Team 12 Assignment Three

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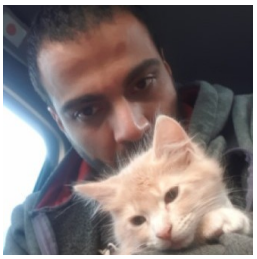
Team Profile

Team Name: stockIT

Personal Information

Ahmet Akgun



Student No: S3865010

Originally from Istanbul Turkey, Ahmet's passion for IT started in 1992, when his uncle assembled their first personal computer. Their first computer had MSDOS 4.0 installed and provided the young Ahmet with various experiences such as customising a data storage device and entering lines of code in the command bar. It was this first interaction with a computer that fostered his interest in IT.

After graduating from RMIT university, he intends to continue his study at the postgraduate level in hopes to become an instructor at an education institution one day. Ahmet's hobbies include learning about astronomy and astrophysics, playing chess and editing music using a program called CoolEdit. He currently lives in Melbourne Australia.

Brandon McPherson

Student No: S3921902

Brandon is a person with a wide range of interests. In his spare time, he enjoys playing video games, watching soccer games, spending time with friends and family, and travelling. He is also an enthusiastic reader, his favourite book for this year is titled *Sapiens: A Brief History of Humankind* by *Yuval Noah Harari*. In his childhood, he used to play a game called *Sonic the hedgehog.* The experience resulted in developing his passion for video games and technology.

At the time of this writing, he has already been working in the IT industry as an information system support analyst for 7 years. Despite his solid background in networking and information systems, he found computer programming interesting and is considering a career change as a full stack software developer in the future. He lives in Brisbane with his cat named Indy.

Hugo Hughes

Student No: S3923309

Hugo has a culturally diversified family background with his parents and grandparents who originated from various countries all over the world. He is a keen learner of different languages and loves to travel the world to experience different cultures. In his childhood, information technology was not something he was familiar with nor interested in. However, it all changed when he landed a job at an IT service desk.

With this challenging role, he gradually developed his passion in IT. The role also allowed him an

opportunity to brush up on the basic skills that are required to secure his ideal job in the future. His ideal role is to work for the Royal Australian Navy as a Cyber Security Technician. The position interests him because it requires him to be multifaceted and be familiar with various disciplines.

Taylen Robert Anderson

Student No: S3925287

Born in Idaho USA, Taylen grew up in Mornington Peninsula, the southeast of Melbourne. Taylen started nurturing his interest in IT when his father was building websites, it was here that he began playing around with Macromedia flash. Due to Taylen's proficiency with building websites, his IT teacher offered him to build a website for the teacher's dad, the website was built using ActionScript 2.0 which is now deprecated. Since then, he taught himself various computer skills and successfully implemented a server which is running his smart home system for his family.

Being a qualified mechanic, he has a strong understanding of electronics. Also, as an astute self-learner, He acquired a basic understanding in programming languages such as C and C++. In the future, he sees himself becoming a firmware engineer which allows him to be involved with both hardware and software development. He currently lives in West Gippsland with his wife and child.

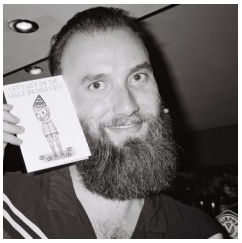
Tetsu Watanabe

Student No: S3923443

Born and raised in Japan, Tetsu came to Australia over 20 years ago. He worked at several accounting practices in Brisbane before starting his consulting firm targeting Japanese businesses. The company has grown after 8 years of operation, expanding his client offices in Brisbane, Japan, and Vietnam.

He has witnessed the substantial evolution of IT in the accounting industry. He believes that combining IT and Accounting skills will take him and his company to the next level. His hobby is surfing, which is the reason he moved to Tweed Heads 3 years ago with his family.

Tim Prast



Student No: S3923309

Tim has a successful business background operating his own bar in Subiaco for the past 5 years. His business is technically advanced and uses the latest technologies to achieve efficient operation. His interest in IT came naturally by having a childhood surrounded by technology and can easily relate himself to IT. Throughout his life, he has enjoyed experiencing the technological advancement.

Gaming has also significantly contributed to developing his interest in the field of IT, his passion for gaming led him to build his own gaming PC. With his strong commercial experience, he hopes to transition his studies over to Computer Science and pursue a career as a business analyst specialising in IT.

Group Processes

In assignment two our team was quite fresh at learning to work together. This was particularly evidenced by our initial meetings lack of structure and leadership. Progress through assignment two transitioned us from no management to a central leader (Tetsu Watanabe) from whom everyone else answered to. This was a significant step and produced some sizeable benefits in terms of productivity and reduced wasted time drastically.

Progression to assignment three our team has kept with the same arrangement under a new leader (Taylen Anderson). Small changes implemented include things such as individuals in a meeting being required to mute themselves during each meeting unless they are called upon by the host. Assignment three has also attempted to move our group to a GitHub from the beginning approach allowing collaboration for individual segments of our assignment to be completed easily by multiple parties. This team dynamic is a natural progression from where we were in assignment two and should allow us to continue to build on that foundation.

Career Plans

Our team have an impressive variety of ideal jobs. This culminates with a large variety of careers available for us as individuals from the public sector as a teacher, to the private sector as a computer engineer. This is just a snippet of the available roles available within the Information Technology (IT) industry however we will go further in depth to see what variety is available to us.

Ahmet Akgun wishes to become a teacher within the industry. This contrasts with our team in many ways, for example this was the only job to specifically require a masters degree in any field. Additionally there are requirements for skills in teaching as well as communication. Due to the nature of this particular industry the communication skill would have different assessment criteria to communication in a management position. Teaching within the IT industry will likely have many interesting challenges and is going to be a role on the outskirts of the industry in an intriguing way.

Brandon McPherson indicated he would like to be a full stack developer. The role included within his first assignment (Full Stack Developer, BHP) asks for significant experience in application development using a lot more programming languages not intended for web development. BHP requires significant knowledge using Linux systems and creating and using a virtualisation software known as Docker. This contrasts significantly with the other member of our group also wishing to be a full stack developer Tetsu Watanabe. A full stack developer at BHP is very different to a full stack developer somewhere else.

Hugo Hughes told us that he would like be a Cyber Security Technical Officer. The specific position which Hugo provided is with the Australian Military, this would likely lead to different requirements than the same position in the public sector. Interestingly this position requests developed artefacts in communication skills and analytical skills, this is to allow the individual to educate other individuals within the company structure. This is interesting in contrast to Cyber security roles located in the private sector which generally put more of an emphasis on the security hardware than the people using it.

Taylen Anderson chose this position within the firmware engineering segment of IT. This was an interesting choice as it lead into not only development of software but also hardware which was not common with the others in our team. There was a high level of programming skills required with languages including c, c++ and java. The languages requested do have some crossover into the software development segments of the it industry though this is becoming less and less frequent. This job also requested knowledge in basic electronics with measurement of current, resistance and noise being noted as important. As such it seems that firmware engineering is another special category within the information technology industry to be exploited.

Tetsu Watanabe chose the position of full stack developer along with Brandon. Though the position title was the same the actual jobs in which they both applied were very different in scope. The job that was provided here has much more emphasis on the development side of websites and web applications. This has some significant impacts on the kind of work being done along with the programming languages being used to achieve the desired results. Due to the heavy emphasis on web development this is yet another separate category of IT to be explored

Timothy Prast showed interest in the business analyst line of work. This was another position advertised in the public sector which created some interesting criteria. There was a need to be able to follow planning protocols called SCRUM, this is a methodology where a bigger problem is broken down into smaller steps, these small parts are worked on and the problem is analysed and broken down again. Upon analysis of this job it seems to differ significantly to many others within the IT industry, and thus it paints a very large picture about the size of this industry.

Tools

Website:

https://rmitstockit.github.io/stockIT

Github:

https://github.com/rmitStockIT/stockIT

Project Folder:

https://github.com/rmitStockIT/stockIT
Download the .fig files at the project folder and the application from **Figma** to run our application.

Project PDF:

https://github.com/rmitStockIT/stockIT

Reflection

Upon reflection of our GitHub audit trail of 281 commits we found that our team was able to use it much more effectively than when we initially started working with the service. Over the last month on assignments 3 and 5 we as a team have pushed 74 commits. Over those commits around 75% of those have had sufficient comments from the author. Looking at pulse by github, which is one of their analytical tools we determined our standard deviation had reduced from 36.6% to 14.7% which shows that the group members commits have become much more evenly distributed from assignment 2 to assignment 3. In summary it appears that our use of GitHub has had significant improvements since our introduction to this software.

Project plan

Overview

Topic

The application **stockIT** will require a significant amount resources to implement a complete product. These resources are not available to our team in regard to the project timeline or our individual skills. In our time frame of five weeks, we will have a fully fleshed out wire-frame including graphical content, we will have a start up site containing a desktop oriented mock site and have a stretch goal of creating an application for android. These developments will show our abilities to work together well within a team environment and achieve measurable success with the resources available.

The wire-frame shows our design implementation and continuity. Using a non functional sketch or three-dimensional plan is one of the best ways to start any serious project. This allows your team to create an application layout quickly showing basic functionality in the form of navigation and design. This allows your team to know what the agreed look for the project will be allowing the team to create the necessary code making the project functional.

Our desktop oriented mock site show the basic functionality required for our project. Our development from wire-frame will make it easy to develop the final deliverable part of our project. This mock site will have basic functionalities allowing any user to add or remove stock from the database, insert new stock items and run a stock take using the supplied database.
This database will be populated with data pulled from the hospitality industry supplied to us from one member of the team. This website allows the team to present a functional part to our project.

Creating an android application is our teams stretch goal. This will be developed right up to the due date to show our intention of creating a meaningful product out of this. This will allow the team countless opportunities to develop skills and knowledge useful in the information technology(IT) industry. Additionally it shows a drive to take away more from this class and earn more than just a passing grade. As this is a significant step up in complexity from creating a mock site or a wire-frame the quality of the product delivered will be indicative of a first years work.

Motivation

stockIT was born from a single team member's desire to fill a perceived gap in the current market of inventory management software. After detailed discussion between all parties we have expanded the initial stock-taking application to a full inventory management system. This change occurred due to the increased future potential of a full inventory system rather than a stock taking application. A project such as this allows our team to provide an exposé based upon our skills both individually and also when working together as a team.

As a development project stockIT covers a lot of knowledge and skill bases within the IT industry that we as a group would like to develop further. At its end point the software will require a working knowledge of various programming languages (SQL, XML, C++, Java etc), networking, user interface development

(websites, apps, software design), project management and teamwork, cloud infrastructure, software integration and artificial intelligence(AI) implementation. The software taps into many different aspects of the IT industry and intersects with many of our planned future career paths. This is why a team we decided it would be a worthwhile project to pursue.

Our team views stockIT as a start-up. Start-ups have always been a defining factor of the IT industry, whereby a group of individuals unite to create a piece of software or to solve a problem using IT technologies. We believe stockIT achieves both of these things as it uses a tech-based approach to solve a problem that affects every business that buys or sells inventory on some level. A big development within the IT industry over the past decade has been in the use and development of AI technology. As stockIT is centered around handling and making sense of large amounts of data, we believe that AI integration is an important part to the software's utility and marketability. AI technology is at the cutting edge of the IT industry and from it has spawned many new fields of study and different career paths.

Landscape

Inventory management software is a somewhat crowded marketplace. As with most software markets there are a variety of competing products that all provide very similar services but that all have their own delineations that set them apart. stockIT straddles the line between pure inventory management software and enterprise resource planning (ERP) software, placing it into a market with large established companies such as MYOB and XERO. MYOB and XERO have established accounting software systems that integrate into a range of existing Point of Sale (PoS) systems. The plan aim is for stockIT to have similar integration, in this situation MYOB focusses on being more of an enterprise resource planning software solution and XERO focusses on the accounting integration side of things. StockIT will have a heavier focus on direct supplier integration and communication than either of these. (SoftwareAdvice, 2021)

Cin7 is designed to be more of a retail inventory solution with a strong leaning towards online retail whereas Peach Software has a strong focus on more traditional retail (agriculture businesses, auto parts etc) and managing inventories between stores and across the group. In this situation, stockIT is designed to operate as a one stop shop by facilitating all these different functionalities into the one software bundle. Oracle Netsuite is one of the closest competitors to the finalized version of stockIT, with real time inventory visibility, direct supplier purchasing available and the ability to push purchase orders directly to shipment and sales tracking – all of which will be available through stockIT. Katana offers robust manufacturing inventory management, live tracking with real-time manufacturing planning and end to end traceability. This makes Katana a slight outlier on the list as it leans towards the manufacturing process and handling the data related to that area. While this is something that stockIT does handle, our product is designed more and an inventory management tool rather than a direct Manufacturing tie-in.

Detailed Description

Aim

"To develop a financially viable, simple inventory management system"

Businesses are asking for an easy to use solution that will increase productivity. Our team wishes to create the solution to this problem ensuring businesses will be able to flourish in this post covid world. *"71% of retailers are looking to inventory management technology to improve their supply chain efficiency."* Invalid source specified. This has made significant impact to businesses due to the expense of many solutions along with the training necessary for competence. We will make the software easier by including a modern interface with big touch enabled buttons and hiding unnecessary detail in the simple display. Our product will be financially viable by saving both the operators time and companies money. Our pricing will be subscription based for our web enabled services and licence based for software installed directly on hardware.

Goals

Create an application wireframe

Our team's initial objective is to develop a wireframe for our project. This will ensure that we have a vision of our product that we can work towards. Our decision to make the visual design the first goal stems from our groups perceived abilities in the IT space. Much of our team have little to no programming experience and we are unable to find a suitable solution which provides application design in an easy to learn format. The other significant reason for this is our time constraints in development, if we were to create a full application in five weeks' time, we would not provide anything of substance, or we simply would not be able to complete our initial goal to a satisfying conclusion.

Create a mock website with sample data.

Secondarily to our initial goal we wish to create a pseudo functional website. The reason we chose to this as a secondary goal as it is a significant step up from creating a wireframe. This will require the use of some more complicated programming and potentially a database backend with a webserver. Including this is a measurable jump for the skills of our team and will show progression in both the project and our team. This has been defined as one of our stretch goals and as such will most likely not be delivered to a complete standard by the end of week 12.

Create a mobile application.

Finally, we wish to embark upon development of a mobile application which can host a small business's inventory. This has been presented to our team as an unattainable goal for the original time frame of 21st of November. This was included as an attainable goal for the 6 month project defined within our skills and jobs segment.

Plans And Progress

Preface

The highest cost for a business is staff. This is especially true in the hospitality and retail sectors, where seasonal and low-skilled employment is often used to bridge staffing gaps over high turnover periods, such as Christmas. These industries are challenged by low profit margins against comparatively high staffing costs, making it difficult for businesses to generate consistent and strong revenue to enable the growth of the business.
According to the Department of Industry's report from 2018, "Small and medium businesses with higher levels of digital engagement are significantly more likely to be growing revenue, creating jobs, exporting and innovating new products or services." Despite this, "many businesses are still a long way off adopting digital technology." We attribute this to lack of intuitive, affordable, and accessible solutions for small to medium businesses; it is for these reasons the idea of stockIT was created to bridge the gap between the demands of the industry with the skills of the workforce.

stockIT

StockIT is an integrated inventory management and business platform. It aims to empower business owners to make smarter, evidence based decisions through access to real-time data on the purchasing, tracking and fulfillment of inventory. It is through this process that stockIT's three main goals can be realised, which are to:
optimise wastage
increase purchasing power
improve supply chain efficacy.

In order to appreciate the full value add of stockIT for a business, it is important to understand the basics of and the underlying mechanics of inventory management. Purchase, store, supply, sell and analyse

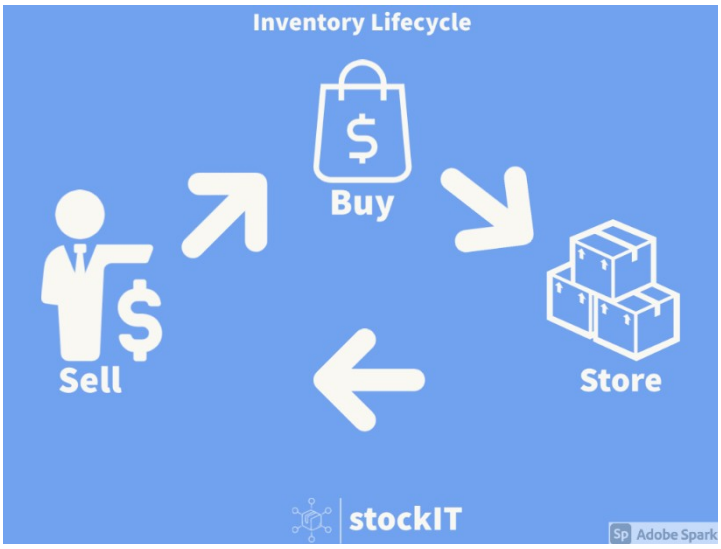


Figure 1: Inventory Lifecycle

Through digitalising inventory management with the use of stockIT a business can optimise their resources, increase purchasing power and improve supply chain efficacy. StockIT is a backend facing software suite that allows the user (a company or business) to track their inventory from purchase to sale and at every point in between.
(assignment 2 extract starts)
StockIT's data driven approach allows the user to make informed decisions about inventory management, minimizing the risk of personnel failures and human error, in the tracking, purchasing and fulfilment of orders and inventory.

With a heavy focus on the Retail and Hospitality sectors, stockIT allows its users to keep track of inventory from a variety of different SILos [Standalone Inventory Locations] (stores, locations, sites), or a single location, and see at a glance the current inventory on hand. This enables users with different SILos to see the bigger picture of their organization, but allows them to identify shortfalls or issues at the micro level. Resolving issues at this level allows for business to stem issues before they grow and have impacts on a larger scale. It also allows individual SILo managers to see how small changes on their end impact business more broadly. Only have a single location for your business? No problem. The scalability of stockIT means it can be utilised by a business of any size to help them achieve a greater level of efficiency in their inventory management, the key fundamental functionalities of stockIT apply to a business of any size. This negates the need for small and medium business to seek alternative business solutions as they seek to grow, making stockIT an ideal tool for growing businesses to use.
A clean and user-friendly interface is integral to any piece of software in today's day and age. The hospitality and retail industries can be prone to staff change, especially before and after peak service season towards the end of the calendar year. Further to this, staff will most likely possess a range of different levels of technological literacy. Ensuring that software is accessible, functional and thus fit for purpose is vitally important; stockIT uses simple drop down menus and click-through commands, allowing the user to spend less time navigating systems and more time focusing on their work, whether that be customer service or deliverables.
(assignment 2 extract ends.)

Where it all began

The first iteration of stockIT was an app idea named "Stock-Take-It". Initially the app was designed to fill a need in a group member's business, where productivity and efficiency were being lost during the inventory management process, The app focused on a simple easy to use interface and on increasing the user's efficiency and accuracy when it came to counting and collating inventory data.
The stockIT we see now grew as an extension of the original seed of "Stock-Take-IT" after brainstorming concepts and ideas in a group setting. The change came about through open and constructive conversations about each of our experiences with inventory management, business development and functionalities we would like to see in software suites aimed at businesses.

Along the way

Assignment Two provided our group with the opportunity to explore the concepts and core functionalities of stockIT in an unrestrained, open-ended manner. We were able to freely explore functionalities without a need to narrow down and focus only on what was achievable given the semesters timeline. While we did keep in mind the requirements and restraints of Assignment Three when formally writing our report and detailing functionalities, we did not want to restrict our flow of ideas simply because of time constraints.

A key motivating factor in the creation of stockIT was for us, the development team, to be able to create a product or software suite to bridge what we perceived to be as a gap in the current market. While we did and still do acknowledge that there are products on the market today that cater to similar functionalities and business requirements (please see landscape section of this report for more

information). Our belief is stockIT provides far more beneficial functionalities, better scalability and is far better suited to a retail or hospitality customers' needs than the competitors.
By not constraining our ideas for Assignment Two we realised two problems. The first problem was "feature creep", whereby as the idea grew from Stock-Take-IT to stockIT more and more features and functionalities were added to the software. This was a problem because it created a situation where we could have possibly lost sight of the fundamental and unique features of the software as we try to implement too many features. As more features are added, it becomes increasingly difficult to distill the software and marketable product down to its core features.
The second problem was that by fleshing out the concept of stockIT to such a degree, we had a greater level of difficulty in pulling the focus back to deliverables for our Assignment Three. As the software of stockIT grew and developed in our minds, so did the amount skill and experience required to offer up functioning deliverables.

Where we are now

However, with problems come solutions. Our solution to the issue of feature creep was to limit the scope of deliverables for Assignment Three. Limiting the scope of the deliverables meant that we could better plan out the future features and functionalities of stockIT, thus allowing us to spend more time laying the foundations for the project's success outside of an educational environment. It also brought the group together in a way that shifted our focus to a more goal orientated way. No longer were we looking to come up with new and exciting additions, now we were looking to build upon the ideas we had and work out ways to implement them going forward.
Because of the vast undertaking that is the development of a fully functioning version of stockIT, our deliverables for Assignment Three may feel that they fall a bit short of where we as a group would like them to be. We are realistic about our current skill level and the actual skills required to develop a fully functioning software suite, as such our key deliverable is our wireframing and prototype user interface for both the WebApp and Mobile app version of stockIT.

Originally we planned to create our mobile app prototype by using the MIT app creator. After the development group spent some time testing the software and its features, we made the decision that given our 6 week timeframe for an initial deliverable, the time investment required to take full advantage of the MIT app creator would not yield the results we wanted. The MIT app creator would be better suited towards a small mobile game or an app that required less functionality. The developer experience using the creator was found to be somewhat clunky and cumbersome to navigate, whilst a lack of collaborative features meant that working on the development of the app with one or more people would become a logistical challenge.
At this point it was decided that we could not pursue the development of our mobile App using the MIT App creator and further research would be required. After brainstorming the key features that we wanted to present in our first deliverable (and the dead end that was the MIT app creator), the development group came back to refocus on one of the first core principles of stockIT, a clean and easy to use user interface. It was after this refocusing that our attention shifted toward using Figma. Figma would allow us to create our ideal user interface, present an animated prototype and work on the project in a collaborative manner. All of these were important factors for the development team in our

choice of wireframing software as it was fundamental that the capabilities of the software aligned with our goals and motivations as a development team.
Another functionality that the development group wanted to explore, to work in tandem with our first wireframing deliverable, was to demonstration of a stockIT functionality running using a programming language. As the programming language skills of the development group are quite limited and Python is the language that most group members have some experience with, it was put forward as the option for us to explore. The plan was to make a program whereby we could create an inventory list, input the amounts of each item in the inventory list and then have it be displayed in an informative way for the user. Whilst Python is perfectly capable of creating modifiable lists, another defining feature of stockIT is the ease of use and locations/storage zones and it was decided that while Python could be used to create a list feature, it would not function in the same easy to use way that the development group would have liked in an end feature of stockIT. Therefore to avoid delivering what we felt was a sub-par and non-reflective artefact the development group decided to re-invest the resources into alternate areas of project development.

Our goal for the very first development plan of stockIT was to give potential investors an overarching view of the capabilities and functionalities of stockIT. For this reason, our first report was a very weighty deep dive into what the development group believe to be the fundamental selling points and features of stockIT. We consider this to be our wish list and it should be viewed very much as a “what could be possible with a large budget, the required skills and resources”. For our second iteration of the development plan we are taking a much more strategic, refined and realistic approach to the future development of stockIT.
Before bringing stockIT to potential investors we will need to test a prototype with some functionalities. Firstly, we will create and test (in-house) a working UI prototype. The UI prototype is important. When shown alongside our development documents and project design reports it gives investors and potential users a greater understanding and appreciation for what stockIT is and can become. Testing for the UI prototype will be carried out through-out project development. Once an investor has been secured, we will begin further development of stockIT’s programmed features and functionalities. A freemium mobile application will be developed to initially take stockIT to market, the mobile app will have limited functionalities (stock counting and Unit Profiles). It will be designed to get stockIT into the marketplace and users hands. Data gathered from the freemium users of stockIT will then be used to further develop the software’s database, improve predictive technology and establish a clear line of communication between users and the development team for free-flowing user feedback.

After securing investment, the development team will then approach various small businesses to discuss a free trial use basis for the software. The trial use basis will allow the development team to have real world testing carried out in a live use environment, where feedback from end users will be incredibly useful for the further development of stockIT. The free use trial periods will be carried out over at least a 6 month period, where a business has free access to the stockIT license with features added incrementally over the course of the trial. Incremental feature additions allow the user to scale up their interaction with stockIT and allow the development team time to space out feature additions and implementation in a practical way. User feedback and testing will shape the way stockIT is developed

and features are implemented.

As mentioned, the key deliverable now is our wireframing and prototyping. The development group believes that this best shows the capabilities and trajectory of the software, while remaining in our current skillsets. Alongside this, a comprehensive list of future features (non-deliverables) and their reasons for exclusion at this point in the development cycle can be seen below and in the project timeline included in this report;

stockIT Future Feature	**Examination**
Software Integration MYOB, XERO, Vend, Square etc	Integrating software can be an arduous process. Not only do we have to navigate the software, being able to function on a code by code basis and facilitate the communication between the two separately developed entities, we would need to navigate the legal and functional business logistics of both parties.
SILo Feature Functionality Collate inventory data to single repository Collaborative users Ties into Cloud and local storage	An overview of SILo's and their functionalities can be demonstrated in the Figma wireframing and prototyping, however SILo's and their coding require a greater level of skill and experience than we as a development group possess. We can illustrate how they will operate and function in hypothetical sense, but not in a demonstratable (backed by coded functionalities) fashion.
Supply chain integration • Supplier lead times • Raw good to Finalised product	This process relies on a coded and realised version of stockIT. The underlying function here is to have two separate instances of stockIT be able to relay and communicate information between each other.
Storage Database infrastructure Cloud storage Local storage Amazon Web services	A vast understanding and working knowledge of cloud and local machine infrastructure, SQL, DDL and DML languages are required to implement these features. Having inventory information be storable and transmittable both in a local fashion and through the cloud is key to the operation of stockIT.
Reporting Functionalities Sales data Predictive and historic data Purchasing Information Accounting information	Much like SILo's, the presentation of this information can be demonstrated through Figma wireframing, however a functioning prototype of these features cannot be created without a working knowledge of both SQL and a programming language like C++.
Direct Purchasing Integration	This feature executes in a similar fashion to supply chain integration – a working build is required to execute.
AI Integration • Predictive behaviours • Trigger alerts for low stock • Purchasing and supplier triggers	The end game feature of stockIT and what the development team all agrees will set the software apart from its competitors. A fully functioning build of stockIT is required to implement this feature, with extensive in-field testing to be carried out for data gathering and analysis before it can be implemented in a Beta phase. This is likely a feature that will run in the background of a "finalised" stockIT build before we can advertise it as

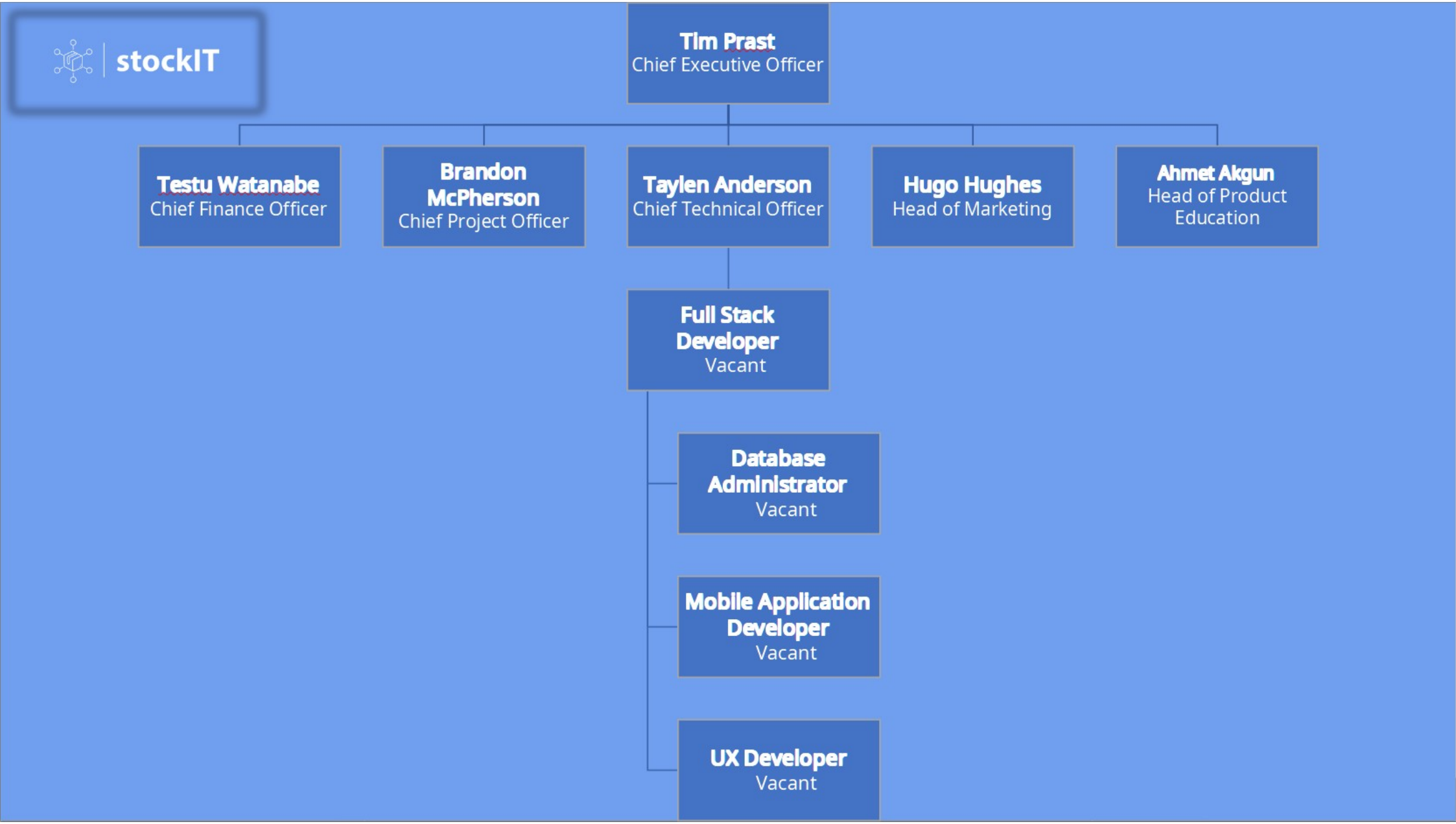
	fully formed feature of stockIT.
Unit Profiles • Stocking keeping formulae • Recipe information • Accounting information	Unit Profiles are demonstratable in a purely aesthetic sense through Figma wireframing. While we can provide real data to use, the core functionality requires a high level in databasing language and programming language skills to implement Unit Profiles as a functioning feature.
Stock Taking functionality • Export data to CSV • Multiple Users	While the development group did experiment with and brainstorm the use of Python, as a functioning prototype for stock taking and inventory counting purposes, ultimately, we deemed the language and our execution with it would not meet the standards and requirements we had for it. As such this is a work-in-progress feature and is likely one of the first items we will implement in a working build, to facilitate the growth of the app and the database building features of stockIT.
Function Mobile App, Web Application and standalone Program for Windows OS	Figma wireframing and prototyping can give us a very good indication of the end product look and feel however a functioning prototype for the Mobile app, Web App and standalone windows OS program are not feasible until our skills develop or outside help is acquired. The Mobile App is first in the development cycle as it will provide a means of advertising the product with very limited functionalities and features and is a good way to step into the market.

The above table is an accurate list of the yet to be implemented features for stockIT. While the features do present what at first may look like an insurmountable challenge, it is one that we as a development group feel is achievable – although not in the initial 6 week timeline we have been allocated. Therefore, we are using this project both as a learning exercise in entrepreneurship but also as a way to view real world roles and jobs in the IT world through a more focussed project lens. Long term, provided we have the resources, time, skills and financial backing stockIT is something that we believe is a very realistic and achievable project and business idea. Short term, we have had to reign in our expectations about what is achievable and actionable. It is all very well to plan out a large scale software application like stockIT on paper and list out all these great, intuitive and exciting features; however when you take the time to plan out how each and every one of these features and functionalities can come to fruition the task can quickly become very overwhelming.

Throughout this project the development group has been simultaneously excited and terrified at the prospect of creating stockIT. The real world potential for execution is there, but seeing the amount of resources required to create a project like this has meant we have all been quite humbled by our actual skills in the IT world. We have learnt that we can achieve a great many things when we work together, creating a concept and fully fleshing out the intricate details can be a very difficult thing to do when working as a group – especially when all the work is carried out virtually and amongst a group of total strangers. Over the course of the experience we have learnt to rely on each other's individual skillsets and be responsible for our own allocated tasks, all the while being realistic about what we can actually

achieve given the nature and timeframe of the project. Now as we near the completion of this course it is clear to us now that what started off as a group has now developed into a team, united by the challenges and opportunities presented to us by the IT industry to create a usable, effective and innovative platform.

Roles


stockIT
Tim Prast
Chief Executive Officer
Testu Watanabe
Chief Finance Officer
Brandon McPherson
Chief Project Officer
Taylen Anderson
Chief Technical Officer
Hugo Hughes
Head of Marketing
Ahmet Akgun
Head of Product Education
Full Stack Developer
Vacant
Database Administrator
Vacant
Mobile Application Developer
Vacant
UX Developer
Vacant

Tim Prast
Chief Executive Officer

Has a successful business background having operated his own bar in Subiaco, Western Australia for the past five years. He prides himself on bridging his passion for hospitality and IT to optimise business operations to increase profitably and management efficacy. It was his project idea that the group decided to implement, making him the obvious choice for the role of Chief Executive Officer of stockIT.

Testu Watanabe
Chief Finance Officer

Has an extensive background in accounting, having worked for multiple accounting firms, prior to opening his own consulting practice with a focus on Japanese businesses; to date he has operations in Australia, Japan & Vietnam. Tetsu has witnessed the evolution of IT on the accounting industry and believes that stockIT can have the same effect on the hospitality and retail industries. His background makes him our strongest candidate for the role of Chief Finance Officer.

Taylen Anderson
Chief Technical Officer

Is stockIT's very own Tony Stark. As a qualified mechanic with a strong understanding of electronics and an ever growing knowledge of programming, Taylen has been the single point of authority on all matters technical for the project. He has also championed the design and development of our website and will continue to be our technical expert going forward. There was simply no other choice for our Chief Technical Officer position.

Brandon McPherson
Chief Project Officer

Is the project's Swiss Army knife. Having worked as a information systems support analyst for the past seven years, Brandon possesses a range of technical and non-technical skills which have been essential for the success of our project. His proven ability to rapidly pivot and respond to problems in an agile way, has positioned him as the best candidate for our Chief Project Officer role.

Ahmet Akgun
Head of Product Education

Has a passion for IT & education. It started when his uncle assembled their first personal computer, exposing him to interactions with data storage devices and command line prompts. It was through this experience that set Ahmet on his path to become a tertiary educator. Leveraging off his dreams, Ahmet was the best candidate for the Head of Product Education, where he will focus on client engagement and education as part of our premium tiered packages.

Hugo Hughes
Head of Marketing

Is an outspoken and skilled communicator with experience working with the public sector on a range of large Government projects. Despite having no formal marketing experience, he has worked closely with key stakeholders to develop and implement a number of strategic communication plans. He believes that stockIT has the power to change the way the hospitality and retail industries function, empowering business owners and transforming the state of play for the industries.

Tools and Technologies

There are several different programs and web tools used in the creation and development of StockIT project. Below is a list of and a brief description for them:

GitHub

Our team uses GitHub to upload their files for the project so, all the team members can have access to them. Creating a user account and setting a password is required to use GitHub. An internet connection is necessary to download the software package and to gain access to repositories. (GitHub, 2021)
All of our team members are informed about how to operate their GitHub repository. Taylen Anderson created and shared a video about the instructions to follow.

MS Office

The main program we use to create text files is Microsoft Word. Our entire team have used MS Word in their daily lives and in their fields of work. It is installed through Microsoft Office. A software licence is necessary to install this suite. MS Office can be installed in computers with Windows or Apple operating systems only. Minimum hardware requirements vary by the version of the software. (Microsoft, 2019)

Adobe Spark

Spark is the program we use to create logos, graphics and visual artifacts in the user interface. It can be downloaded from Adobe official website. Adobe, Apple, Google, Facebook or personal email is necessary to use Spark but it is a free software. (Adobe, n.d.)
Windows 8.1 or a higher Microsoft Windows operating system is required. It can be used on the latest Chromebooks too. For Apple OS, iOs 13 or higher is the minimum requirement. For Android OS, Android 7(Nougat) or higher is necessary.
Two of the most recent versions of Chrome, Safari, Firefox and Edge(Chromium) web browsers are supported. These browsers must have JavaScript installed as an add-on.
Adobe Spark requires at least 4 gigabytes of memory capactiy. (Adobe, n.d.)

Canva

StockIT team uses Canva also to create logos, graphics and visual artifacts in the user interface. It is an online graphic design platform that requires a user account and a subscription to operate. Depending on usage, there are different membership options. For students and non-profit organisations it offers free subscirption. Basic free membership is also available. (Canva, n.d.) Google, Apple and Facebook accounts can be used to sign-in. An internet connection is required for these processes.
Timothy Prast has quite extensive knowledge on both Canva and Adobe Spark.

Figma

For user interface design, layout and prototyping we use Figma which is a web-based desgn tool. It can be downloaded as a desktop application for MacOS or Windows OS. It also offers Live Design Preview for iOS or Android and Font Installer that can be used in Mac or MS operating systems. (Figma, n.d.)
A Google account or a personal email address can be used to create a Figma account. An internet connection is necessary to use its website and cloud data. Desktop and mobile applications can be used off-line.

Nginx (E nginx)

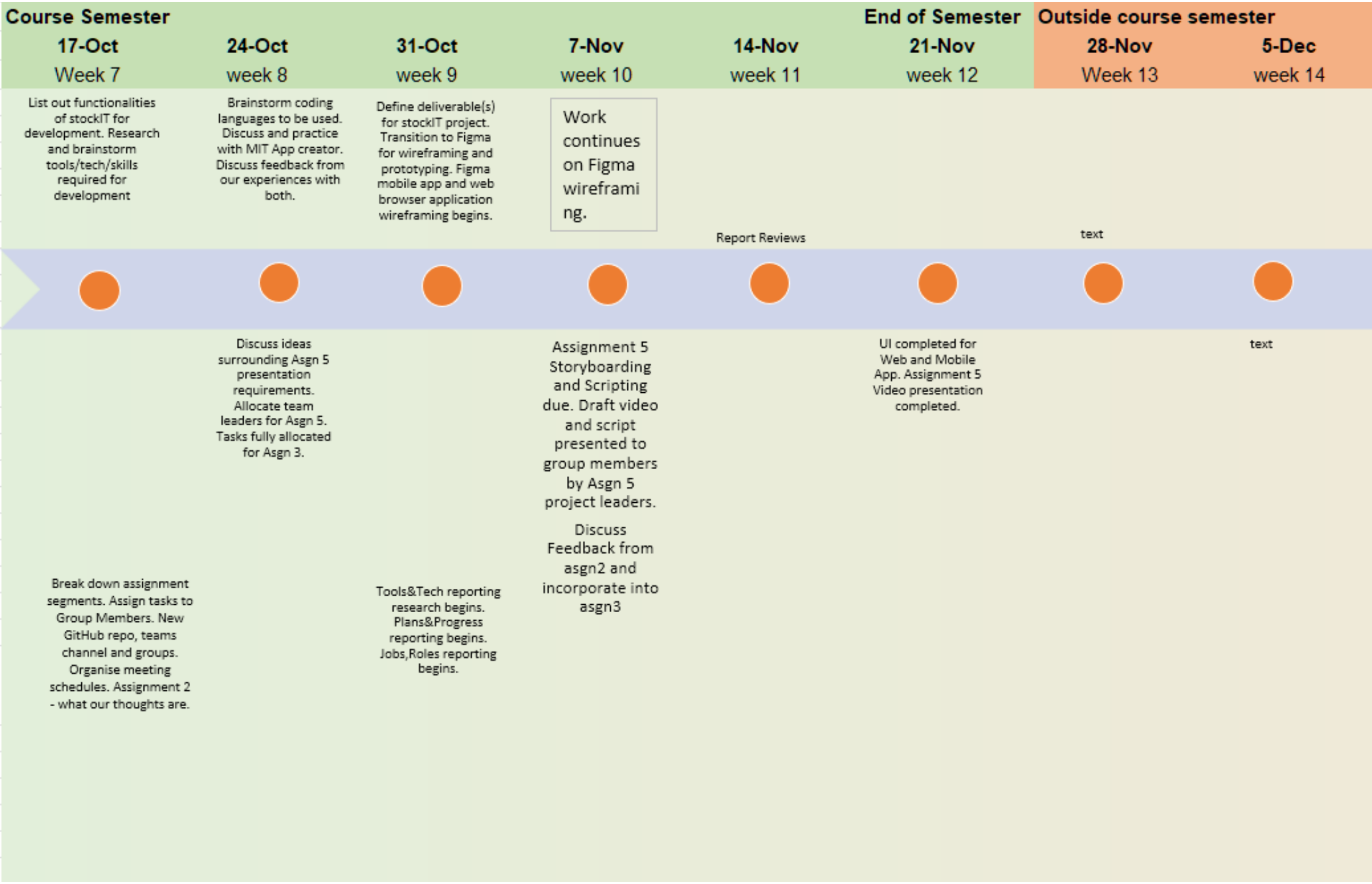
Team StockIT benefits from Nginx products to create the web server and the email proxy server. NgniX Unit is used to build application and web servers. An account must be created to access to NginX products. It offers free trial but after a certain period paying a subscription is necessary to continue to use the products and services. (Nginx, n.d.)
The NginX Controller requires minimum 155 gigabytes of storage and if additional databases range between 10 gigabye to 150 gigabyte. If security option is enabled another 100 gigabyte storage is required.
It works with computers with at least 8 gigabytes of memory and cpus with at least 8 cores.
Edge, Chrome, Firefox and Safari web browsers are supported. (Nginx, n.d.)

PHP

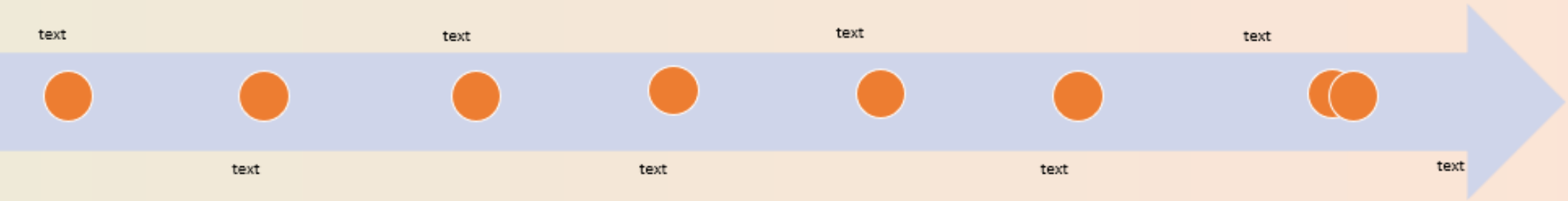
PHP Designer is the software we use to design the language. Its current version number is 8 and it requires on 100 megabytes of free storage and Windows XP or higher operating system. A free trial version can be installed but it requires a paid subscription after the trial period ends. (Softonic, n.d.)

MySQL

Team StockIT uses MySQL for building a database. Its most up-to date version number is 8.0. For storage the minimum required free space ranges between 500 megabytes to 1.7 gigabytes. A cpu with minimum with 2 cores and a memory with minimum 2 gigabytes of ram is necessary to operate the software. (MYSQL, n.d.)
This suite is not free and there are three different subscriptions to operate MySQL with database function. **(12)** Cloud and database services are enhanced with Oracle Heatwave memory accelerator. **(13,14)**


Course Semester
End of Semester
Outside course semester
17-Oct
Week 7
24-Oct
week 8
31-Oct
week 9
7-Nov
week 10
14-Nov
week 11
21-Nov
week 12
28-Nov
Week 13
5-Dec
week 14
List out functionalities of stockIT for development. Research and brainstorm tools/tech/skills required for development
Brainstorm coding languages to be used. Discuss and practice with MIT App creator. Discuss feedback from our experiences with both.
Define deliverable(s) for stockIT project. Transition to Figma for wireframing and prototyping. Figma mobile app and web browser application wireframing begins.
Work continues on Figma wireframing.
Report Reviews
text
Discuss ideas surrounding Asgn 5 presentation requirements. Allocate team leaders for Asgn 5. Tasks fully allocated for Asgn 3.
Assignment 5 Storyboarding and Scripting due. Draft video and script presented to group members by Asgn 5 project leaders.
UI completed for Web and Mobile App. Assignment 5 Video presentation completed.
text
Break down assignment segments. Assign tasks to Group Members. New GitHub repo, teams channel and groups. Organise meeting schedules. Assignment 2 - what our thoughts are.
Tools&Tech reporting research begins. Plans&Progress reporting begins. Jobs,Roles reporting begins.
Discuss Feedback from asgn2 and incorporate into asgn3

12-Dec	19-Dec	26-Dec	2-Jan	9-Jan	16-Jan	23-Jan	30-Jan
week 15	weel 16	week 17	week 18	week 19	week 20	week 21	week 22



Risks

Undertaking a project such as stockIT is an exercise in risk taking, risk management and risk mitigation. In all such situations it is important to fully understand the risks and challenges you may face before you can attempt to manage or mitigate the affects of those risks. Because of the vast undertaking that is facing the stockIT development team with the creation of software, there are a variety of issues that act as roadblocks to the development lifecycle of our product and to seeing it through to its full implementation. The key risks facing the development of both our Project and the Assignment itself are listed out in the table below

Risks

Assignment	Project
Market & Landscape • Is there a place for stockIT in the world of ERP and Business? • Does it fit into marketplace? • Limited access to immediate market data (group members business data) • Can a start-up compete with the established market players?	**Financial** • Funding is required for the project to be developed at good pace. • Too saturated for financial investment? • Who do we approach for investment? • What is our runway with or without investment? • How much is required?
Temporal – deadline • Can we complete deliverable(s) in 6 weeks? • Do we all have enough time to develop the Project.	**Market** • Is the market too saturated for stockIT to be successful? • Can we get access to more Market data?
Software • Python issues with creating functioning GUI and being able to code the program to act the way we had originally planned. • MIT app creator did not meet the requirements for what we wanted.	**Temporal** • Time to develop project. • Project Development lifecycle. • Time for potential investor contracts. • Will stockIT ever really be finished?
Skills • No prior coding experience.	**Supply Chains** • Covid world

- No prior UX and UI experience.
- No prior database experience.

Hardware

- No cloud infrastructure or local storage database.
- Using our own personal hardware to develop all assets.
- Budget limitations.

Staffing

- Can we hire the right people?
- What is the skill barrier?

AI

- Will we be able to license the AI from academia?
- If we cannot license it, how will we go about creating a functional AI.
- Can we use code that operates in a predictive manner using datasets from users?

Software

- Technical skills to develop functional software.
- Will we have to develop software or can we license utilities and tools to suit our needs?

Features and functionality

- Software integration
- SILo Feature functionality
- Supply chain integration
- Storage Database infrastructure
- Reporting functionalities
- AI integration
- Direct purchasing integration
- Unit Profiles
- Stock Taking functionality

The single biggest risk to both the development of stockIT and the project itself is the timeline. To mitigate the temporal factor facing the completion of the assignment, we have allocated tasks to each group member, the time required to complete the task (to give ourselves a better indication of the actual time required to complete it) and created a visual timeline to provide an at-a-glance roadmap and development timeline. The timeline for the development of stockIT extends far beyond both the 6 week

and 16 week deadline imposed on us, as such, we have created an accurate as possible post deadline that sets clear goals and deliverables for a period of up to 6 months. At the end of the 6 month period, we believe it will be feasible to have a base-line product ready for market.

This leads into the second shared risk (between both the assignment and stockIT). The market. The target markets for stockIT have witnessed the hardest hit over the past 12-18 months with Covid-19 closures, reduced trading hours and risk to staff. Bringing a new product to market (even as an exercise as part of this assignment) in the current economic climate can be a very difficult thing to do. The single biggest risk here that is common amongst both Project and Assignment is that of the Market. Market can mean a few different things in this type of situation and while the specter of Covid will continue to loom for the foreseeable future, posing a significant risk to stockIT's target market is not something that can truly be overcome by our development group. In this situation, we would use the uncertainty given by Covid to develop stockIT before going to market as covid has paused businesses unnecessary spending – giving the development team more time to create the product. The uncertainty here can also be used to our advantage as stockIT allows the user to do more, have more control and a greater level of oversight with less staff hours required, therefore not requiring a business to have a large pool of staff which is difficult to retain in these current circumstances.

Secondly, bringing a new upstart business to an already established marketplace poses risks to the future financial stability and success of the business as the development group will need to place a larger focus on taking customers away from established software suites. This will mean a large investment in marketing for customer acquisition which will divert funding away (albeit initially) from the development of the software. One way to mitigate this risk is to focus on a freemium offering at first, with reduced functionalities and features, but aimed at capturing a portion of the market and getting a foothold in the small retail and hospitality businesses. With an established freemium foothold stockIT can then pivot to the full offering and upsell current customers to a more feature rich subscription model. Alongside this, stockIT can offer referral bonuses to current customers to help organically grow the userbase of the software.

The range of non-shared risks (between the Project itself and the assignment) largely fall into hard skill shortages, software, and hardware. The hard skills of the development team pose the biggest risk to the development of stockIT and to the assignment. Because of the skills shortfall, we are unable to create coded and functioning deliverables with fully formed features that would best display the capability of the stockIT software. This negatively impacts both the marketability of the software suite and our ability to create tangible artifacts for the assignment project. To mitigate this risk, we plan to hire experienced developers and programmers to help create the software. On the assignment side of things, we have stuck to deliverables that are within our skill set – this includes a wireframe created using Figma that best displays what our finished product would look like and creates a visual aid for our product vision. Having to hire developers and programmers leads into another risk facing stockIT's development. That being the financial risk of pursuing a project such as this. Initially, the project plan is to pitch the idea to a series of investors and seek financial assistance to speed up the development of stockIT's software. Without financial assistance, the timeline for software development is greatly delayed as it relies on the original development team being able to teach and learn programming.

While ideally all development team members will be able to upskill through-out the course, any delays in bringing the product to market creates further financial burden on the group, delaying the product coming to market and therefore decreases the chances of stockIT's success and viability of the software. All business ideas and their creation are time sensitive to a certain degree, none more so than new software packages. The earlier stockIT comes to market, the more users we can capture and the more time there is to work on growing the market and developing the features and functionalities of stockIT.

There are always risks in life however with business, the risks can seem insurmountable. This is because there are real world implications if a business fails, negative financial implications and the risk that all the time investments could be for nothing. What we have addressed documents the risks that we have been able to foresee but there are always more that are unknown and cannot predict. The only way to mitigate the unknown is to focus on the known.

Group Process and Communications

Team meetings will be conducted over Microsoft Teams. As this project is large in scope, it will provide us the opportunity to seek specialized roles across the country. Ideally it is best to seek roles within Australia as this will allow the team to get together formally in person biannually. Each week, 2 stand-up meetings will be conducted essentially discussing on "*what was completed the day prior, what we are working on today, preventions on completing the work*". As we still have Covid-19 restrictions for international travel, it is safer to hirer our staff within the same country. Due to our budget limitations, an Agile project management style is best used. This will allow our project to take a realistic approach on what would be nice to have and what we can actually achieve Invalid source specified..

What we plan to do to help mitigate poor communication, working in a virtual world is to implement connecteam which is a productivity app. The application also allows tasks to be allocated to members of your team to track progress and capture historic comments. The Roles that we are after for our project is a Full Stack Developer to build the front-end and back-end of our stockIT system, a mobile application developer to develop the mobile application for our customers, A database administrator to manage the customer data that we will be collecting and UX Developer to design both mobile and systems interconnection.

StockIT – Full Stack Developer

Job Reference Number: SIT/00001/22
Salary: $85,000 - $120,000 (plus Super & performance-based bonuses)
Position Location: Remote Work
Employment Status: Non-Ongoing – 6 Months - Full time (37.5 hours per week +)

Your Role

As a Full Stack Developer for StockIT you will be responsible for developing and maintaining the front and back end of our product; you will also work closely with our mobile application developer, database administrator and UX developer to build the product more holistically.

The Full Stack Developer role can include:
Product design, development and maintenance.

Website and application development

Database construction and integration

Version control, Monitoring and alerting

Our Ideal Candidate

We are looking for a collaborative and creative-minded individual who can effectively translate business requirements into tangible deliverables in order to develop, grow and promote our product. This person must be able to realistically manage multiple priorities to manage team and stakeholder expectations. Whilst this role will be required to work independently, there will also be a fair amount of engagement with our UX Developer, Database Administrator and Mobile Application Developer to ensure that the front and back ends of our product work harmoniously.

Who we are

We are a small start-up, co-founded after virtually meeting at an Introduction to Information Technology course. We sought to bridge our passions of IT and business to change the way the hospitality and retail industries function, creating our product stockIT.

StockIT is an integrated inventory management and business platform. It aims to empower business owners to make smarter, evidence based decisions through access to real-time data on the purchasing, tracking and fulfillment of inventory. StockIT's three main goals are to:

- optimise wastage
- increase purchasing power
- improve supply chain efficacy

We are currently in the design phase our product with the intent to launch a fully functioning platform in Q3 2022.

Our Work Environment

Given the geographical spread of our team this role is entirely remote. There will be some requirements to travel quarterly to meet in person. Workplace environment requirements include:

- Remote work, laptop based.
- Infrequent travel, vehicle, aeroplane.

Qualifications, Experience or Training

Mandatory	Highly Desirable	Desirable
A degree in an IT-related field or at least 3 years industry experience in a relevant field.	Experience working in or with Start Ups	Experience in application development
Fluency in C++, Python and/or Java	Proficiency in SQL & HTML	Previous Agile project management Framework experience.
Familiarity with cloud technologies, preferably AWS		

How To Apply

Apply for this role by submitting your application directly through to applications@stockit.com.au or through our job advertisement on https://www.seek.com.au/
Please ensure that you format your application the following way:
(Job Reference_Number_Last Name_First Name)
If you have any questions regarding the role, please email the contact officer.
The application deadline is 1 February 2021. Extensions will only be granted under exceptional circumstances to ensure the recruitment round is fair for all applicants. To apply for an extension, you must email the Contact Officer prior to the vacancy closing date.

Assessment Criteria

There are phases to this job round:

- Application Phase
- Testing Phase
- Interview Phase

For the application phase you are required to provide a copy of your resume/CV along with answers to the following questions:
What makes you the ideal candidate for this role, please include any specific skills or experiences. (300 Words)
An example of a challenging technical problem you were faced with and how you overcame it (300 Words)

An example of a time where you have had to work with a team to achieve an outcome.

(300 Words)
Applicants who are successful in the application phase (phase 1) will be asked to progress to the testing phase (phase 2).
The testing phase consists of two types, technical and psychometric. This is to ascertain whether you possess the level of technical skill necessary for the role and to understand about how you might best fit our team.
Please note that our team consists of a range of technical abilities and personalities. Offers will not be made solely on the results of this alone and are designed only to give us more insight into who you are.
Applicants who are successful in the testing phase (phase 2) will be asked to progress to the interview phase (phase 3).
The interview phase (phase 3) consists of an interview over Zoom where we will seek to gain further information on who you are as a person and to provide you the opportunity to ask us questions. Once this phase has concluded we will seek to finalise offers for ideal candidates.
We will seek to use this recruitment round to fill future vacancies, if you would like to be considered for future roles, please let us know in your initial application.

Best of luck and thank you for your interest in working with us
The stockIT Team.

StockIT – Mobile Application Developer

Job Reference Number: SIT/00002/22
Salary: $80,000 - $95,000 (plus Super & performance-based bonuses)
Position Location: Remote Work
Employment Status: Non-Ongoing – 6 Months - Full time (37.5 hours per week +)

Your Role

As a Mobile Developer for StockIT you will be responsible for building and maintaining a bespoke Mobile application for our product; you will also work closely with our Full Stack developer, UX developer and Chief Technical Officer to develop a reliable, accessible and functional mobile application.

The Mobile Application Developer role can include:
Mobile application development

Website and mobile application UX/UI

Product design, development and maintenance.

Our Ideal Candidate

We are looking for a collaborative and creative-minded individual who can effectively translate business requirements into a reliable, accessible and functional mobile application in order to host our product. This person must be able to realistically manage multiple priorities to manage team and stakeholder expectations. There will be a fair amount of engagement with our Chief Technical Officer, Full Stack developer, UX Developer and Database Administrator to ensure that the front and back ends of our product work harmoniously.

Who we are

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- increase purchasing power
- improve supply chain efficacy

We are currently in the design phase our product with the intent to launch a fully functioning platform in Q3 2022.

Our Work Environment

Given the geographical spread of our team this role is entirely remote. There will be some requirements

to travel quarterly to meet in person. Workplace environment requirements include:

- Remote work, laptop based.
- Infrequent travel, vehicle, aeroplane.

Qualifications, Experience or Training

Mandatory	Highly Desirable	Desirable
A degree in an IT-related field or at least 3 years industry experience in a relevant field.	Experience working in or with Start Ups	Understanding of back-end architecture
Fluency in Android SDK	An understanding of C++ or Java	Previous Agile project management Framework experience.
Mobile application development experience	Objective-C (Swift), working with Apple devices	
An understanding of Material Design Language Guidelines		
Strong ability in wireframing and prototyping.		

How To Apply

Apply for this role by submitting your application directly through to applications@stockit.com.au or through our job advertisement on https://www.seek.com.au/
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Please note that our team consists of a range of technical abilities and personalities. Offers will not be made solely on the results of this alone and are designed only to give us more insight into who you are.
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The interview phase (phase 3) consists of an interview over Zoom where we will seek to gain further information on who you are as a person and to provide you the opportunity to ask us questions. Once this phase has concluded we will seek to finalise offers for ideal candidates.
We will seek to use this recruitment round to fill future vacancies, if you would like to be considered for future roles, please let us know in your initial application.

Best of luck and thank you for your interest in working with us

The stockIT Team.

StockIT – Database Administrator

Job Reference Number: SIT/00003/22
Salary: $85,000 - $120,000 (plus Super & performance-based bonuses)
Position Location: Remote Work
Employment Status: Non-Ongoing – 6 Months - Full time (37.5 hours per week +)

Your Role

As a Database Administrator for StockIT you will be responsible for building and maintaining a back-end database for our product; you will also work closely with our Full Stack developer, Mobile Application Developer and Chief Technical Officer to ensure that the database successfully and reliably integrates with all areas of our product.

The Database Administrator role can include:
Database design, development and integration

Database security development

Database maintenance and quality assurance.

Cloud infrastructure and integration

Cloud maintenance

Our Ideal Candidate

We are looking for a collaborative and creative-minded individual who can effectively translate business requirements into a reliable, accessible and functional Database in order to host our product. This person must be able to realistically manage multiple priorities to manage team and stakeholder expectations. There will be a fair amount of engagement with our Chief Technical Officer, Full Stack developer and Mobile Application Developer to ensure that the front and back ends of our product work harmoniously.

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- Remote work, laptop based.
- Infrequent travel, vehicle, aeroplane.

Qualifications, Experience or Training

Mandatory	Highly Desirable	Desirable
A degree in an IT-related field or at least 3 years industry experience in a relevant field.	Experience working in or with Start Ups	Previous Agile project management Framework experience.
Strong understanding of back-end architecture		
Proficiency in Maria DB and SQL		
Proficiency in XML, DDL and DML		
Strong understanding of cloud infrastructure and data storage		

How To Apply

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Please ensure that you format your application the following way:
(Job Reference_Number_Last Name_First Name)
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An example of a time where you have had to work with a team to achieve an outcome.

(300 Words)
Applicants who are successful in the application phase (phase 1) will be asked to progress to the testing phase (phase 2).
The testing phase consists of two types, technical and psychometric. This is to ascertain whether you possess the level of technical skill necessary for the role and to understand about how you might best fit our team.
Please note that our team consists of a range of technical abilities and personalities. Offers will not be made solely on the results of this alone and are designed only to give us more insight into who you are.
Applicants who are successful in the testing phase (phase 2) will be asked to progress to the interview phase (phase 3).
The interview phase (phase 3) consists of an interview over Zoom where we will seek to gain further information on who you are as a person and to provide you the opportunity to ask us questions. Once this phase has concluded we will seek to finalise offers for ideal candidates.
We will seek to use this recruitment round to fill future vacancies, if you would like to be considered for future roles, please let us know in your initial application.

Best of luck and thank you for your interest in working with us
The stockIT Team.

StockIT – UX Developer

Job Reference Number: SIT/00004/22
Salary: $85,000 - $125,000 (plus Super & performance-based bonuses)
Position Location: Remote Work
Employment Status: Non-Ongoing – 6 Months - Full time (37.5 hours per week +)

Your Role

As a UX Developer for StockIT you will be responsible for designing and building the client facing interface for our product; you will also work closely with our Full Stack developer, Mobile Application Developer, Chief Technical Officer and Head of Marketing to ensure that our user interface is functional, accessible and intuitive for non-technical users.

The UX Developer role can include:
Client facing interface design and development for web application

Client facing interface design and development for mobile application

Client facing interface maintenance

Our Ideal Candidate

We are looking for a collaborative and creative-minded individual who can effectively translate business requirements into a functional, accessible and intuitive interface for our product. This person must be able to realistically manage multiple priorities to manage team and stakeholder expectations. There will be a fair amount of engagement with Full Stack developer, Mobile Application Developer, Chief Technical Officer and Head of Marketing to ensure that the client facing side of the product is effective and fit for purpose.

Who we are

We are a small start-up, co-founded after virtually meeting at an Introduction to Information Technology course. We sought to bridge our passions of IT and business to change the way the hospitality and retail industries function, creating our product stockIT.

StockIT is an integrated inventory management and business platform. It aims to empower business owners to make smarter, evidence based decisions through access to real-time data on the purchasing, tracking and fulfillment of inventory. StockIT's three main goals are to:

- optimise wastage
- increase purchasing power
- improve supply chain efficacy

We are currently in the design phase our product with the intent to launch a fully functioning platform in Q3 2022.

Our Work Environment

Given the geographical spread of our team this role is entirely remote. There will be some requirements

to travel quarterly to meet in person. Workplace environment requirements include:

- Remote work, laptop based.
- Infrequent travel, vehicle, aeroplane.

Qualifications, Experience or Training

Mandatory	Highly Desirable	Desirable
A degree in an IT-related field or at least 3 years industry experience in a relevant field.	Experience working in or with Start Ups	Experience in software testing.
Proficiency in wireframing and prototyping.		Previous Agile project management Framework experience.
Strong graphic design skills		
An understanding of the Apple human interface guidelines		
An understanding of Material Design language guidelines		

How To Apply

Apply for this role by submitting your application directly through to applications@stockit.com.au or through our job advertisement on https://www.seek.com.au/
Please ensure that you format your application the following way:
(Job Reference_Number_Last Name_First Name)
If you have any questions regarding the role, please email the contact officer.
The application deadline is 1 February 2021. Extensions will only be granted under exceptional circumstances to ensure the recruitment round is fair for all applicants. To apply for an extension, you must email the Contact Officer prior to the vacancy closing date.

Assessment Criteria

There are phases to this job round:

- Application phase
- Testing phase
- Interview phase

For the application phase you are required to provide a copy of your resume/CV along with answers to the following questions:
What makes you the ideal candidate for this role, please include any specific skills or experiences. (300 Words)

An example of a challenging technical problem you were faced with and how you overcame it (300 Words)
An example of a time where you have had to work with a team to achieve an outcome. (300 Words)
Applicants who are successful in the application phase (phase 1) will be asked to progress to the testing

phase (phase 2).
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Group Feedback

Group's Feedback

Coming off from Assessment 2, there was a large sense of achievement amongst the group as we celebrated our final meeting before starting Assessments 3 and 5. Right then, we all went through the assessment documentation to better understand what was required for assessments 3 and 5. Taylen nominated himself as the project leader and built a project time frame of actionable items with their deadline dates amongst the group.

There was a real sense of fatigue amongst the group as we finished up assessment 2 and when starting assessment 3, it showed. We started slow, however we all attended and contributed in our twice a week meetings. What was good though is it gave time for group members to collaborate, share ideas and thoughts for our respective tasks. As the deadlines were coming closer, the urgency shifted. We all knew what we wanted to achieve with our assessments, and we began to execute. What was tricky with this assessment was that there were two of them, assessment 3 for the project artifact and assessment 5 for the video presentation. It made sense to allocate members to the different assignment. Tim and Hugo worked extensively on the project artifact as this was Tim's idea and has the best overall knowledge. Brandon and Tetsu worked on the video presentation to advertise stockIT.

Even though the bulk of our work was divided, there were times when members of our group would work between assessments. Our group meetings were very insightful and constructive, sharing our ideas, thoughts, and opinions of completed drafts. What went well is we all stuck to our deadlines mostly. Having worked on Assessment 2 previously, we were able to hit the ground running when using tools such as Git and Microsoft Teams. What could have improved was completing work earlier, such as creating rough drafts that would better articulate our ideas across however this was largely due to the fatigue from assessment two and was made up in our constructive weekly. What surprised us all is how we all stuck together and continued to progress with our assessments 3 and 5 despite the hurdle in front of the group. All members made a conscious effort to attend almost every meeting, providing input and sharing ideas.

Throughout assessments 3 and 5, various technologies were used and shared amongst that group. Bringing in Figma to build our stockIT mobile app, Vyond to create the video presentation and of course, Microsoft Teams, Word, and Git Hub which we all mastered through Assessment 2.
We have all learnt so much about each other within this unit. Having Assessments 3 and 5 completed and still having the same members since assessment 2 just goes to show how well we worked together as a team.

Individual Feedback

Ahmet Akgun

The first thing I noticed about our team is it was formed soon after the group assignments were released. A

team with with initiative has an early start and has extra time for their overall work. This advantage allowed the team members to resolve any complication that occurred during the study period.

Our team communicated swiftly on Microsoft Teams and every member was notified immediately for the updates. Some group meetings exceeded the allocated time mark and caused minor distractions. This resulted in the misalignment of some of our tasks. Though, it was corrected quickly.

On a few occasions, our meetings clashed with my meetings with another team from another subject. My Intro to IT team was kind enough to schedule the time of our periodic meetings to a more convenient point and any collision was avoided.

In the early phases of our project, I've found some of our discussions longer than expected but towards the next phases of our task they proved to be quite explanatory and beneficial.

Brandon McPherson

After completing Assessment 2, there were definitely some fatigue within the group. We were eager to get our results back for Assessment 2 as we put a lot of work in for the assignment but also needed our feedback to see if we were going in right direction for our project.

For our first meeting, Taylen nominated himself as the project leader for assessments 3 and 5, allowing Tetsu to focus his efforts on the video presentation for assessment 5. I was tasked to create a script for Assessment 5 which I found a little daunting. This was because I had to imagine how the video was going to structured even though I wasn't tasked to create the video presentation. I didn't know if the script was going to make sense but after seeing the video draft that Tetsu put together, there was a feeling of relief. It was great to see how well the video went based off the structure of the script and seeing everything come together. Through the assessment, I had to go back between Assessments 3 and 5 to do bits of work. At times I was worried as there were so many components to get through but as we were nearing the submission date, you could see the assessments all coming together.

Through my group work in this course unit for introduction to information technology, I have learnt how important it is to set small tasks and put time aside each day to complete them.

Hugo Hughes

There was definitely a large degree of fatigue after completing Assignment Two; however despite this the group was keen to capitalise on our strong performance and deliver equally strong end result for assignments 3 & 5. Taylen put his hand up for the manager role this time round and was effective in keeping us on topic and focussed. Ahmet drove contributions for tools & technologies, whilst Brandon and Tetsu did a fantastic job taking lead of the script and video components of the assignment. I mainly worked closely with Tim trying to take onboard the feedback we received from Assignment 2 to refine our wording, delivery and scope for Assignment 3. I really enjoyed leveraging off all of our different skills and experiences. As a group we work well together and I feel very lucky to have found this team to do my first IT course with!

Taylen Anderson

From humble beginnings, our team started from a few individuals in an IT class. We have developed our project from week four until now with great effect. In our time together we have overcome a few challenges such as hardware failures, and pulled together to finish our work to a high standard. Continuing with this assignment I have learnt a lot from each of our team members either from research to answer questions they had or directly from them individually. Hugo surprised me with his structured writing and deep understanding of marketing and its importance in not just selling a product but also yourself. Business was a topic that a particularly had troubles with though speaking off hours with both Tetsu and Timothy I have definitely expanded my knowledge and confidence with that field. Brandon was another surprising individual moving from strength to strength, initially coming to our group as one of the quietest, he drafted the majority of our video pitch and contributed a significant amount of voice recording to make our video idea a reality. Finally, though not of least we have Ahmet, He was able to contribute more within the confines of this assignment, with both some interesting ideas on which software and languages we could use to accomplish our Theoretical goals. In summary I am very privileged to have been invited to join this group and thrilled to have participated in this task.

Tetsu Watanabe

I believe that I was assigned to one of the best teams within the entire course. Despite my initial concern at the beginning of assessment 1, we have experienced no major issue with the group collaboration until to date. I believe that we did very well developing a degree of trust in each other. Taylen, our group leader, was very effective in managing the team. Thanks to him, our biweekly meeting became exceptionally effective and efficient. Tim and Hugo surprised me for their continued dedication to the project plan despite the fatigue we experienced after our busy schedule of completing assignment 2. After successfully completing the IT work interview in assignment 2, Brandon again showed his storytelling talent by creating well-written scripts for our video presentation. Ahmet, a keen music editor, was always willing to help me with the sound effect of our video presentation.

It was a pleasant experience to realise that group work could be an easy mission when everyone is willing to collaborate. My attempt with this course could have been much harder if I had been assigned to a different team. There may be some improvements to be made, such as completing each task a little quicker, but overall, we did very well. From my experience, I can say that it is even hard to find a team like us in a real business. So, all I have is respect for my team.

Tim Prast

While our group worked its way through Assignment 2, we were keenly aware of the upcoming tasks in Assignment 3 and 5 and tried to get as much information into and about our project (stockIT) into Assignment 2 as we could. This was a great idea at the time, however there was a great amount of fatigue felt by both myself and the rest of the group when we needed to now write into further (although mostly previously covered) detail about stockIT and its business landscape.

With Assignments 3 and 5 I have really enjoyed that the awkward first assignment interactions were done and out of the way, it meant that we could roll into the next two assignments as a very unified group that was entirely aware of how each member worked, their capacities and their skills sets. It has also allowed us to facilitate very effective and efficient smaller group tasks, allowing each of us to work to our strengths.

Taylen did an amazing job at setting the pace and structure of the next assignments as well as a firm guiding hand in making sure we all got through the fatigue and got our tasks submitted but also allowing and allocating some unofficial time for us all to chat and hang out. Ahmet did well with the tools&tech section and has been much more engaged in our meetings. Tetsu and Brandon both outdid themselves by taking the lead on the scripting and creation of our groups presentation video, I've definitely shared the video to a few friends and I think it highlights our groups personality very well. Hugo and I worked closely on a number of aspects of this assignment and I feel I've learnt a lot from his during our exchanges.

Overall, I couldn't be more happy with Group 12 and my experiences. A group of 6 strangers from the internet have managed to come together a create a project idea with a real world business application, one which we could immediately continue working on and look at launching.

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