Online] Available at: <u>https://www.instagram.com/earthlinged/</u> [Accessed 2020].

Ewing-Chow, D., 2019. *Is Cultured Meat The Answer To The World's Meat Problem?*. [Online] Available at: <u>https://www.forbes.com/sites/daphneewingchow/2019/06/20/is-cultured-meat-the-answer-to-the-worlds-meat-problem/#2d0569674468</u> [Accessed 21 October 2020].

Exa Cognition, 2020. *Cultured Meat: Lab Grown Meat Has Just Been Approved For Sale*. [Online] Available at: <u>https://www.youtube.com/watch?v=f7BqsG6AKGI</u> [Accessed 2021].

FAO, 2011. *World Livestock 2011 Livestock in food security.* 1st ed. Rome: Food and Agriculture Organization of the United Nations.

GRAPHISOFT, 2018. *Create a Single-plane Roof on the Floor Plan.* [Online] Available at: <u>https://helpcenter.graphisoft.com/user-guide/76471/</u> [Accessed 2021].

GRAPHISOFT, 2021. User manuals. [Online] Available at: <u>https://helpcenter.graphisoft.com/user-guide/</u> [Accessed 2021].

IPCC, 2006. N2O emissions from managed soils, and CO2 emissions from lime and urea application. *IPCC Guidelines for National Greenhouse Gas Inventories, The Intergovernmental Panel of Climate Change, Geneva 2, Switzerland,* pp. 1-54.

Jim, 2016. *Open Broadcaster Software.* [Online] Available at: <u>https://obsproject.com</u> [Accessed 2021].

Kastner, T., Rivas, M. J. I., Koch, W. & Nonhebel, S., 2012. Global changes in diets and the consequences for land requirements for food. *PNAS*, 109(18), pp. 6868-6872.

Li, Y., Filimonau, V., Wang, L.-e. & Cheng, S., 2020. Tourist food consumption and its arable land requirements in a popular tourist destination. *Resources, Conservation and Recycling*, 153(1), p. 104587.

Mancini, M. & Antonioli, F., 2019. Exploring consumers' attitude towards cultured meat in Italy.. *Meat Science*, 150(1), pp. 101-110.

Mancini, M. C. & Antonioli, F., 2019. Exploring consumers' attitude towards cultured meat in Italy. *Meat Science*, 150(1), pp. 101-110.

Marcu, A. et al., 2015. Analogies, metaphors, and wondering about the future: Lay sense-making around synthetic meat. *Public Understanding of Science*, 5(24), pp. 547-562.

Mattick, C. S., Landis, A. E., Allenby, B. R. & Genovese, N. J., 2015. Anticipatory Life Cycle Analysis of In Vitro Biomass Cultivation for Cultured Meat Production in the United States. *Environmental Science & Technology*, 19(49), pp. 11941-11949.

Mohorčich, J. & Reese, J., 2019. Cell-cultured meat: Lessons from GMO adoption and resistance. *Appetite*, 143(1), p. 104408.

Mosa Meat, 2019. *HOW IT'S MADE*. [Online] Available at: <u>https://www.mosameat.com/technology/</u> [Accessed 22 October 2020].

Mourtisen, O. G. & Styrbæk, K., 2017. *Mouthfeel.* 1st ed. New York: Colombia University Press.

Murphy, S. V. & Atala, A., 2014. 3D bioprinting of tissues and organs. *Nature Biotechnology*, 32(1), p. 773–785.

OBS, 2020. *OBS Studio*. [Online] Available at: <u>https://obsproject.com</u> [Accessed 2021].

Oosterhuis, N., 2018. Bioreactor design for cultured meat, where to go?, s.l.: s.n.

OpenLearn, 2019. *Eating for the Environment*. [Online] Available at: <u>https://www.open.edu/openlearn/nature-environment/eating-the-environment/content-section-0?active-tab=content-tab</u> [Accessed 2020].

Otter, 2021. *Otter*. [Online] Available at: <u>https://otter.ai</u> [Accessed 2021].

Otter, 2021. Otter is where conversations live. [Online] Available at: <u>https://otter.ai</u> [Accessed 2021].

Roman, S., Sanchez-Siles, L. M. & Siegrist, M., 2017. The importance of food naturalness for consumers: Results of a systematic review. *Trends in Food Science & Technology*, 1(67), pp. 44-57.

Scott, E., Kallis, G. & Zografos, C., 2019. Why environmentalists eat meat. *PLoS ONE*, 14(7), p. e0219607.

Scribbr, 2020. How to Write a Dissertation Results Section | Scribbr Decision | Scribbr Section | Scri

Shahbandeh, M., 2019. *Global meat market value 2018 & 2023.* [Online] Available at: <u>https://www.statista.com/statistics/502286/global-meat-and-seafood-market-value/</u>

Siegner, C., 2019. *Plant-based meat market forecast to reach \$85B by 2030, report says.* [Online] Available at: <u>https://www.fooddive.com/news/plant-based-meat-market-forecast-to-reach-85b-by-2030-report-says/559170/</u> [Accessed 22 October 2020]. Siegrist, M. & Hartmann, C., 2020. Perceived naturalness, disgust, trust and food neophobia as predictors of cultured meat acceptance in ten countries. *Appetite*, 155(1).

Southey, F., 2020. Cultured Chicken Hybrid: KFC develops 3D-printed nuggets from chicken cells and plants. [Online]

Available at: <u>https://www.foodnavigator.com/Article/2020/07/20/KFC-develops-3D-printed-cultured-meat-hybrid-nuggets-for-Russian-market</u> [Accessed 22 October 2020].

Southey, F., 2020. *Cultured Chicken hybrid: KFC develops 3D-printed nuggets from chicken cels and plants.* [Online] Available at: <u>https://www.foodnavigator.com/Article/2020/07/20/KFC-develops-3D-printed-cultured-meat-hybrid-nuggets-for-Russian-market</u>

stayinabpub, 2021. *THE WESTGATE*. [Online] Available at: <u>https://stayinapub.co.uk/the-westgate-winchester-hampshire/</u> [Accessed 2021].

The Westgate, 2021. *The Westgate*. [Online] Available at: <u>https://www.westgatewinchester.com</u> [Accessed 2021].

Tomiyama, A. J. et al., 2020. Bridging the gap between the science of cultured meat and public perceptions. *Trends in Food Science & Technology*, October, 104(1), pp. 144-152.

TripAdvisor, 2011. Westgate Museum. [Online] Available at: <u>https://www.tripadvisor.co.uk/Attraction_Review-g186300-d261023-Reviews-</u> <u>Westgate_Museum-</u> <u>Winchester_Hampshire_England.html#photos;aggregationId=101&albumid=101&filter=7&ff=29426</u> 6088

[Accessed 2021].

Tuomisto, H. L. & Mattos, M. J. T. d., 2011. Environmental Impacts of Cultured Meat Production. *Environmental Science & Technology*, 14(45), pp. 6117-6123.

Vegan.com, 2012. *Why Go Vegan? The Top Reasons Explained.* [Online] Available at: <u>https://www.vegan.com/why/</u>

Verbruggen, S., Luining, D., Essen, A. v. & Post, M. J., 2018. Bovine myoblast cell production in a microcarriers-based system. *Cytotechnology*, 70(1), pp. 503-512.

Wilks, M., Hornsey, M. & Bloom, P., 2021. What does it mean to say that cultured meat is unnatural?. *Appetite*, 156(1), p. 104960.

Wilks, M. & Phillips, C. J. C., 2017. Attitudes to in vitro meat: A survey of potential consumers in the United States. *PLOS ONE.*

Wilks, M., Phillips, C. J. C., Fielding, K. & Hornsey, M. J., 2019. Testing potential psychological predictors of attitudes towards cultured meat. *Appetite*, 136(1), pp. 137-145.

Winchester City Council, 2019. *Planning*. [Online] Available at: <u>https://planningapps.winchester.gov.uk/online-</u> <u>applications/applicationDetails.do?activeTab=documents&keyVal=Q15Z6NBPHTW00</u> [Accessed 2021]. Yourofsky, G., 2010. *The Most Important Speech You Will Ever Hear*. Georgia Tech university: ADAPTT.

YouTube, 2012. The ARCHICAD MORPH Tool - Subtracting Element Geometries from a Morph. [Online]

Available at: <u>https://www.youtube.com/watch?v=1kPohlbYcgY</u> [Accessed 2021].

YouTube, 2018. *Trimming to Roof - ARCHICAD Training Series 3 - 15/84*. [Online] Available at: <u>https://www.youtube.com/watch?v=7Wsl0ZursCg</u> [Accessed 2021].

Zhang, G. et al., 2020. Challenges and possibilities for bio-manufacturing cultured meat. *Trends in Food Science & Technology*, 97(1), pp. 443-450.

Zoom, 2011. *Zoom*. [Online] Available at: <u>https://zoom.us</u> [Accessed 2021].