Assessment Three

Team Profile Personal information **Doug Barrett** Matt Wilson Sean Cullen John Rehill Kyle Hudson **Group Processes** Career Plans **Project Description Tools** Aims Plans and Progress Roles **Scope and Limits** Tools and Technologies Doug Matt Sean **John Kyle Testing** Timeframe **Risks Group processes and communications Skills and Jobs Group Reflection** Sean Cullen **Doug Barrett** John Rehill Kyle Hudson

References

Team Profile

Team Name: Meta Tier Solutions

Personal information

Doug Barrett

https://rmit-subatomic.github.io/Assessment-one-My-Profile/

Meta Tier Solutions - Team Leader

I am an Australian born citizen with Argentinien family background, I left school halfway through year 12 to commence a traineeship as a Network Technician with a small local business on Yorke Peninsula, I then moved on from that role due to personal reasons and headed back into the hospitality game, there I was able to travel around Australia and manage different hotels for a number of years. While traveling I had the opportunity to study a number of boating certificates to gain employment in the shipping trade, but that fell short, as I found my beautiful wife who I have been with for 10 years and counting.

Matt Wilson

https://mattwilsonrmit.github.io/S3826711/index.html

ID- s3826711 || Meta Tier Solutions – Frontend DevOps

I am a 30-year-old single father from Queensland whose hobbies include writing music, gaming and programming. My interest in IT began at a young age after playing video games and building my first computer, but it didn't truly flourish until my late 20's during my work in a technical role within a CCTV program.

I believe this passion for IT is the result of a combination of the freedom for creativity it can offer and the ever present and changing problem solving aspect of the industry. The room left for further innovation feels near infinite, the possibility for us to all leave our footprint of humanity is very much available to those of us passionate to pursue a career within Information Technology.

I have experience working within a government organization contributing to front-end web design and development along with general troubleshooting and maintenance on equipment and software.

Sean Cullen

https://s3735706.github.io/ Student Number: s3735706

RMIT Email: s3735706@student.rmit.edu.au

Website URL: https://s3735706.github.io/

In this section about myself I have added more personal information about me, that I didn't think to add in my original website. I was born in Adelaide, South Australia. My mother was born in the UK. She was raised in India, my father was born in Switzerland. He was Swiss French, my culture is mainly British despite the cultural diversity. I completed year 11, Cert 2 and 3 in security, Cert 2 in fitness and did a diploma in IT. One of my hobbies is Tarantula keeping. I had kept thirty different species of Australian Tarantulas. I started a group on Facebook for reptile's invertebrates and amphibians. I have a cat whose name is Bella. I raised her from a six-weekold kitten. In my spare time I do weight training, cycling, reading and playing sims 3 on pc. I am the youngest of five in my family, my life wasn't an easy one I was brought up in a very religious strict environment. I broke away from the religious environment which led to me being disowned. I had to form a new life without family support. I have lived in Sydney and Melbourne, I lived in Sydney for 12 months and I lived in Melbourne for 6 years. I have a partner who lives in Cardiff Wales and I am working towards moving over there after I complete my studies. I have travelled overseas to England, Germany, Amsterdam, Singapore, Vanuatu, New Caledonia and Thailand. I leave in four weeks to Wales to see my Fiancé. I reside in Adelaide South Australia; I live in the city itself which is handy for me as I don't drive. I am one of those people you will see at a local café enjoying a latte perusing social media or reading the paper. Our team name is Meta Tier Solutions. We came up with the group name based around our project. We decided the name together in a team meeting. We wanted a team name that sounded professional.

John Rehill

https://s3828158.github.io/index.html

S3828158, Team: Meta Tier Solutions

I originally come from Dublin, Ireland and my Irish accent is one of the things people notice about me. My father mentioned I was good at technical things so suggested I look into working with computers. I was one of the first people to have a home pc in my class so was pretty good in computer classes and assisted the teacher with instructing other students. I completed my year 12 equivalent in Ireland and started doing a programming course, but while walking through the local shops, a friend of a friend mentioned he was starting a computer hardware course so I dropped out of programming and did that. This gave me some good opportunities such as being able to travel to Florida for a couple of months as part of study work over there. After the course I got a position working with upgrading the Dublin health service government computers for the incoming Euro currency and Y2k changeover. Though it was a term project, I was able to impress my supervisor that I was asked to come onboard as a helpdesk agent in the IT call centre and while working with this organisation for several years I moved onto lab repair work and then onto fieldwork, driving around to different locations solving issues. I then relocated to Australia, I again got a job working in IT desktop support which I've been doing for the last 14 years. I've now moved away from the day to day desktop work to a mid-level role supervising the desktop support person, providing backup for the system administrators and working on various projects. I've got a curious nature and I'm always looking into new technology and trying to improve my knowledge with new things. I'm also a typical gamer, playing a variety of PC games, Xbox and mobile platform games. As a family man, I encourage my kids to explore and try out new things so they can have a variety of choices as they get older. Although my background is strongly hardware side, I'd like to get back into the programming/coding side of IT work and that's why I started with Open University/RMIT to see what the next step for me will be.

Kyle Hudson

https://khudson-debug979.github.io/

Team: Meta Tier Solutions

My first interest in IT was a young kid playing Doom and Quake. I wondered what made this wonderful machine work the way it did. I'm very interested in networking and hardware; building custom computers is something I enjoy. I;d love to build my own server, but currently lack the funds. I eventually got my own second hand computer and wrecked it within a week. Being a very experimental child. I deleted System32: after all, it was taking up so much space. When I was young, I ended up in foster care several times and one of the best places I ever stayed with was with my primary school IT teacher and his family. The efforts that family went to still blow my mind. I became who I am because of them. My teacher/foster father instilled a love of computers and IT that has lasted my entire life. I don't have much IT experience beyond clearing viruses from friends laptops and building my own PC. I tried to learn programming myself a few years ago, but I struggled with C++ and gave up after a couple months. I chose RMIT because it is well known for being great for IT. I figured I would pick the school with the best reputation for IT that I knew of. To be fair, I never gave it much thought. Somebody on Reddit messaged me when I was struggling and gave me the encouragement to enrol and get started, so I jumped in feet first and now, here we are. I'm hoping to become a competent programmer and learn more about networking, though I expect the total sum of knowledge I acquire to be much greater by the end of my studies. I don't really know exactly what my dream job would be, but I've been leaning more towards becoming a network engineer more than anything else.

Group Processes

How we worked in Assessment two?

Assessment two we work extremely well together, at first we had a few issues with team members and people dropping out and no contact, but with these people leaving, we were given a new team member that really fit in.

Things we might change this Assessment?

There will be changes to the team meeting schedule, assessment two we got by with a couple of group meetings with all of us, then kept everyone up to speed with a group chat channel where we could talk to anyone anytime, with this assessment because there are two that need to be worked on, we will be having a lot more meetings as a group, this way we can all be kept up to speed with what's going on.

Career Plans

Doug Barrett- Cyber Security

Kyle Hudson- Network Engineer

Matt Wilson- Web Application Development

Sean Cullen- Web Application Development

John- Software Development

What common elements are there, if any? And What differentiates each position from the others?

There are a few common elements when it comes to everyone's ideal jobs, the major on involves a solid grounding in programming and how computers can be connected together to communicate via a range of different protocols. With Matt, Sean and Johns ideal jobs programing will be a core requirement for any job in that field, the languages they need to learn could be vastly different depending on what company they apply for and the jobs that they take on

A quick comparison of two qualifications that are the same skill but different technologies in different jobs could look like this.

If John was looking for work at Microsoft as a Software Engineer they will be looking for someone who has

- Familiarity with Microsoft .NET technologies (C# and the .NET Framework) and/or competitive offerings (e.g. J2EE, WebLogic or WebSphere). Candidates should have previous experience with multiple product release cycles
- Experience with ASP.NET, MVC, or WCF/Web API or JAX-JS API (Careers.microsoft.com, 2020)

Then if Matt and Sean where looking at Apple for a software engineering job they would be looking for someone who has

- Experience deploying software on elastic platforms such as Kubernetes, EC2, Mesos
- Strong development skills in an OO language. We use Java. (Jobs.apple.com, 2020))

Doug and Kyle where going for more network and communication style jobs, where programming will still be a fundamental skill to have but used in a completely different way, like writing scripts in Bash to run applications automatically, or reading the code of a virus or worm written in C++ or Java that is infecting the company's computers to get an understanding of how to stop it and protect from future ones like it, so yes they all have the same requirements of being able to program but that varies greatly depending on the job and field that person is working in.

How similar or different are your career plans across the group?

If you look at the groups desired careers just by their job title, then it looks like we all want similar outcomes, but when you ask each person individually where they want to go with that desired role, that is where it all begins to be vastly different from each other. Some of us just want to gain employment and have a steady job in a field that they are passionate about, but then some of us want to get more than that, we want to fully immerse ourselves in that field, learn everything that we can possibly can learn about it, then move on to something else. So our career plans might look similar but really underneath all the job titles it is enormously different.

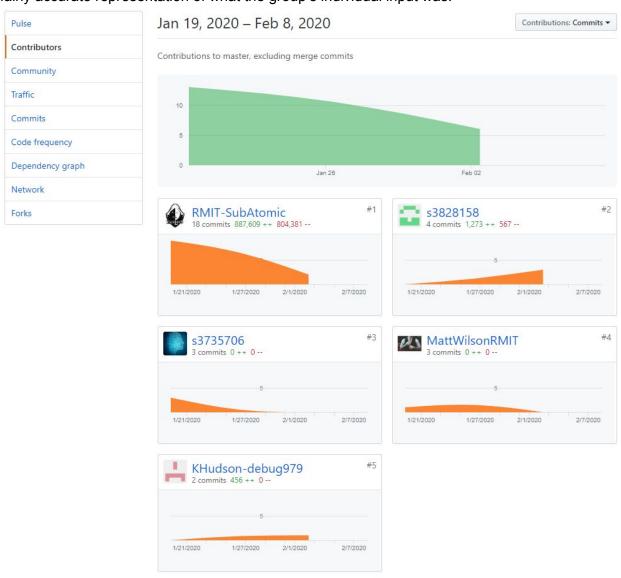
Tools

Website URL: https://rmit-subatomic.github.io/Assessment-three-and-five/
GitHub Repo URL: https://github.com/RMIT-SubAtomic/Assessment-three-and-five

What we Have Done

How Well the Audit Trail on the Git Repository Reflects your Group's Work?

Below is a copy of the Contributors graph from the groups GitHub repository. It shows that there was a very substantial input from Doug, followed next by John, Sean, Matt and then Kyle. It is a fairly accurate representation of what the group's individual input was.



Project Description

Overview

Today, more than ever we are scraping for more minutes in the day after work and before bed to spend more time with our families and decompress. While many of us, myself included, find cooking very relaxing and fulfilling, often it is the last thing we want to do at the end of what was potentially a long day. This feeling of "I have to cook tonight" is no doubt heightened when it's a mammoth task to find something everyone in your house will not only eat but will nourish and sustain them. This is where META Foods comes into the picture, providing everyone from all walks of life a means of easily having affordable, delicious and healthy meals every night of the week. The cooking is still up to you (we aren't quite there yet) but we have taken care of doing all of the thinking for you when it comes to meeting your entire families dietary requirements, health goals and taking grocery shopping out of the equation while still supporting your local supermarkets.

What are your motivations for your project?

The motivations for this app are to bring something to the public to make life that little bit easier, to help people with planning meals to their requirements. Giving people a chance to make and eat healthier food in an age where it is made to think it is cheaper to eat junk food and to help those with food intolerances to have more variety with their menus.

Why is this project important or interesting?

This app is interesting as it doesn't just cater for one specific genre. This app caters for everyone. This app does the thinking for you when it comes to meeting your entire family's dietary requirements, health goals and taking grocery shopping out of the equation while still supporting your local supermarkets. This app is important for those on a low income who can't afford expensive elaborate meals but can still eat healthy and making sure their family eats healthy. This app is also important as it will make food preparation easier for those who lead busy lives with family where time is limited.

How does it fit in with current IT trends?

The app fits in with current IT trends as a lot of people use the internet and online services, either through their smartphones or home PC's and laptops. This app fits in with current IT trends as it utilises online grocery shopping, the use of databases for recipe searching and it fits in with current trends because of where the direction of the IoT is going, everything is becoming online based and people are using apps for everything to make life easy and integrated with their daily life.

What would it show to a future employer if you were able to work on this project?

This would show a future employer that we could effectively work as a team, meet deadlines, successfully complete the project and show that we can effectively work with the technology and software tools we have. As a team it would show a future employer how we utilise these skills in different areas and supporting our fellow teammates where it is needed.

What similar systems or products are available?

There are a lot of similar systems and products available online such as; Allrecipes dinner spinner, mealime, foodplanner, mealplan+, mealboard, eat this much, yummly and many more. (Digital Trends, 2020)

What competitors are there?

The types of competitors that we will be up against are mealime, foodplanner, mealplan +, mealboard, eat this much, yummly, Hello Fresh, Paprika and Veganised. (Digital Trends, 2020)

What points of difference are there about your project compared to what exists now?

There are delicious and healthy meals every night of the week. The cooking is still up to you (we aren't quite there yet) but we have taken care of doing all of the thinking for you when it comes to meeting your entire families dietary requirements, health goals and taking grocery shopping out of the equation while still supporting your local supermarkets. The difference between our project than most that are readily available online now is that ours interfaces with the local supermarket.

Detailed Description

Aims

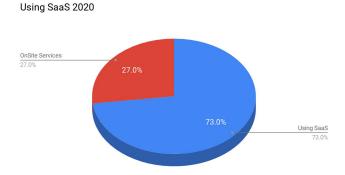
Poor nutrition can impair our daily health and wellbeing while reducing our ability to lead an enjoyable and active life, so being in an age where people can access that information at the click of a button finding good nutrition has become ever so easy, it is putting that information into practice is where people struggle and where we aim to make it easy.

So our proposed project is for a functional web application that is similar to "Dinnerly" or "Hello Fresh" pre-prepared food delivery service except it is entirely online, you cook the meals yourself and it is accessed through a professional-looking web interface that can be easily accessed by families, single mothers or fathers, kids that have just left home and experiencing life independently, or basically anyone who cooks for themselves and or others that finds it difficult to adhere to nutritional needs of specific dietary requirements, and general health-related issues they may have. Along with giving the users a meal plan for the week that includes a shopping list that can be printed out or sent to a mobile device, there will be helpful guidelines and inspirations to go with their selected diet, and we also hope to incorporate supermarkets and payment applications making the whole shopping experience even easier. (Sahealth.sa.gov.au, 2020)

What are the most important parts of the project?

Having an easy to use interface to navigate, because there is nothing worse than having a web application that gets confusing and difficult to traverse, so in today's world where more and more companies become reliant on the internet and base themselves around a web application, then the need for them to have a user-friendly interface that does not frustrate or confuse users is of highest priority and could ultimately be the sole reason that keeps that company from going under.

Using Amazon Web Services is a high priority due to SaaS growth rates showing astonishing performance incentives and a projected outlook of 73% of business using SaaS by 2020; just between 2015 and 2017, the number of SaaS apps averagely used by organizations doubled up from 8 to 16. This upward trend will continue as 73% of businesses have said all of their apps will be SaaS by 2020. (Blissfully)



Having a diverse range of meals and guidelines in our database will be another goal because when people choose to go on a diet, or when they are told by a medical professional that they have to start making better choices it can be daunting and downright scary, not only because they feel like they are going to be missing out on things but they have to begin completely new habits. Two out of every five people quit within the first seven days, why because they concentrate too much on the diet and not the lifestyle choices, having a diverse range of meals and lifestyle guidelines to accompany the selected menu for the week will help keep the user-focused and interested.

(Nicole Justus, 2020)

Incorporating a payment API is another important goal, It is all very well to be able to generate a shopping list from a database but to have the ability to then send that list through to a local supermarket and have it all paid for and ready to be picked up or delivered, would make this application stand out from the rest. Having a payment API like PayPaI tied in with Woolworths click'n'collect would generate a wide range of customers and make the application much more appealing.

Making this application secure is the final goal, people today are a lot more tech-savvy and notice things like the site not being served over HTTPS, or if the application enforces using strong passwords for user accounts, also customers using an application that accepts payments via a credit card will want that application to be secure and well maintained.

As time is very limited and resources only allow for the team to accomplish one of these goals stated above, then having a user-friendly interface and well-structured layout of everything will be the number one priority. This gives the next group who comes along a good overall feel of how this application is intended to be for the user "Easy and Friendly".

Plans and Progress

This all began as a passion project between colleagues who collectively discovered they all faced the same challenges with food, though solutions to these problems did not appear to be accessible to the average Australian on an average income. Hypothetical means of resolving the problems we were all facing started arising in conversation more frequently until they started sounding very realistic, especially given our already existing skill sets.

People are spending more and more money at the shops but in Meta Tier Solutions was already operating as a successful support company providing affordable troubleshooting, maintenance and repair to IT systems, software and hardware within businesses and residences.

We simply decided to redirect our focus from equipment to people and using our expertise to realize this concept, we stood a chance at providing not just ourselves, but families and individuals everywhere an accessible and affordable, better way of living.

The plan was simple, create an app that fills a gap in the market that we believed could positively impact the lives of many people. To be sure we were on the right track we got stuck into research, not just around nutrition but at the very base of all the issues.

Key Drivers of Food Demand in Households

Between 1988-89 and 2016-17, Australia's resident population increased by 1.4 percent a year on average, increasing the demand on food consumption.

200 Volume index of total Population food consumption growth 150 index no. Volume index of food consumption per person 100 Real food consumer price index 50 2012-13 004-05 60-800 2000-01 2016-17 68-886 992-93 26-966

Figure 1 Food demand, population growth and food prices in Australia, 1988-89 to 2016-17

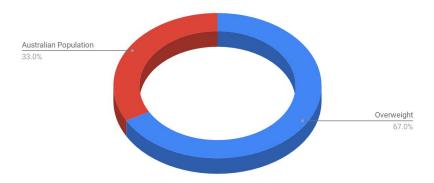
Note: Chain volume measure of household food consumption expenditure. Index base: 1988-89=100.

One thing is true for all of us, as we move forward through an ever-changing world, conveniently and affordably eating healthy can often feel like fighting a losing battle. We have all encountered that same feeling coming home from our day and thinking "I just can't be bothered to cook" or "I forgot to pick something up for dinner."

This often leads to a quick run for fast food or simply having to cook less than healthy options as they are often the least time consuming and the most affordable way to feed yourself or your family.

Surveys conducted by the Australian Bureau of Statistics' during 2017 and 2018 showed that 67% of Australian adults were overweight or obese and a staggering 24% of Australian children aged between 5-17 were also recorded as being overweight or obese.

Overweight Australians



(Www1.health.gov.au, 2020)

Products like Dinnerly and Hello Fresh are trying to remove having to plan, shop and prep for meals, only they haven't managed to hit what would be considered an affordable price point for the average Australian family.

Meta Foods is looking to fill that gap by working alongside local supermarkets like Coles and Woolworths by integrating their pre-existing "click and collect" systems into the web application. Rather than browsing their website or walking down their isles trying to find something vegetarian, something vegan or something high in fibre, using the filter system in the application you will be able to see what meals will be appropriate for you and/or your families dietary needs. From here it is as simple as selecting the meals and the rest is left up to us. The ingredients will be put into the "click and collect" shopping cart of your choosing (Coles or Woolworths) and then sent through to the locale selected based on your postcode.

One of the first things that was discussed was the acquisition of the Coles and Woolworths checkout api and access to their products and pricing. Initially this was thought to be a relatively simple task as it would not require any resources from their end. This was the project's first roadblock.

This became the starting point because if the team were denied access to the api, the rest of the application simply would not be possible without taking some potentially invasive or less than efficient methods on board. After our first interaction with these supermarket giants, it was advised that a working prototype would need to be developed and presented first. While this was no surprise to us it very much left the team in a position of "all in" that was trying to be avoided.

Development has begun with no certainty that Coles and Woolworths would want to be on board. It was decided that even with just one of them the project could still achieve its goals. Luckily, outside of this integration, everything was able to be developed in-house without requiring resources or external input.

The front-end of the application is quite typical being a web-based application. The web page uses PHP to interact with an SQL database that enables users to sign up and log in. It will sustain a session that houses data like their food profiles (members created within the account that keep each person's dietary requirements and goals), previous purchases and orders.

Getting the above-mentioned foundations in place will be the easiest part of the development process. Creating the data for users to access the menu, meals, nutritional information

presented itself as being a monumental task. Each meal has to be able to be displayed to the user based on the filters applied by the food profiles they have created.

Decisions Made, and Changes that have been Made to the Project Plan

The team decided early on that for the initial presentation it would be best to belay the database and just present the web page along with the menu and an example of the user page that would act as the GUI for Meta Foods, but we also found ourselves in a few hard spots when developing the database, so at the end of week five the team will have a working landing page completed that adheres to the chosen colour scheme. The site will be hosted from within Amazon Web Services but only through a static S3 bucket with the following address:

http://metafoods.s3-website-ap-southeast-2.amazonaws.com

Roles

We have assigned roles to each person from the start of week three, we found that if we where to go about this project with no kind of structure then things could get really out of order and that can be catastrophic for a team.

Doug Barrett - Team Leader

Doug is the project lead for META Solutions, he ensures the team is on task and on track to produce the best results. Doug has taken the team leader role as his dedication to perfection comes first before anything else, he has had many years experience with running a business and dealing with not just staff but customers as well, this role has just been a natural fit. Doug has also taken on the roles of setting out the projects scope and limits, producing a detailed job description for several jobs that will be taken on by another employer once this team's allocated time has passed.

Matt Wilson - Lead Project Designer and Manager

Matt is a committed web designer and front end developer. His work facilitates customer interaction and provides a platform for the solutions and products at META Solutions. Originally this project was Matt's idea and dream, so he has come onto this with the title of lead project designer, but he is more than that, he takes every aspect of this and refines it so that it is more then perfect.

John Rehill - Backend Development

John is the backend developer here at META Solutions providing our projects with custom software tailored to our customers needs. John has also handled working out the groups timeline and what risks are involved with this project. His dedication to getting things done has been more than enough and with John's experience with server administration from his last job, has made this role perfect for him.

Kyle Hudson - Administration

Kyle Hudson has taken on the role of becoming the teams administration and HR department. He has taken the time to gather the group's reflection on what has been going on throughout the whole process, made sure that everyone knows their roles and what they are doing in the team. He has been a major help for the team leader in gathering ideas for helping the team get through any hardships they may encounter. Kyle has fallen into this role nicely as he has compassion and a way of working with people.

Scope and Limits

We have five weeks to produce a working sample of our project, giving us very little time to really accomplish the true aim of this application. The main aspect of this section will be allocated to designing a user-friendly interface, we do not want to be spending too much time on the complex functions of the interface, but rather getting the basic feel and site layout completed to a degree where the user can view a sample meal plan for the week, view a couple of goals for the user to achieve in that given week as well, have an outline of what the payment buttons and selection buttons will look like, then have the colour scheme implemented into the design as thoroughly as possible.

We hope to integrate a couple of APIs into the site as well. We will be using PayPal for payment options, so for the development stage of the application it will be sufficient enough to only sign up for a developer account, and use the given sandbox account to test the functionality of the system, then when everything is fully functional change over to a business account. (Developer.paypal.com, 2020)

For the shopping list functionality, we are going to stick with With Woolworths and only use the "Stores and Information Management" API for referencing stock that is available in the end-users local supermarket, there is a range of other functions that are included with that API like Woolworths Money, supply chain, and Online Digital but they are all not applicable to this application and will not be included.

(Apiportal.woolworths.com.au, 2020)

Setting the limits for this project will be hard due to the fact that so much of this project will consist of the complex operations of the APIs and the backend database. Having only the time to complete a basic website that will have a sample menu list for a single user will not do the project justice. That being said if the colour scheme is worked out with a few simple graphics it should give the overall feel of the project outcome.

But we have had a lot of team members loose the drive needed to finish this project, I honestly do not see a working sample being handed up at the end of week five, one team member had a planned trip overseas that he had to take making it difficult to correspond due to the time differences, then another member is going through a bit of hardship so the limits of this project are drastically reduced to what they were originally planned, hopefully getting a wireframe of the sites design done and maybe a list of a few different meal plans that will be entered into the database will be completed.

Tools and Technologies

Hardware required for the project

Hosting will be done on servers that are with Amazon Web Services, so apart from the workstations and general IT equipment required to produce the code for this application and complete the research required for the project, there will be no need for physical hardware to host this application it will all be done via the cloud.

What software or other tools are required by the project?

Woolworths/Coles API

Eclipse IDE (Java)

Atom/Notepad++/sublime for writing HTML/JavaScript

Office 365

Windows 10 product keys

GitHub

Amazon Web Services

Cloud flare

MYSQL

MongoDB

Excel

GoDaddy

Are there any software licenses needed?

Coles and Woolworths API (Application programming interface) office 365, Amazon Web Services - hosting services (Paid Service), Windows 10 product keys, Cloud flare and MongoDB

Brief description of any prior experience any group members have had with the tools and technologies you list

Doug

HTML/CSS3

I have had many years of on and off again experience with HTML dating back to when I was in school and used the internet for the first time on Netscape navigator. I have produced a few websites professionally and would say that I have a very good understanding of HTML 5 and CSS3.

GitHub

I am a new user to GitHub; I have only been using it professionally for the last 12 months. There are still a lot of features that I have a limited amount of knowledge on, but I can use it comfortably in a professional setting.

Atom/Notepad++

I have never used notepad++ but Atom I use all the time and is my go-to editor for writing HTML and CSS. I have used Atom for 3 years now and do not think that I would change unless I had to for a specific job or employer.

Office 365

I do not use the office at all, I have some experience in this set of application when I completed Cert III in business but other than that course, I do not use it at all.

Eclipse

I have limited experience in using Eclipse as I have only been using it for the last 12 months, I have used it a long time ago when I was in school but not enough to retain any knowledge.

Windows 10

I have used Windows 10 and other versions a lot and can say that I have a high working knowledge of this product, it is not my go to Operating System, but I do enjoy it over the other mainstream systems.

Matt

Woolworths/Coles API

Nil

Amazon Web Services - hosting services (Paid Service)

I have been using AWS for the last several months to host the domain for the website I am currently developing for work. www.bigplay.store

Cloudflare – Web Infrastructure and security (Paid Service)

Cloudflare has been used in tandem with AWS to provide security and infrastructure to the website. It has excellent DDOS protection and makes forwarding and dns management very easy.

GoDaddy – Domain registrar (Paid service)

GoDaddy again is a domain registrar I have been using for a long time when organizing hosting and/or domain registration for clients.

MongoDB – Database (Paid Service)

I have a significant amount of experience with database management and administration, whoever, this only extends to MSSQL and MYSQL. I have not yet utilized mongo dB, but it is the platform of choice for many larger web-based applications looking to use cloud databases, which in this case, applies to this project.

Eclipse IDE (Java)

Fairly extensive use of this IDE across a few languages.

Atom/Notepad++/Sublime Text 3 for writing HTML/JavaScript

Sublime text is my choice of these, and I have used Sublime for many years.

Office 365

Office is something I spent much of my previous job role working with. My experience with Excel is extremely extensive.

Sean

Office 365

I have used Office 365 for a few years now within professional sectors and home use.

Sublime Text

I only started using Sublime text editor these past couple of months I have had no prior experience using a text editor.

GitHub

I have only used GitHub these past couple of months I have had no prior experience.

Woolworths/ Coles API

No experience using an API

Eclipse IDE

I have had no experience using Eclipse IDE. I will start using this tool when I start doing the intro to programming course.

Notepad ++/ Atom

No experience using Notepad, but I am looking to get using this program. The same applies to Atom.

Windows 10/professional

I have years of experience working with Windows operating systems. Over the past couple of years, I have worked with Windows 10 and Windows 10 professional versions.

John

GitHub

I had never used GitHub before to work with any projects although I did have a GitHub account and through my career as an IT professional.

Notepad++

I have used Notepad++ for several years as I found its default syntax highlighting and code formatting to be very helpful.

Office 365

I have used Office 365 for several years, not just the Office 365 client suite but other Office 365 services such as Share point.

Eclipse IDE

I haven't yet used this product as I have not yet reached a programming stage of my coursework

Woolworths/Coles API

While I am familiar with APIs as a concept and have used various software packages or tools that use APIs, the process of implementing a use case myself has not yet come about.

Amazon Web Services - hosting services (Paid Service)

I have no experience with this service although I am familiar with the Azure platform that is offered by Microsoft as I use it in a corporate sense

Kyle

Eclipse IDE

I have actively used eclipse for about 2 months

notepad++

I have used this text editor actively for 2 months,

office 365

I have used this tool for years, before it was a subscription-based model,

GitHub

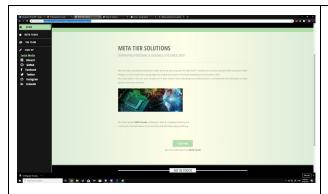
I have used this tool for 2 months and have no experience with the other tools.

Testing

How Will We Test the Project?

Site URL: http://metafoods.s3-website-ap-southeast-2.amazonaws.com

We will be testing the sites layout and how it looks by uploading it to Amazon Web Services and using S3 static website hosting. The plans were to have the basic layout and colour theme done inorder to launch a simple static website with Amazon Web Services S3, then from that site the team hoped to have a simple database of meals that whoever was testing the project could get a feel of how the menu and shopping list would react to user input. The landing page was achieved with a very minimal looking style, that had little graphics making loading time quick for the user and not confusing. The signup page was created as well but launched as an under construction page due to issues the team had faced towards the end of the allocated time, this was unfortunate but at the same time unavoidable as the team was down to two skilled people at the time.





How will you know when you have succeeded?

When the website starts to move from a static site to a dynamic site gaining interaction between user and company, that is when this team will know that they have had success, but success is a long way from where the team is at the moment, there is still a lot of development to be accomplished and at the moment the whole project has fallen onto the shoulders of a few members, but as most teams encounter some form of hardship the ones that push through, like the few current members left have been doing will soon find the drive to succeed again.

Timeframe

The development of a project timeline can be difficult to do as while it is possible to create an outline, even the best-laid plans can go awry sometimes due to internal team issues or issues with external factors to the team. Best efforts are always used but time should always be seen as adjustable to allow some tasks to extend beyond the week they are factored for. It may be possible that task in some weeks would take less time which would all for a catch-up to be done on delayed items. There this is scheduled for weeks 1(7)-2(8) to best outline what the end project outcome will be.

In developing the timeline, I feel the first option would be to establish what each person's skills and familiarity with tools are so that a more concise and targeted list of tasks can be. Using the Tools & Technologies section will allow an overview of the technology that will be expected to bring the project to an achievable outcome. Once this list is complete, each member of the team gave input to their familiarity with the tools. However, it should be considered that while one member of the team may be very familiar with a particular tool, as members of the team should have some familiarity to allow for collaboration and/or task reassignment. It would be unreasonable to assume all members can work with the various tools to the same degree, however, enough of an overview would allow team discussions to proceed with minimal confusion or lack of understanding. This would be scheduled for week 3(9).

As each member of the team is assigned a task, individual week targets would be more specified. For the assignment, the timeline begins to move from a known quantity to an unknown or virtual quantity in this would continue until the final project week. As a result from week 4(10), the roles in the project would be more akin not to the users' actual assignment role but to the role in the fictional company team that would be developing the Meta Foods application.

Weeks 5(11)-16(22) would cover the actual work on the project. This would also incorporate weeks that may be dedicated to documentation tasks or report development to ensure that all members of the team are up-to-date on work in progress.

	Doug	John	Kyle	Sean	Matt		
Week 7	Project lead	Review of initial assignment text					
Week 8	*Scope & Limits *Skills & Jobs *Testing	*Time Frame *Risks	*Roles *Group Processes	*Tools & Tech *Overview	*Roles *Plan & Progress		
Week 9	The present initial draft of tasks	*Outline timeframe *Outline risks	An initial draft of tasks	An initial draft of tasks	An initial draft of tasks		
Week 10	Tools investigation: Office 365 Eclipse	Tools investigation: API/Integration services Github Eclipse	Tools investigation: API/Integration services	Tools investigation: Github API/Integration services Eclipse/Editors	Tools investigation: API/Integration services		
Week 11	Report development	Report development	Report development	Report development	Report development		

Week 12	Scope of financial needs and outcomes	Purchase of web hosting services	Source corporate partnerships	Source nutritional information	Create login page and customer profile page and cart page		
Week 13	Report development	Report development	Report development	Report development	Website launch – internal only		
Week 14	Present update to financial backers	Code development	Selection of corporate partnerships	Research of required tools	Add additional web functionality		
Week 15	Report presentation	Report presentation	Report presentation	Report presentation	Add additional web functionality		
Week 16	Clarification/resol ution of any items	Code development	Review of corporate partnerships	Scope of nutritional database requirements	Add additional web functionality		
Week 17	Outline media release notification	Outline the final code draft	Finish partnership contracts	Purchase of services	Add additional web functionality		
Week 18	Evaluate status and green light	Ensure correct backup and restore process	Present live view to corporate	Scope additional nutrition entries	Outline the final website draft		
Week 19	Review deadlines	Ensure infrastructure scalability	Expand the pool of suppliers	Optimise selection process	Add additional web functionality		
Week 20	Final testing phase	Final testing phase	Final testing phase	Final testing phase	Add additional web functionality		
Week 21	Launch of site and service to the public						
Week 22	Re-evaluate launch, review statistics and future project scope						

Risks

The project aims to create an online service that would provide the dual roles of helping to create set meal plans for a person or family and also interface with a food ordering service however this will differ from others in that there will be a built-in capacity for customers to modify the meals to account for any food intolerances such as gluten or lactose or other dietary requirements to enable those that need a plan that would work toward a weight goal. Currently, it has been observed from the online options that are already available, meals and ingredients are provided however there is limited to no option for modification against the set meal plans. Also one of the aims is to support local suppliers for the customers' area so that local supermarkets and small businesses can be partnered. While the cooking of the meal would still need to be done by the customer, the use of local supermarkets that have an online ordering interface would allow the customer to prepare a meal that is delicious and nutritious.

Poor nutrition can impair our daily health and wellbeing and reduce our ability to lead an enjoyable and active life. In the short term, poor nutrition can contribute to stress, tiredness and our capacity to work, and over time, it can contribute to the risk of developing some illnesses and other health problems. Therefore, the lack of or inaccurate nutritional data could health risks with customers and care should be taken to provide food and meal selections that are tailored to the customer as much as possible.(SA Health, 2019)

With the advent of online delivery services, there are many factors to consider not only for the company providing the food delivery but also for the customer. One such factor is how customer data is handled. An article on the Wasserstrom Blog from 2018 refers to such a risk: "Hardly a day passes when we don't read about another data breach or other hacking-type incident. And in the restaurant industry, too often we see what we like to call "nephew-built" websites (i.e. "My nephew can build your website over the weekend real cheap!"), especially for smaller restaurants. Computer and internet security can be challenging even for experienced businesses." To ensure customer confidence, the privacy of the customer data must be paramount or any sort of data breach would be high risk.

The same article also points out that food Safety for the customer would also be a high risk of improper measures were taken with delivery methods. With any sort of food delivery process, the onus is placed on both the supplier that will be supplying the food and also the delivery method used to transport the goods from the suppliers' location to the end customer. Each part of the process should be documented and trackable to ensure that the methods used will not cause any sort of contamination of the food and will also ensure that food tampering is not possible during transit. The more recent cases that have been reported related to online hot food orders however the risk would also be valid for the Meta foods product solution. (Wasserstrom, 2018)

Given that Meta Foods will aim to include small suppliers as a resource when sourcing ingredients, the food safety concern is also relevant. Small business owners may have less overhead when it comes to competing with large operators however due to the small business nature, small suppliers may have less intense inspection methods than "big name" corporations and therefore it becomes even more of a risk to use them as a source. However this should in way impact the Meta Foods group from deciding to use the smaller suppliers, instead, it just adds an extra risk element that the company needs to be aware of.

Sourcing of the ingredients for meals from local suppliers however there may be instances where a standard supplier would not have required items. The inability to source items from local suppliers would cause a delay in meeting customer demands or expectations. Even major supermarkets such as Coles, who would be partnered with the service can experience delays. An article in 2019 detailed how Coles and Woolworths were experiencing supply issues, and while this case was specific to pet products, other food items could experience the same issues. (Inside Retail, 2015) Another similar article also illustrated how supplier issues with local producers can impact the end customer or such other companies such as Meta Foods that may be providing an intermediary service (Australian Financial Review, 2019)

Due to the online nature of the application, uptime availability would need to be high so working on an unreliable platform could damage the brand. Costs for any cloud service such as AWS or Cloudfire are scalable however this can also lead to cost blow out due to lack of pre-planning or incorrect scope of scalability. In today's modern society, the lack of operability of online services is paramount. The application needs to have a high degree of functionality but needs not to be complex that the customer will be reluctant to use the service. However, the practicality of self-hosting all the infrastructure is outweighed with the use of cloud services.(Cloud Academy, 2019)

Due to the online nature of the site, browser compatibility remains a risk factor. While the development of the site would be largely unaffected by the browser being used, certain web elements may not work correctly should the client be working with an out of date browser or one that has recently gone through a significant codebase change. Web development standards would be used however not all client-side applications adhere to these standards. Such an example would be the discontinuation of Flash and Java by their respective developers.

Developing an online service can be a very positive financial outcome when the right measures are taken. The view of the service is to provide a balanced healthy option to families that may not have time to cater to the needs of everyone or who are unable to take the one size fits all model. However, with any startup business, there are common risks such as lack of team experience with an online resource, unfamiliarity with the current market or technological and environmental risk. Many articles discuss the risks of having such a startup and it is essential that the business takes note of past experiences and ensures that mistakes are not repeated. (Gust, 2013) (Smart Insights, 2018)(Websites, 2020)

Group processes and communications

Our team uses Discord to communicate with each other, we have tried to schedule weekly meetings but since we can be in contact with each other 24/7 team meetings are a rarity. We looked at the option of also having face to face meetings, but two members live in different states and having the ability to make voice calls with the whole team on Discord we figured that it would be just as good. Mostly when the team needs to be called in for a meeting the team leader will be the one to schedule it, but any member can call a meeting if they feel like something is missing or not getting done. Having a team member leave is extremely hard on the group and puts extra pressure on everyone else that is trying. In the past we have had that happen without notice, so to deal with that by just assigned out the tasks that were his to other members.

Skills and Jobs

Internal App Development Team Leader

From the design perspective of this app bringing on a development team leader would be the highest priority, as this application would have been in development for 15 weeks prior to to this and to not have someone that has been there from the very beginning would be dreprementual to the whole way the application is meant to feel and work. This would not mean that anyone from the original team could take on this role, they would have to show extremely confident team leadership and management skills, a thorough understanding of all the skills required to produce the application from the website's main pages to the backend systems and how they are meant to work to produce the required feel of the application.

Programmer (server-side)

As the application will have the majority of the frontend complete and setup, ready for the backend development to begin the team will need to bring on board a skilled programmer that has a few years team work experience, does not need to be leadership experience but that would be a bonus, will need knowledge of one or more of PHP, Python, Ruby, Java, .NET, JavaScript as the team is open to a new direction for the backend if presented with one. And have an active imagination ready to tackle issues that arise with innovative approaches.

Web Designer

As the majority of the website will have been completed the team will be looking for a web developer that can keep up with bugs that arise with the site, be able to have a quick response time in regards to fixing the bugs. They will need to be very team orientated and have plenty of team work ethic as communicating with others in the team will be a major part of finding issues, fixing them and reporting back to make management aware of any issues that have come up. Skillset will include a working knowledge of HTML 5, CSS, Javascript, there will be plenty of time to gain experience while on the job as they will be working with a skilled team.

This is a perfect job for a person that is looking for the next step after their traineeship or to improve their skill set and build on what they already know.

Web Application Security Engineer

With the application coming into the final stages of development the team is looking for a skilled web app security engineer, Primary Responsibilities will be static/dynamic code testing, manual code inspection, threat modeling, design reviews and penetration testing of internal web applications and external partner applications to identify vulnerabilities and security defects. This position will need to have at least 5 years working experience behind them, Experience in the use of various commercial and open source penetration testing tools and methodologies and performing penetration testing of web applications and operating systems.

Group Reflection

What Went Well?

At the start of the course we as a whole got along really well we had a full group of six from week one, assessment two the group worked really well together everyone was in contact with each other, come assessment three the group was still communicating really well through Discord, GitHub was being used really well to set up the projects and a workspace where everyone could pool their thoughts and ideas together. The moral of the team was great coming into the project and people had an idea of what was the projected outcome of the application and everyone also had a rough idea of what part they wanted to play in developing it.

Looking back on everything now I can see a few things that could have been improved like the expectations of perfection which was a major downfall within the group. Coming into this project from assessment two and not knowing the outcome of what the grade for it was until the last few weeks of this project, was a major stress for some team members, and then when the grade came back, and it was not perfect that really hit some team members hard and in turn threw the team into a tailspin and ultimately a game of blaming one another. Another thing that could of been improved was structure and motivation, even though everyone had there part and what they needed to get done I as team leader thought that towards the middle of this project everyone had lost interest, either that was because of the remarks from assessment two or because the team lost its drive, either way I think that if we dropped the expectation of passing at a mark of close to 100% and kept complimenting and pushing each other things would not of turned out how they have. John has also pointed out that it would have been ideal If we were all in the same tutoring groups, because it may have helped being on the same schedule also in turn not received slightly different directions per tutor when we asked for help on some occasions.

Then to the surprise of the whole team it was quite a shock as to how quickly things fell apart, all it took was a semi bad comment for the whole team to just collapse in a heap and nearly fail entirely, but with that said I think that with what had happened and then what was nearly going to happen it was a huge effort by the few team members that gave it their all and tried their hardest to complete everything as best they could with what time they had left.

Sean Cullen

What went well

The group worked well together again on this assignment just the same as the last assignment. Through Discord we discussed who was going to do what. I found we were a lot more communicative this time around. We had more of an understanding of our requirements.

What could be improved

This time around we improved our communication compared to the last assignment. But communication can always be improved. I think what could be improved is being more encouraging with each other. It's a challenge when working in a team, when we have outside factors going on in our lives it can make things much more difficult.

At least one thing that was surprising

After finding out our marks which really hit me hard, I blamed myself for the results. Doug and Kyle really helped me. I was even close to quitting the course that's how low I felt, I had not had anyone help me like that before.

At least one thing that you have learned about groups

One of the biggest things I have learnt is when you are working in a group you need each other and how what one person's actions affects everyone.

Doug Barrett

What went well

At the start of this assessment things were going really well, everyone was communicating, the project had a lot of drive and everyone was in high spirits. Everyone understood how to use GitHub, Discord, and keeping upto date with what was getting done.

What could be improved

Even though everyone was communicating and had an understanding of what the project was about some team members felt really lost and lacked direction when things needed to be done. It felt like a lot of members didn't know how to take some initiative and treat the project as if it was one of their own, instead it felt like it was someone else project and not a group one.

At least one thing that was surprising

The most surprising thing about this time around was the groups dissipation after getting assessments twos marks back. To me I felt like we were a great team but the first moment of

nonperformance most lost interest and it really showed, as the group chat went silent, and the teams works lost that creative input it once had.

At least one thing that you have learned about groups

This time around has been a huge learning experience for myself as I have now learned that working in a group takes a lot of patience, and a willingness to drop one's personal expectations of perfection in order to not hold resentment against someone who might not have that drive or passion for high standards. I have really enjoyed working within this group for most of it, I just wished things could have worked out better in the end.

John Rehill

What went well

The group seemed to build well upon the progress we made with the first assignment and when it came time to discuss assignment three, everyone in the group was able to make time to get together to discuss the meeting and get roles assigned. There was no issue with members raising their hands for task assignment and throughout the assignment, each person seemed to work well and keep in contact.

What could be improved

Commits to the repository were done however some were done towards the end of the assignment rather than throughout, and it may have been better for commits to be a bit more active. I would admit that this would be a failing I took part in however I would contribute this down to lack of experience with Git and commits used for projects for fear of causing corruption of files or confusion.

At least one thing that was surprising

In the previous assignment, everyone seemed to be eager to get the job done and while everyone has a personal schedule outside of the coursework, the members of the team seemed to repeat this performance with this assignment and try their best to get it done as required. Each member worked on their sections as required and provided their input when needed.

At least one thing that you have learned about groups

I enjoyed getting together with the other members of the group for the team meetings and although everyone can focus during the chat and discuss the project after the official meeting ended, those that could remain in chat we're happy to discuss other matters such as personal interests. This helped to improve the rapport between the members and I think that not focusing on the work alone was a good thing

Kyle Hudson

What went well

Working in this same group again was fantastic. We had a few issues this time but we were able to pull through in the end. Communication was easy, and everyone on the team was quick to respond.

What could be improved

We could improve on frequency of meetings, but I also feel like we didn't need any more meetings to achieve our goals. We had a couple of members lose their drive this time, so we were able to discuss what tasks suited each of us and push through. Our Team Leader Doug worked really hard to get what needed to be finished, completed.

At least one thing that was surprising

I was surprised with the team this time around as we lost the motivation towards the end, coming from such a great working team in assignment two to having struggled to complete this assignment on time was really surprising.

At least one thing that you have learned about groups

One thing I have learned about groups is how important it is for individual members to get along with each other. Our teamwork and willingness to communicate made the project a lot easier to complete compared to how it would have been if we didn't work well together. The most important thing I learned was that communication is the most important part of group work; without it, we can't get anything done properly, and people are going to work on the same thing without realising, wasting time and effort.

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