

Angry Birds Pizza Report



Benjamin Kiprotich S3735277
Harris Charalambous S3742332
Ian Romito Descham S3665571

Project Background	2
Motivation	2
People	2
Aim and Goals	3
Scope	4
Project Progress	6
Outcomes to Date	8
Progress	13
Tools and Technologies	17
Challenges and learning	18
Project process	19
Marketing Pitch	21
Skills and Jobs	21
Reference List	22

Project Background

Motivation

When discussing the topic regarding what we should base our project around, we found ourselves quickly struggling to find ideas that would meet our common interests both inside and outside of IT. Because of our struggles, we decided to not over complicate our project.

This revelation allowed us to narrow down our project into a single, achievable goal; one in which we were all satisfied with. None of us had too much experience with web development so we found building a website to be an interesting challenge as we approached it as both a learning opportunity, as well as an opportunity to create something we were all passionate about.

Finally, we decided to base the website around the concept of pizza, as we established quickly that pizza websites are somewhat of a staple for the internet in its current state, and we would have a lot of research material to base our project on. We were also excited by the idea to build a website about something many have come to take for granted over the years; food.

People

1. Benjamin Kiprotich, s3735277@student.rmit.edu.au

Interest and Skills:

I became interested in IT while I was still a kid when I first used my dad's Motorola razr and I was interested in technology and how the software and hardware interact. I am good in art and I am interested in animations but in computer I am genuinely interested in the programming part, I could do game programming or cloud computing and later major in cyber security.

Individually Assigned Role:

My assigned role is one of the coders alongside Harris. Together, we work on coding the pages based on the mock-ups that we designed earlier. We focus on building up the user interface and building the Minimal Viable Features that we pre-established, for which we have divided up between ourselves.

2. Ian Romito Descham, s3665571@student.rmit.edu.au

Interest and Skills:

I come from a developing country, where the field of Information Technology (IT) is not focused/delved on strongly. As such, my background in IT is quite weak in term of knowledge. I do, however, tend to try my hands at the field whenever it is convenient for me to do so. For instance, I did enrol into a robotic class and electro class at primary and secondary school. From these, I get some basic knowledge in IT, such as programming and

hardware concepts. I believe I am a little good at programming. I might also have a little skill in writing, as I did get several commendations on my writing skill, which could be helpful in writing reports.

Individually Assigned Role:

As for my role in the project, I am the dedicated researcher and write up the documentations regarding the reports. I conduct all the research needed for the developers and compile it into an easy to read document for the developers. This would include looking at competitors websites to view the overall average price for each pizza, which I then document and send off to Harris and Ben.

3. Harris Charalambous, s3742332@student.rmit.edu.au

Interest and Skills:

I have always had an interest in IT based skills; this includes concepts about Java development and web development. While Java is not very applicable to this project, I am able to demonstrate and extend my knowledge in the field of web development, and as such, improve my overall IT based skills. Furthermore, I have always had a passion for pizza, so the merger of IT and pizza is a combination that interests me greatly.

Individually Assigned Role:

I am one of the dedicated coders for this website, alongside Ben. With Ben, we work on bring our mock-ups to life, with working functionality based on the Minimal Viable Features we established earlier on in our timeline. I have been working hard on creating the homepage, which we are using as a template to build off of for the remaining pages and/ or features.

Aim and Goals

Aim

We want to create a simple and efficient pizza website that has an aspect of “gamification” to it, meaning to have some features act almost as a game, adding an entertainment value to the site. Above all else however, we value speed in the site, and are actively trying to make it the fastest ordering experience available for customers. It will allow customers to add pizzas to their order via a single click, which is common amongst competitors. However, where the project will differ from competitors, and greatly increase the ordering time, will be the ability to duplicate customised and self built pizzas, something which is not commonly allowed amongst other websites. While the main development focus is in making the website responsive amongst computers, it is the aim to also make the site mobile responsive post launch, to make the site accessible from any device.

Goals

Add Pizzas to Cart: While seeming simple, the goal of adding pizzas to a cart is absolutely essential for the site. It will track which pizzas have been customised, which have been built from scratch, and which have been selected from the menu. From here, the pricing can be calculated and displayed to the user. The goal of this is so that all of this would happen in the background without the user having to interact, creating a better user experience, as well

as speeding along the ordering process as the user is not stopped having to deal with obnoxious cart difficulties.

Order as Quickly as Possible: The main priority with this project is efficiency and speed. Therefore, this goal has been kept in mind when designing and implementing all functionality. Anything that can be reduced to a lesser amount of clicks for the user has been, as evident through the user being able to duplicate customised pizzas, as opposed to having to re customize the pizza every time they wanted to add another.

Show Current Promotions: Through evaluation of competitors, we determined that specials are essential when ordering pizzas online. As such, this goal is to make sure the customer is always informed of the latest and current promotion currently offered by the pizza store. This will be completed by a pop up that opens automatically when the user first enters the page. As it is only a single click to close it, we believed this goal did not clash with our goal to make ordering as quickly as possible.

Track Order in Collapsible Sidebar: This goal is to have the website track the order and display it for the customer so that they are not required to remember what is in the order they are currently placing. This would be collapsible so that the user can remove it if it is unnecessary, and can be brought back up if they choose to want it afterwards. This is built entirely for the customer so that their ordering experience is as smooth and effortless as possible.

Customise and Build Pizzas: This is to have users be able to customise and build pizzas to their liking. The main goal for this is to improve the customer experience overall as the customer would feel more involved and more in control over their food and order.

Scope

From an evaluation of our project, we have identified key features that are essential to a working build or prototype. They are listed in order of importance, with the first feature being the utmost important, while the last feature not being as significant as the rest, but still essential to the build of project.

Project Goals	Deliverables / Outcomes	
	Design	Description
Basic Menu	Layout	This involves making sure the site is symmetrical and aesthetically appealing.
	Collapsible Tabs	This makes sure that the menu is divided into working collapsable tabs so that the user can filter and only see

		portions of the menu that are relevant to them.
	Correct Information	This is regarding the specific pizzas themselves, and making sure that all ingredients listed are accurate, descriptions are clear, and nothing we are presenting is vague or misleading.
	Sidebar	This involves having a working sidebar that opens when items are added to the order and closes when the user decides. It also involves making sure it presents the user's order clearly and accurately.
Place Order	User can Input Payment Details	Fields for details of customer payments will be available for users to enter their payment details, or select "pay by cash" option.
	Copy of Order is Sent to Restaurant	An order summary is sent to the restaurant via email for them to make the order.
	Copy of Order is Sent to User	An order summary is sent to the user's email so that they can review their order and confirm they received the correct pizzas.
Customise/ Build Pizza	Display Ingredient Lists	An ingredients list on what currently available/ already on the pizza will be displayed in a list-like view.
	Remove Items from Pizza	Users will be able to remove items that are already placed on the pizza, either by the premade default listing or by them adding the ingredient on.
	Add Items to Pizza	Users are able to add ingredients to pre-existing pizzas, or pizzas they are

		building.
--	--	-----------

The following are features we believe to be improvements to the site, but are not considered essential to the working build and overall scope of the website and project. Presented in no particular order.

Project Goals	Deliverables / Outcomes	
	Design	Description
User Accounts	Add Username and Password	Users will be able to create accounts that remember order details by having them save into a database.
	Remember Orders	When logged in, users will be able to see previous orders and reorder exact orders. It will also save their details such as payment information and address.
Pop-Up Promotions	Display Promotions	The promotion pop-up will appear when the user opens up the site.
Rating System	User can Rate Pizzas	Users will be able to rate pizzas out of 5 stars.
	Average Rating of Pizza will be Calculated	The average review of the pizzas will be displayed alongside the pizza.

Project Progress

The decision to make a pizza based website was relatively quick and unanimous. While we did have some hesitation and reluctance, due to us meeting each other and having to decide the project entirely on the same day, we were able to quickly overcome that stalemate and draft a plan to implement. We also distinguished that amongst ourselves, we had the beginning skill sets to take create something that we could be proud of, as we all had differing skills and abilities that meant we could learn off each other and give our expertise to the project.

Creating the project timeline was quite simple, as we were able to come up with it within a single meeting. We found it to be quite fair and steady, so after all troubleshooting was set, we assigned everyone research and development roles for which we could adhere to.

However, this timeline was rarely able to be followed; this is due to the unfortunate unenrollment of one group member, causing the workload we had planned between four people to then be divided into three. Here, we made the pivotal decision to attempt to continue with the established timeline. This made our time severely limited and, in hindsight, a reevaluation of the scope would have been necessary. One instance of a feature impacted by the reduced time is the "Customise Pizza" segment of the project we made a Minimal Viable Feature. The feature involved several hand drawn images that we had planned to integrate, which when our group member left, caused issues as none of the remaining members had the artistic ability to draw out the required elements. This caused hardship in the project as we were limited in the ability to create the required elements. Despite the difficulties and hardships we encountered through losing a member and reallocating the workloads, we were still able to create major portions of the expected outcomes. For instance, research and creation of the menu and template went away fantastically, with us being able to create multiple designs and layouts, and even experiment with multiple colour palettes. Implementation of the expected sidebar took longer than originally allocated, however it eventually became fully implemented and functional. If we had a greater amount of time for the development, we would work implementing the extended viable features, such as the map tracker. While we do not believe this to be overly difficult, due to the loss of the member, we are struggling to incorporate the entirety of minimal features.

Outcomes to Date

Prototypes (Mock-Ups)

Presented below are two design mockups created to demonstrate a generalised layout of how the website would look (*Figure 1*). Also pictured is the expected implementation of the sidebar and how the functionality would operate (*Figure 2*).



Figure 1

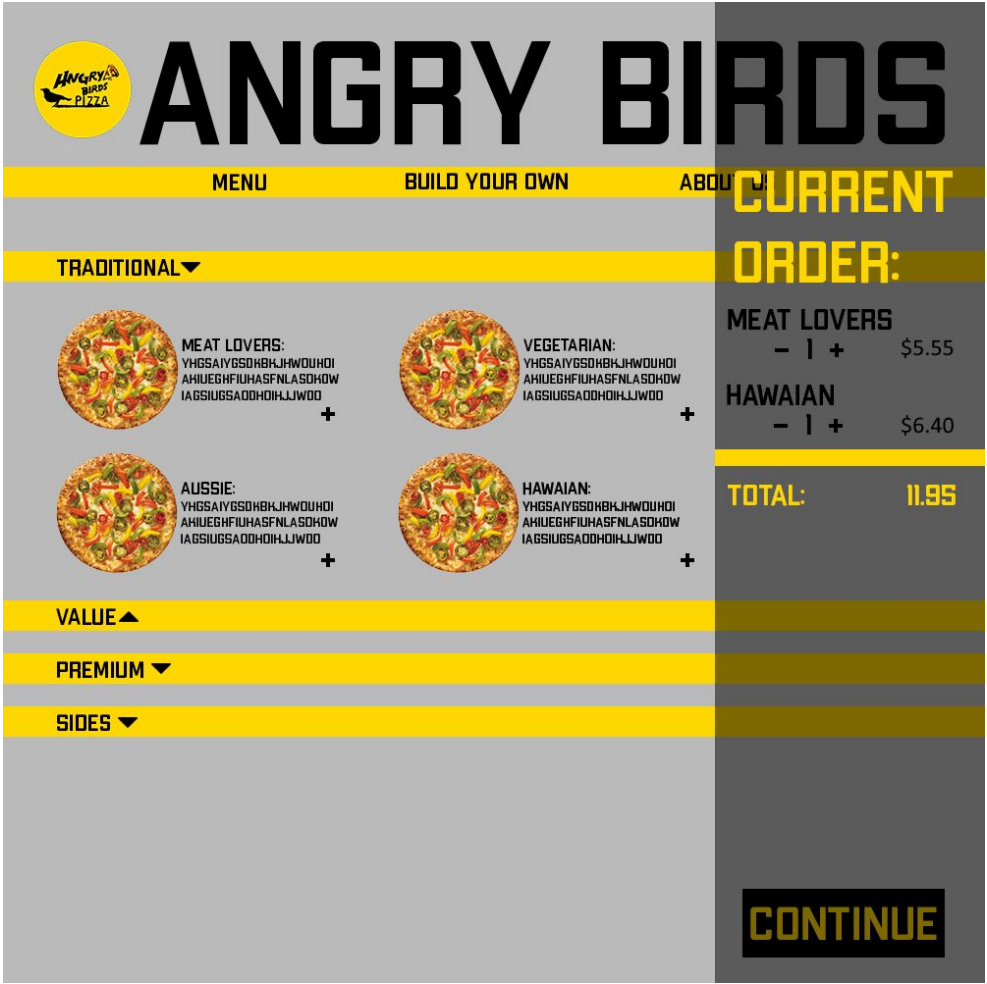


Figure 2

Front End Interface (PC)

Pictured below in *Figure 3* is the functional and working prototype of the user interface designed in the mockups. The bars are collapsible as expected and the sidebar is operational, although at this instance is not very aesthetically pleasing (*Figure 4*).



Figure 3

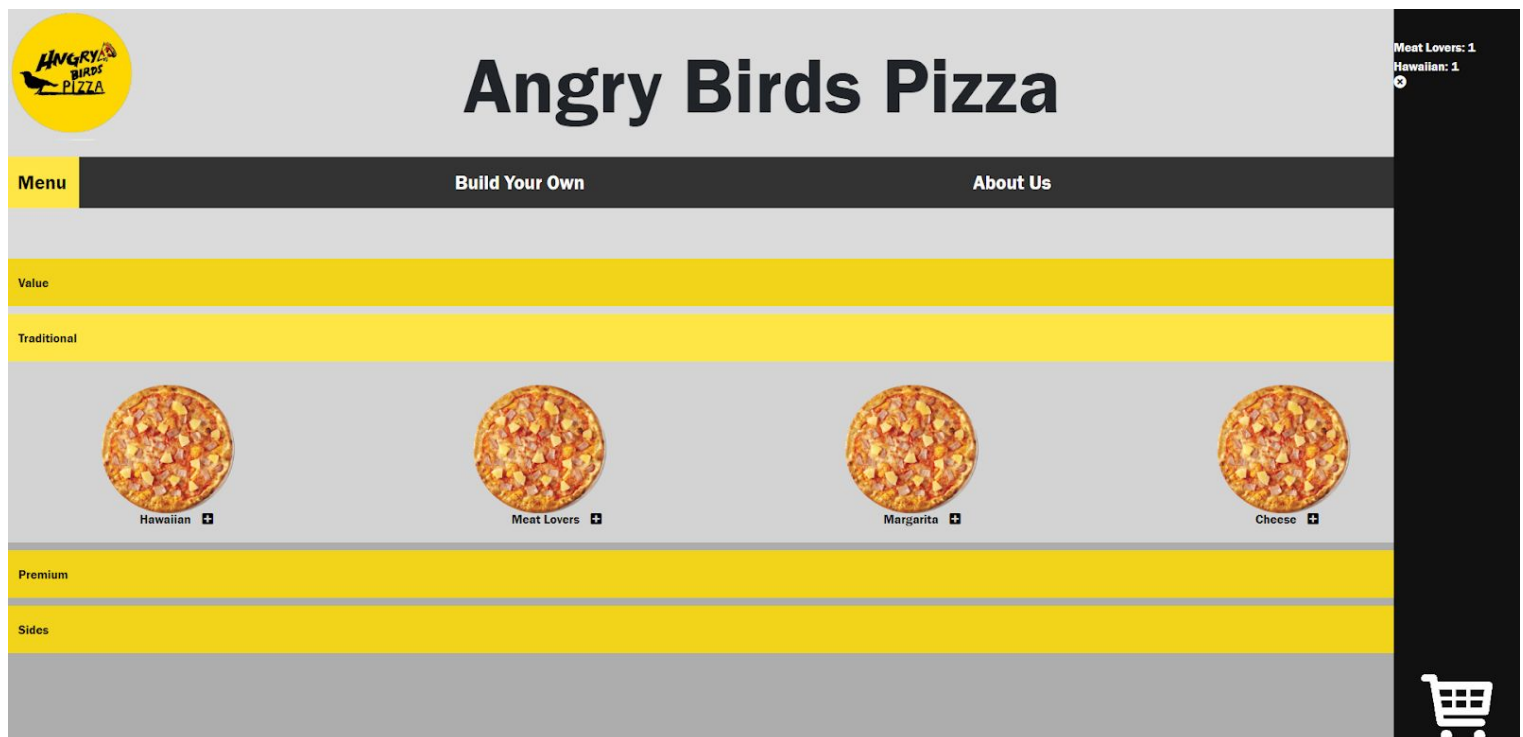


Figure 4

Alternative Designs

While the mockups were useful in showing us a working layout, we still decided to experiment with colours, fonts and orientations. Pictured in *Figure 5* and *Figure 6* are some alternative designs that we experimented with.

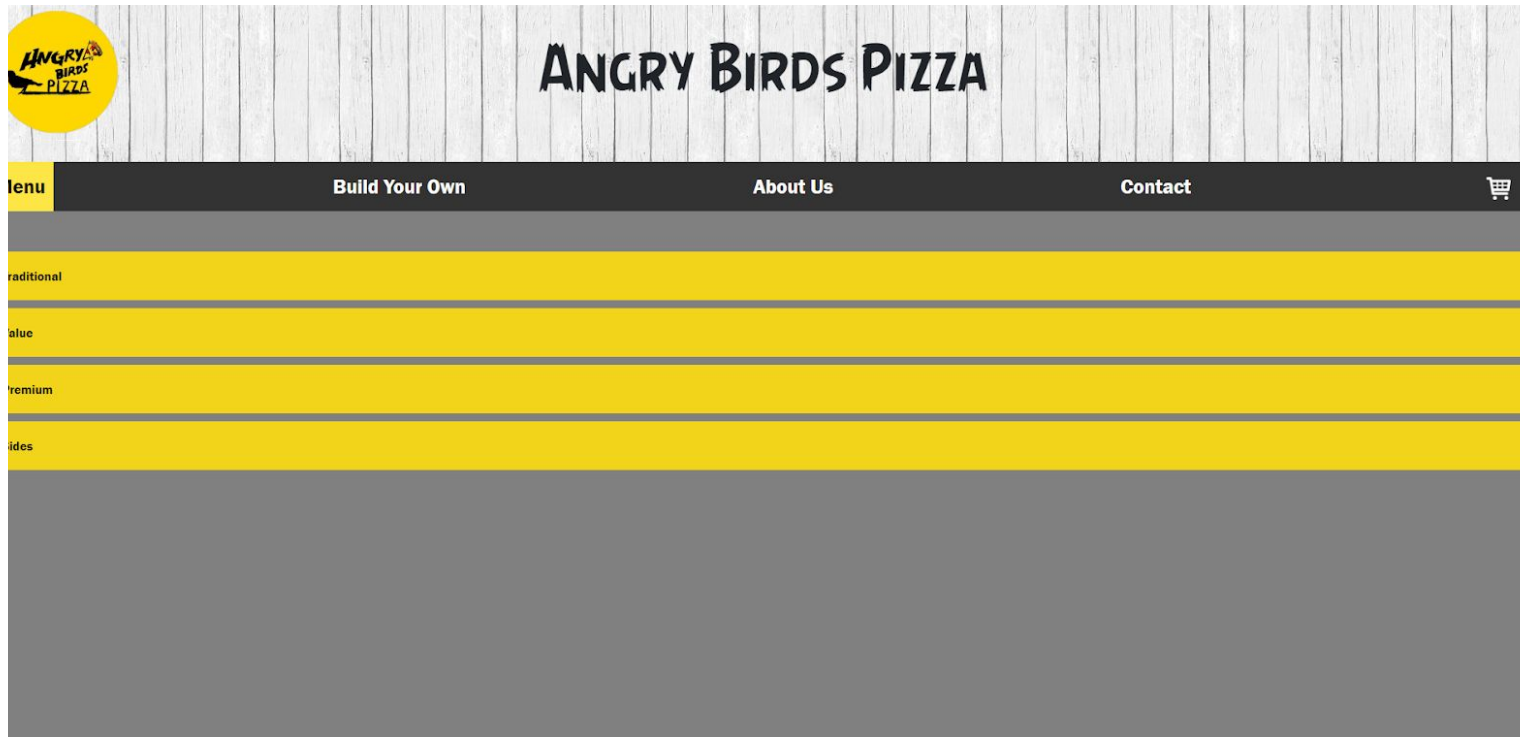


Figure 5

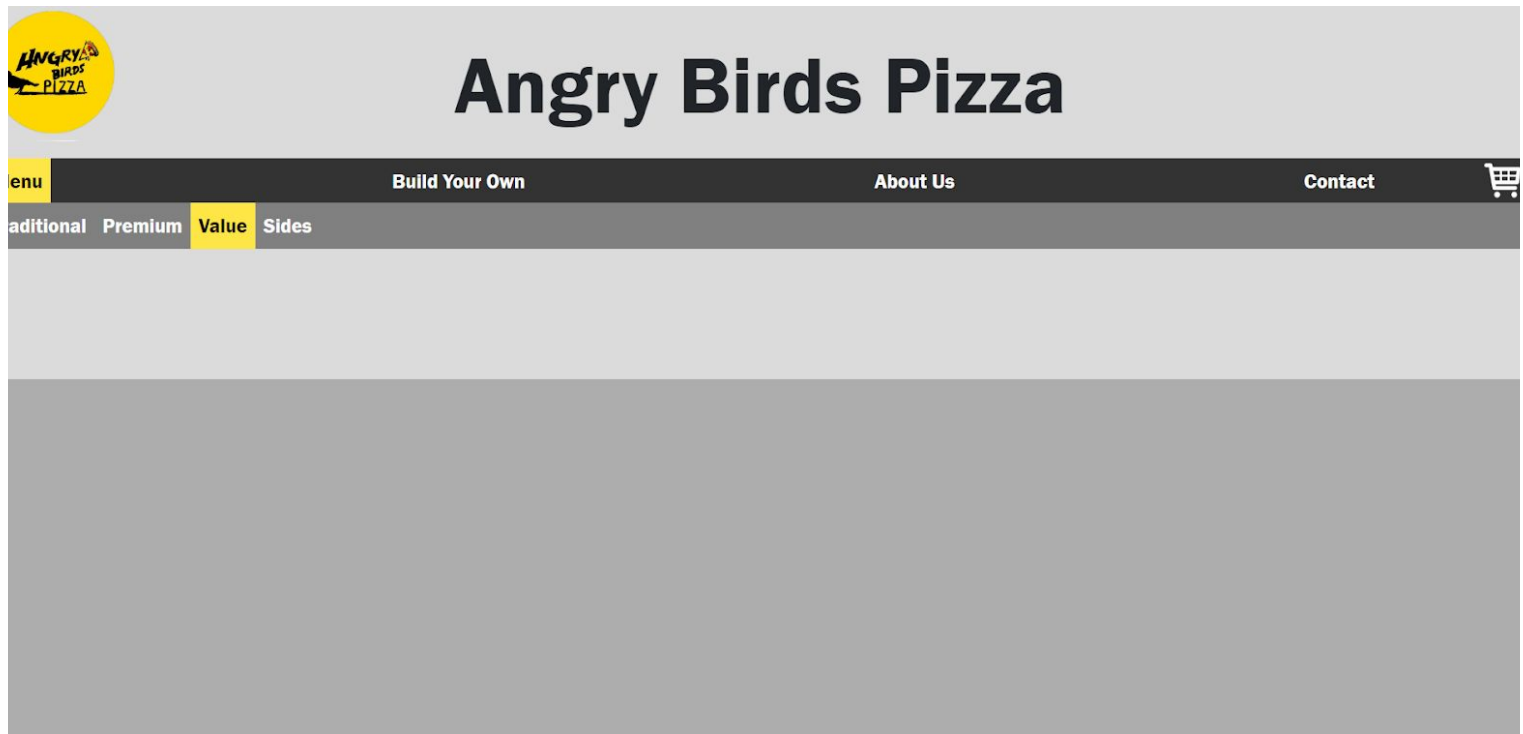


Figure 6

Back End (JavaScript, CSS, HTML)

Figure 7, Figure 8, Figure 9 show the HTML, CSS and Javascript code respectively.

```
index.html style.css script.js
1 <html>
2 <head>
3   <meta name="viewport" content="width=device-width, initial-scale=1">
4   <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" integrity="sha384-ggOyR0iXCbBKlrvWq...>
5   <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-q8i/X+965DzO0rT7abk41JstQIAqVgRVzpbzo5smXp4yFvH+8abTE1P6jizo" crossorigin="anonymous"></script>
6   <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js" integrity="sha384-Uo2eT8CqHdQ56PiYkhvKvNW+M;1a7NN9/D057Xuwg16" crossorigin="anonymous"></script>
7   <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js" integrity="sha384-J5swydyghSpxB1Rb2ZUaV0I7y60rQ6VrJJEaff/fn36r1xPds4xk1H4807j8" crossorigin="anonymous"></script>
8   <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.8.2/css/all.css" integrity="sha384-o53v8Wj3dvX8tpaobDGMtOj12ybDkrjml+Xmp6Y9t1sR6pxwNUj3VtYGDNVHPzofXELi" crossorigin="anonymous">
9   <title>Angry Birds Pizza</title>
10
11   <link rel="stylesheet" type="text/css" href="assets/style.css">
12 </head>
13
14 <body style="font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif">
15   <header>
16     
17     <div class="title">Angry Birds Pizza</div>
18     <ul class="navbar">
19       <li class="navitem"><a href="#">Home</a></li>
20       <li class="navitem"><a href="#">Build Your Own</a></li>
21       <li class="navitem"><a href="#">About Us</a></li>
22       <li class="navitem"><a href="#">Contact</a></li>
23     </ul>
24   </header>
25   <button class="collapsible">Value</button>
26   <div class="content">
27     <table style="width:100%">
28       <tr>
29         <td>
30           <div class="wrapper">
31             
32             <div class="imageDiv">
33               <div class="imageText">
34                 The Classic! Ham, Cheese, Pineapple, and our homemade Pizza Sauce!
35               </div>
36             </div>
37             <p class="pizzaName">Hawaiian <i class="fas fa-plus-square addicon"></i></p>
38           </div>
39         </td>
40         <td>
41           <div class="wrapper">
42             
43             <div class="imageDiv">
44               <div class="imageText">
45                 The Classic! Ham, Cheese, Pineapple, and our homemade Pizza Sauce!
46               </div>
47             </div>
48             <p class="pizzaName">Hawaiian <i class="fas fa-plus-square addicon"></i></p>
49           </div>
50         </td>
51         <td>
52           <div class="wrapper">
53             
54             <div class="imageDiv">
55               <div class="imageText">
```

Figure 7

```
1 body {
2   background-color: grey;
3   background-image: linear-gradient(180deg, #dbdbdb 50%, #dadada 50%);
4 }
5
6 .collapsible {
7   background-color: #F2D51A;
8   cursor: pointer;
9   padding: 10px;
10  width: 100%;
11  border: none;
12  text-align: left;
13  outline: none;
14  font-size: 100%;
15  font-weight: bold;
16  margin-bottom: 10px;
17  font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif !important;
18 }
19
20 .collapsible:hover {
21   background-color: #ffe647;
22 }
23
24 .active {
25   background-color: #ffe647;
26   margin-bottom: 0px !important;
27 }
28
29 .content {
30   padding: 0 10px;
31   margin-bottom: 10px;
32   display: none;
33   overflow: hidden;
34   background-color: #d3d3d3;
35 }
36
37 .title {
38   text-align: center;
39   font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;
40   font-size: 100px;
41   position: relative;
42   bottom: 145px;
43 }
44
45 .navbar {
46   list-style-type: none;
47   margin: 0;
48   padding: 0;
49   overflow: hidden;
50   background-color: #333;
51   position: fixed;
52   top: 105px;
53   left: 10px;
54   width: 100%;
55   font-size: 25px;
```

Figure 8

```
1 var coll = document.getElementsByClassName("collapsible");
2 var i;
3
4 for (i = 0; i < coll.length; i++) {
5   coll[i].addEventListener("click", function () {
6     this.classList.toggle("active");
7     var content = this.nextElementSibling;
8     if (content.style.display == "block") {
9       content.style.display = "none";
10    } else {
11      content.style.display = "block";
12    }
13  });
14 }
```

Figure 9

Scope Creep

Due to the unfortunate loss of one group member, we suffered quite a large contraction in scope. Segments that would have required drawn assets or custom assets had to be reworked entirely, such as the customise pizza segment which would have had custom assets overlay on top of each other to simulate the pizza design and ingredients. Without the assets though, we were forced to reevaluate the feature and make something significantly less exerting of the developers.

Progress

Title	Planned Start	Planned Due	Finish Date
Week 3			
Describe the project (website) description and main features	18/3	24/3	24/3
Describe team's workspace and communication method(s)	18/3	24/3	24/3
Make an overall plan for the website's development	18/3	24/3	24/3
Describe future possible features	18/3	24/3	24/3

Week 4			
Finalise the project (website) description and main features	25/3	29/3	29/3
Finalise team's workspace and communication method(s)	25/3	29/3	29/3
Finalise overall plan for the website's development	25/3	29/3	29/3
Documentation revision and formatting	29/4	31/3	29/3
Week 5			
Research on minimal viable feature #1 (Add to Cart) – Design	1/4	7/4	7/4
Research on minimal viable feature #1 (add to cart) – Coding	1/4	7/4	7/4
Research on minimal viable feature #2 (Customise Pizza) – Design	1/4	7/4	7/4
Research on minimal viable feature #2 (Customise Pizza) – Coding	1/4	7/4	7/4
Week 6			
Research on minimal viable feature #3 (Place Order) – Design	8/4	14/4	14/4
Research on minimal viable feature #3 (Place Order) – Coding	8/4	14/4	14/4
Research on minimal viable feature #4 (Set Quantity) – Design	8/4	14/4	14/4
Research on minimal viable feature #4 (Set Quantity) – Coding	8/4	14/4	14/4
Week 7			
Research on minimal viable feature #5 (Build Your Own Pizza) – Design	15/4	21/4	21/4
Research on minimal viable feature #5 (Build Your Own Pizza) – Coding	15/4	21/4	21/4
Quick research on extended viable feature #1 (Map Tracker), #2 (Pop-Up Promotions) and #3 (User Accounts)	15/4	21/4	21/4
Quick research on extended viable feature #4 (Rating System), #5 (Facebook Page), #6 (Mobile Application) and #7 (Search Function)	15/4	21/4	21/4
Week 8			
Build mock-up prototype (design-focused)	22/4	30/4	30/4
Build mock-up prototype (coding/functionality-focused)	22/4	30/4	30/4
Mock-up prototype testing and fault finding	30/4	3/5	3/5
Documentation revision and formatting	3/5	5/5	5/5

Week 9			
Building the website – Designing home page	6/5	12/5	12/5
Building the website – Programming home page (Implementation once design has finished)	6/5	12/5	25/5
Building the website – Designing main viable feature #1	6/5	12/5	25/5
Building the website – Programming main viable feature #1 (Implementation once design has finished)	6/5	12/5	25/5
Week 10			
Building the website – Designing main viable feature #2	13/5	19/5	1/06
Building the website – Programming main viable feature #2 (Implementation once design has finished)	13/5	19/5	1/06
Building the website – Designing main viable feature #3	13/5	19/5	1/06
Building the website – Programming main viable feature #3 (Implementation once design has finished)	13/5	19/5	1/06
Week 11			
Building the website – Designing main viable feature #4	20/5	26/5	Unfinished
Building the website – Programming main viable feature #4 (Implementation once design has finished)	20/5	26/5	Unfinished
Building the website – Designing main viable feature #5	20/5	26/5	Unfinished
Building the website – Programming main viable feature #5 (Implementation once design has finished)	20/5	26/5	Unfinished
Week 12			
Website testing (Alpha/Developer Testing) and fault finding	27/5	27/5	Unfinished
Website debugging and improvements	28/5	30/5	Unfinished
Documentation (Project Background, Project Progress, Project Processes)	30/5	2/6	Unfinished
Documentation (Challenges and Learning, Marketing Pitch, Skills and Jobs) and its finalisation	30/5	2/6	Unfinished

From viewing the timeline and comparing the expected and actual due dates, the timeline went quite well until the development that began in *Week 9* where the developers encountered significant issues in implementing all the features that were expected. This pushed all the development back and put the project off schedule.

Testing

We conducted the testing of the project through following the format of a test table as such:

Function	Expected Outcome	Actual Outcome
----------	------------------	----------------

This meant that we would choose the desired function, document the desired outcome, and then compare it with the outcome that happens. This meant that we were able to conduct tests on the same function multiple times until we were able to reach a satisfactory outcome. One example of the test table is as follows:

Function	Expected Outcome	Actual Outcome
Sidebar	When the '+' is pressed on a pizza, the sidebar will appear.	When the '+' is pressed on a pizza, the sidebar will appear.

From here, it is evident that the actual and expected outcomes are one in the same, and therefore we can conclude that the feature has been properly implemented. However, there are also features that took multiple attempts. For instance:

Test 1

Function	Expected Outcome	Actual Outcome
Menu Bars	When clicking the drop down menu, the menu will expand.	The text is underlined and the menu does not expand.

Test 2

Function	Expected Outcome	Actual Outcome
Menu Bars	When clicking the drop down menu, the menu will expand.	When clicking the drop down menu, the menu will expand.

Tools and Technologies

Team Management and Communications:

Presented are the tools we believed to be essential in the performance of the group.

Through the use of the documented tools, we were able to communicate effectively and plan the project accordingly.

- GitHub - A collective space we shared to send files, prototypes, and any other relevant information pertaining to the current task. The repository was adapted half way through the planning of the project and has been used to share development builds between the members.
 - GitHub Repository: <https://github.com/tr-angry-birds/hungry-birds>
- Trello - Our consistent timeline to document any difficulties or achievements by the group members. It allowed the group to document how much time they spent working on a task and when they were able to complete it
 - Trello Board: <https://trello.com/b/4acn4b3e/tr-angry-birds>
- Whatsapp - Our main method of communications and discussions. We have actively used Whatsapp since the very beginning of the project and through our communications, we have been able to make decisions regarding the advancement of the project and how we should proceed going forward.

Development:

Where the project is being built, and with what tools and extensions. Potentially the most vital aspect to the project, and one that has the most impact upon the final product.

- Microsoft Visual Studio - While not the original development kit we planned on using, we found Visual Studio's interface to be far superior to any others that we had available, and therefore decide to proceed with it. We found switching between the tabs that held the Javascript, HTML, and CSS to be quite effortless in Visual Studio, where other programs made it quite difficult, or sometimes disorientating.

Design and Prototype Building:

Below are the listed programs and tools we decided to use in order to build the prototypes and aesthetic assets used in the project, reports, and group images.

- Paint.net - While not as powerful as other technologies utilised, it still allowed us to make quick edits to best fit the project. This could be quick tasks such as removing unwanted backgrounds from the image assets we were using.
- Photoshop - Where most of the large edit work was conducted, in order to make the best possible outcome. It was used to build the mock up prototypes that were used to design the website, as well as edit the logo to add colour and such.
- Pen and Paper - While seeming quite ordinary, these basics ended up being a necessity, as early mock ups for the site were conducted on paper, as well as all drafts for hand drawn assets and the logo for the group.

Challenges and learning

Some of the easy things we found include planning our tasks and putting them into a timetable, it was easy to allocate duties and roles since we already knew each others strengths and weaknesses and we all knew how long a certain task might take to be complete and with that knowledge in mind we were able to swiftly and completely assign tasks and roles which fit perfectly with the timetable and even had time to perfect the project before the Due date. Also since the group consisted of generally good and like minded people, ideas flowed smoothly without issue.

The difficult parts were during the development stage, since everyone had a busy schedule, some had jobs, it was hard to meet in person, it was also hard to keep track of individual work since we did not work on a single document but each worked on their individual ones and submitted it to be compiled to a single document, same goes to the tasks we were to work on. Also in regards to this some members, once tasks were allocated along with a busy schedule, preferred to work in solitude, which made communications a bit difficult. Sometime during the development stage one of our members ended up forgetting his equipment in a different stage where he went during the short semester break which delayed a whole weeks work.

The amount of coding was unexpected, the members who worked on the website had knowledge in coding but were not prepared on how big of a task it is not to mention how the amount of research one has to do in user centered design and graphics design to ensure the website looked as professional and worked just as good.

We had to stretch our knowledge on certain areas like user centered design and graphics design as well as web programing we also had to do heavy research on the fast food industry, the pricing rates and how to be better or at least equal to the top companies in the same field, some had to take art class to know how to draw and design good Logos while others had to learn photography to capture the images of the pizza for commercial use while also stretching our working hours to learn all this outside of the allocated timetable.

I was expecting to have a somewhat unruly group and expected to carry the group but it turned out that they are nice people, i also expected to lag on my part of the project since i have a loaded schedule but so far i have been able to accomplish most of my tasks on time since i took the microcredential on managing time and priorities and learned how to plan my time to effectively accomplish all my tasks without lagging on any of them,

Some new skills i have learned while working on this project include, good communication, web scripting, graphical design as well as critical thinking in the case of web scripting since you can use certain formulas to code a website which are long and complicated as seen in online templates which have the same outcome as small simple lines of code that are complex but simple once you understand them better

So far we have worked in accordance to our timetable when it comes to deadlines but before the deadline a lot of things came up which hindered us to achieve short term goals and accomplish certain tasks which made us change some minor details in the timetable to ensure that the deadline is met on time, i think trying to script time to fit in accordance to your timetable is unrealistic, which is something i came to learn recently and if i went back i'd

be open to any and all changes towards the timetable trusting that it will eventually fit the timetable.

I believe our timetable was realistic since all the tasks were accomplished in time and since we planned it using individual information on how long or how short it would take them to accomplish each individual task so I doubt there is anything I'd change from the timetable itself just my controlling attitude.

We decided to use Trello as our task management app which proved well somewhat irrelevant since all our planning was through word of mouth whenever we meet and once someone was done they'd post their part on github and inform the group on whatsapp which was our communication platform, some unexpected risks were like the loss of some equipment and how uneffective trello was.

Project process

Ben

One of the things I learned from group work includes how vital communication is to a group. I won't lie, I'm not that good with communication, I prefer to work in silence and accomplish my tasks and roles in solitude, but being in a group one must constantly update their progress and accomplishment which isn't my style; I prefer having something concrete before I talk. What worked well in my group was the commitment to the project. Being in uni and doing 4 courses a semester with a load of assignments and reading, it is easy to ignore a group assignment and major on others, but that wasn't the case with my group members, who actively worked on the project since each knew how important it was. As a group we are supposed to meet physically and work on the assignment but aside from the allocated tutorial we never meet which, in a way, I understand, but I also feel like if we meet once a week we would be doing the project faster than the current rate. As mentioned we used Whatsapp to communicate since each of us was familiar with it and relied on it for communication and mostly because it's a mobile app and we're nearly always using our phones throughout the day. We would use it to pass key information, cite references and sites that we would use as well as give links to documents stored in the cloud. It was also where we would ask for help and/or clarification to a certain issue on the task or project in general. When we started we had plans to use facebook messenger but changed to Whatsapp. Later on, with the introduction of Trello, we decided to rely on it to assign tasks and monitor our progress, but it proved to be ineffective.

When planning a group project in future, I have realised it's better to work on group dynamics at the start of the project, having like minded people who have different skills and knowledge in different topics is a key issue. I think the only thing I'd personally do different would be having regular and consistent communications with my group as well as consulting the members, and our Tutor.

My advice to a group about to start a project is to take time to set up communication channels and group dynamics before embarking on the task; know each other, your weakness as well as your strengths, and once you are done with that make sure your communications are consistent whether or not there is progress to talk about or not.

Harris:

Through this group project, I have learnt the effectiveness of the 'divide and conquer' methodology. While I do honestly tend to avoid group work as I find it to be inconvenient, I cannot deny that having work allocated towards several group members is a fantastic way to alleviate stress and ensure the best possible outcome. Personally, I found the dynamic of how we divided the group work to be quite effective, as we were able to communicate amongst ourselves and coordinate work accordingly. The dynamic of researcher and developers we had I believe made the work load a fair balance, as well as gave everyone a specialised field so that individual attention could be given to each feature. Unfortunately, our group did not always communicate effectively, and there could be several days where we would not communicate or meet at all.

We have consistently used Whatsapp as our communications channel throughout the semester. Personally this I believed to be a hindrance, as the standard in most groups would be Facebook Messenger, which comes with a lot of functionality that is lacking in Whatsapp, such as polls and easy mentions. Additionally, I would find that Whatsapp was very inconsistent with alerting me when I was receiving messages, as there would be days when I would open the app and see I have had several unread messages I was not even aware I had received.

The most important thing I have found in this project is improvising. Not only did we have to deal with losing a member and having to adapt work accordingly, but our communication issues meant that there were days where we would potentially all be working autonomously but not in unison. This meant that we would have to quickly align all our work together to make it consistent.

If another group was to attempt this, or a similar, project, I would advise them to establish roles and communicate amongst themselves very early on. I found that our lack of communication really hindered our work and our interpersonal skills amongst each other, therefore resulting in a result of lesser quality.

Ian:

From my time working in the group, I've learnt that there are benefits to working in a group rather than individually. Working in a group proves to be reducing the work needed to be done by much, and ultimately reduces stress. This is especially true as the time to finish the project is relatively short, even for a project as simple as us, which is making a website. Whilst working on the project, everyone is doing their own part, which is crucial for project completion. I also learnt some many new things about web programming from the code made by other team members, which knowledge I used to make my own code. However, not all things are going as planned/well. Halfway through the semester, one of the group members left the group because of some academic problem which, not only very unfortunate for her, also impact our project flow as she has some skills that otherwise be very useful towards the project.

The team is also still using the same communication method as before, which is using WhatsApp. The group's communication processes are also the same, that is answering other members questions and queries when asked. Although, the communication seems to be even more passive than before, mostly due to time limitations/restrictions (being busy on some other matters) and the fact that one of our group members left the group.

From my experience doing this project, it seems that planning is critical to the success in making the project. In a website, it seems that each page has almost a unique look compared to the other, except the header. In which case, putting comments that are easy to be understood would be very helpful and greatly reduce the time to code the pages, especially if said pages are done collaboratively. Although, our group comprises of a small number of people and as such I would think that a different approach might help the group further. If I am to start again, I would suggest for each group member to do a specific page, that would still also contain comments for the ease of understanding, which then combined when finished to create a full working website (or close to it).

As for the advice for a group that would embark on a similar project, I would say that they should make a specific plan and separate works amongst the members, which would also depend on how many members in the team itself. Moreover, I would also suggest them to give/leave comments in their code which could be of immense help to some other members that might not be familiar with the code or even to give some general understanding when trying to combine parts of the project.

Marketing Pitch

According to Statista (2019), there are a total of slightly above 6 million people that order their food online and this trend is estimated to grow in number as the time goes. As such, it is of no wonder that many pizzerias, including famous ones such as Domino's and Pizza Hut, do have a website of their own. However, as our previous research (and past experiences) on said websites, we found that there are some things that we can improve which becomes the focus of our website. For instance, our website would have the capability for the user to customise pizzas directly after it was ordered rather than redirecting them to another page to do so, which is something that is commonly found in pizzeria websites. Furthermore, our website would also have some features unique to our website (or implemented by few pizzerias, i.e. uncommon) that focuses on benefiting the user. One such feature is having a "Build Your Own Pizza" feature to have the capability to show user the appearance of the pizza he/she will receive that changes dynamically in respect to the chosen topping(s). These sorts of problems are problems that affect UX (user experience) and might seem trivial but ignoring these problems might lead to a rather severe repercussion. At worst, this could mean losing potential customer (Metz 2017).

Skills and Jobs

- Back-end developer

A back-end developer would handle the server for the website along with any incoming and outgoing requests to that website. This person would also be responsible to keep data inside a database in an efficient manner so that queries (both for inside and outside company) do not take an unnecessarily large amount of time. The person for this role would also be required to collaborate with the front-end developer (i.e. the designer) due to the nature of website development.

- Website designer

A web designer designs the layout of the website in a manner that promotes usability to the users. Due to that, the person for this role should also be able to carry out a research to find the layout that reflects a good UX (user experience). Moreover, due to the ever-changing trend in the UX field, this person would also need to be able to recognize such change and update the design of the website correspondingly. This person would also be required to collaborate with the back-end developer due to the nature of website development.

- Data security analyst

Since the website is of commercial nature, a certain degree of security is needed to ensure there are no unauthorised access which could be harmful to the company utilising the website. The person for this role would be responsible to handle the various matters of security for the website and as such expected to have a vast understanding in that area.

- Photographer/Photo Editor

A photographer is needed to take pictures in a way that could entice/attract consumer using various photographing techniques. These photos could include several things, such as photos to display for each pizzas and place of the branches (I.e. the pizzerias under the company name) of the company that has the website. Moreover, the person for this role is assumed to also know about editing the photos that have been taken to produce suitable images that are fitting to be displayed on the website.

Reference List

Metz, T 2017, 'The Real Effects of Bad Web Design', Usability Geek, blog post, 3 May, viewed 29 May 2019, <<https://usabilitygeek.com/real-effects-bad-web-design/>>.

Statista 2019, Online Food Delivery, Statista, viewed 29 May 2019, <<https://www.statista.com/outlook/374/107/online-food-delivery/australia>>.