# Assignment 3

By I.T Incorporated

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## **Team Profile**

Name: Huseyin Bator

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My name is Huseyn Bator. Here is some background information about me. I was born in Australia on the 18th of March 1999 (19), but more specifically I was born in Victoria, Carlton. My background is Turkish, because both of my parents were born there. I can speak 2 different languages apart from English, those languages are Turkish and Italian. I know Italian because I studied it all the way throughout primary school and high school. Unfortunately, I stopped it at year 11 because it was getting to difficult.

I live in Brunswick, near my high school Brunswick secondary college, which I graduated from VCE in 2016. I then went to RMIT last year (2017) and studied a bachelor of computing studies. The same study as which I am in now. I then took a gap year after doing half a semester, due to unfortunate family events. I was very sporty throughout my high school years. I got involved in lots of curriculum sports such as athletics, tennis, and basketball. Outside of school I did tennis, taekwondo and went to the gym occasionally. My favourite sport is tennis, I played it for 13 years. One interesting fact is that I have visited 4 countries. My interests in i.t include programming and user design. As a group we decided on the name I.t Incorporated

Name: Rashmi Wijesekara

**Student ID: s3718581** 

Email: s3718581@student.rmit.edu.au

My name is Rashmi Himasha Wijesekara, but I prefer to be called Raszy. I was born in Colombo, Sri Lanka on the 21st of July 1999. My parents are both from Sri Lanka and so is my older brother. When I was 3 years old my family and I moved to Auckland, New Zealand. We lived there for 10 years then decided to make the move to Australia and completed my final years of highschool. I graduated from Glen Waverley Secondary College in 2017. My hobbies include hanging out with friends and family and listening to music.

I find I.T fascinating as you can see just how much technology is used in our daily lives and how rapidly it has evolved. With a few simple clicks you can figure out how to get to where you're going using the PTV app and listen to multiple songs on Spotify or read your favourite

books using Kindle. I think my interest in IT began when there were so apps coming out, for example Angry Birds or Candy Crush that had a pretty basic concept behind it however, it got audiences so amused and addicted. So I was curious on the behind the scenes of what it took to create such an app. I chose to come to Rmit because I wanted to enter the realm of technology and what better university to allow that to happen than the Royal Melbourne Institute of Technology. Since I have no prior experience in this field, it would be an incredible opportunity to learn about the behind the scenes of how things like websites and apps are created. For example, how to best satisfy the target audience or how to create the codes for programs.

I can speak 3 languagaes, English, Sinhalese and basic French. A fun fact about me is that I did cheerleading and have competed internationally in the same year I competed in chess tournaments.

Name: Victor Huang

Student number: s3724584

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I am Chinese but born in Australia. My hobby is playing the piano. Playing the piano helps me relax if I have a long and stressful day. The music and the satisfaction that comes out of playing a piece really nicely is extremely cathartic. Depending on the pieces that I play, it can elicit different moods. If I want to feel more dark and sombre, and contemplatory, then playing something like Chopin's Nocturnes, can really give that mood.

I am interested in many sides of IT but currently, it is Cryptocurrency and Cyber security. I don't have much formal IT experience. But as I grew up in a farm, my parents didn't know much about technology, so I had to learn it myself and fix everything by myself as I had a huge interest in computers. In the end, things worked out and I learnt quite a bit to do with computers, so I decided to move interstate in more central Melbourne to attend RMIT to study IT.

Name: Joshua Cayetano

Student Number: s3722151

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I was born in Australia in Monash Hospital. I was born on October the 1st 1999 on a Wednesday and live primarily with my mum, alternating between my dad as my parents as divorced.

I attended St Mary Magdalen for 3 years and then transferred to Sacred Heart Primary Oakleigh and then attended High School at Salesian College Chadstone, graduating in 2017.

Like any other teenager I wasn't sure what I wanted to do but had a general idea of where I wanted to study, into the science field. It was then during V.C.E that I considered I.T, as I was doing so well that I decided to pursue it.

This wasn't just solely based on luck as I had continuous dedication through trial and error from learning from my mistakes in my studies in Information Technology, being attentive in class and trying to understand concepts that I didn't understand. This was then furnished by my own personal goals and my uncle. Firstly through my passion through gaming I had heard that it was financially better to build a PC so I decided to do some research into the hardware of computers. My uncle then inspired me by telling me on how he was a freelance who travelled to Singapore for a company which sounded really enticing.

I choose to come to RMIT a I heard through various university students that I meet that RMIT was the place that specializes in information technology. Also on occasional visits to the State Library of Victoria when I visited to study and take in the vibrant atmosphere of the city I would notice that RMIT was right next to it and I figured that it would be a great place to study as I would not only enjoy travelling to uni but also gain access to great restaurants.

What I expect to learn during my studies is various techniques on how to program various softwares and programs as well as how to effectively organise databases. However I will also learn how to effectively network between students and organisations while also balancing between socialisation and assignments.

Currently I have no experience in any of the related fields. I will aim towards it by continuing my education at RMIT by furthering my understanding in Information Technology through it's sections of programming languages like css and looking for any available places that require security for their

# **Project Description**

My project idea is to create an app called Chores where young adults (18 years and over, for legal reasons) who would like to make a bit of extra cash. This can target the youth that are unemployed. This is a great way to gain experience and skills for future use e.g. resumes. The app is quite simple really, it let's you know when people need another's service and sends out a job alert. It is similar to Uber in that you can rate the service. But, instead of providing transport, people provide manual labour. Some people may require another's service and/or some people may want to give up their time and energy in return for some cash. The app contains many categories for people to choose from, for example cleaning, pets, gardening, groceries and baby sitting.

First you need to make an account, this process consists of agreeing to terms and agreements e.g. allowing GPS tracking, having sufficient amounts of money in the bank account to give to the "employee" etc. Proving credit card details. Each member also creates a profile with their name, age, gender and suburb of stay. Here's an example of when the app could be used: Marry and John are a couple living in Toorak need to take a business trip. They leave Friday night and come back Sunday morning. Mary's mother is in town and can look after their dog. However, due to her old age, she finds it difficult to walk Coco (the dog). Marry, (the one who owns the account in the couple) simply clicks the "service needed" button, pick the date the chores should be done by (Saturday), click the "pets" category, then "dog" and either feeding, walking, playing etc. They either pick one or multiple tasks. They may also like to write up a little description in the job alert if they wish. E.g. "Our very friendly dog Coco needs to be taken for a 30min walk around the block between the hours of 3pm-6pm".

Jane is a 19 year old girl who also lives in Toorak and is currently unemployed, but is willing to provide a service to earn a few extra dollars to go out with her friends and watch a movie. She simply goes on to the app "Chores" (creates an account), clicks "Provide a service" and the date she is free to provide the service, which happens to be the Saturday. All job alerts for Saturday will come up (including the location, date, set price), in her location (unless she decides to click "broaden location" if there are limited job alerts on that particular day) John and Mary's job alert will be shown.

Since Jane loves animals, she is more than willing to look after Coco. She clicks on "send a request" and a notification goes out to Marry. This provides one another's phone numbers and a set price of \$16. (Prices are pre-set based on time and labour, e.g. \$8 for every 15mins of walking). Jane goes to the house (Start chore), walks the dog and returns back to the house (Chore ended). (All activities will be tracked using a GPS once you click "start chore" and will stop when "chore ended" is clicked) Each party is asked to rate each other (out of 5 stars) on how satisfied they are with the other party. (This will also be shown on their profile, under "reviews". Many software and hardware programs can be used in the making of an app.

Xcode can be used for iOS or if you want to accommodate to both iOS and Android users, you can use software like Android Studio, Eclipse and interlliJ for Android. If this app was successful, it would mean that people who want to make an extra bit of cash can achieve it. It means that people can gain experience for their resumes and hopefully have acquired skills like time management and "customer" interactions for their future job.

People who need assistance with tasks can receive them easily with a couple of clicks. The original problem can be solved by allowing a platform for people to make a small business of their own by doing small yet many tasks and bettering the community at large. This will impact many people as it does not purely help one age group but a wider range, therefore, more people can benefit from making this app come to life.

## **Aims**

As a group we decided to develop an application for the jobless youths. The aim of the development of the app is to help the unemployed citizens of Australia get jobs and experience for their future and their wellbeing. We came up with this aim because we really wanted to create something that would help people in need, instead of creating something redundant and not as useful. Our group was driven by the thought of helping those at need.

In meeting this aim the user will have some goals before meeting the aim of the application.

Firstly, they will need to create a profile in the application. By doing this the user will editing their names, upload a picture, bios and uploading a resume with relevant information.

Secondly, the user should select a job field they would like to work in, this will be sorted in categories e.g logistics, retail. Once selected categories relevant jobs will appear and the user will then view applicable jobs

Thirdly the user will then apply for all applicable jobs if possible or asked uploading relevant information including extra details and extra questionnaire answers.

Fourthly, the user will be notified if successful or not. If successful the user should proceed with the notification details and contact the company for further employment. Thus the aim of gaining experience or a job will then be met.

# Plan/processes of the application

Here is the plan of our project application named "Chores". Unfortunately, we have not progressed onto developing any of the features yet, although we have made a few low fidelity mock-ups. The features would've been coded utilizing a mobile coding app called XCode. Below you will read features that were planned to be developed and a story of how our group came up with the idea.

#### The sign-up process/login:

First, the project will allow users to create a profile. This profile will be of the user and specifically about their interests and hobbies are. It will also show experiences and a profile picture. Also including basic compulsory information such as Name, last name, etc. This will all be sorted during the sign-up process. The sign-up process can take up to a one to two weeks' time, as there will be a verification process where a picture of some sort of identification will be needed. This is to make sure no fake profiles can be made and the employer of a business hiring can verify the person if police checks are necessary.

Once the sign-up process has been submitted it will under review as stated before, then once verified the user may use the app and login with a unique key and password.

#### **Using the Applications navigation bar:**

Once users have logged in and made their profile the user is to click onto the navigation at the bottom of the screen to select a function. At the bottom of the screen there is a navigation bar which contains home, search and mail icons. Home will redirect you to the main page which has news feed of recently posted applicable jobs and recent application updates. essentially, it acts as a live news feed but for the apps features.

The search icon will open a page with automatically filtered based jobs on the users profile and experience, or the user may wish to change the filter settings by clicking on the filter button in the search bar on top of the mobiles window. the filter contains a category, experience, work type and pay - per hour. If the user selects on the search bar they can then search for specific job type or job titles.

The mail icon page will vary, because this icon has notifications badges based on successful or unsuccessful applications. This page will have details of successful applications and notifications on processed applications and everything that has been done with jobs that you have applied for.

#### **Applying for jobs:**

Applying for jobs using the app is easy, its as simple as clicking the apply button on a job advertisement or either found in the home screen or the search tab. On a advertisement on the bottom left there will be rounded rectangle button that says apply. The user simply presses it and the user has applied. If the job advertisement requires additional information such as extra questions or a Cover letter, the user will be prompted a additional text box to enter the information. Once successfully applied the button will transform into a green tick button and a notification will appear in the mail icon stating that the application has been successfully submitted and is under review.

If the applicant is successful they will receive a mail notification with further instructions on how to proceed with the job.

If they are unsuccessful they will receive mail notification saying they are unlucky and they can reapply if they would like.

#### How will advertisements be posted:

Our team will try to link up with a website like seek.com or indeed.com to get advertisements posted daily so are application is constantly updated with opportunities.

#### **Profile customization:**

Although, there is not much to customize the user can edit their picture and change their biography, hobbies and add anymore experiences.

That is the complete overview plan of what the user should experience when applying for jobs whilst utilizing the application.

## Roles

In our group we made four roles whilst developing the project, these were: Lead Programmer, User interface designer, Scrum master and Project planner The lead programmer was Victor, he was in charge of the programming behind the app development. Rashmi was the user interface designer. This role was in charge of the user interface and the experience the users will have whilst using the application. The Scrum master was Joshua, his role was to ensure the team was working on the correct tasks on time and is using the correct materials for their part. Project planner was Huseyin, his role was to plan what the user experience will be like and to make sure that the applications aims and intended use are made as planned.

#### The process of the roles:

Overall the process on how this would work is by starting with the project planner. He will set goals for what the application is meant to do. After this the project planner will draw up a brief design with intended buttons and passages for the users. Then the project will then send of the design to the User Interface Designer and the programmer.

Then the User Interface designer will then begin with a low fidelity prototype then will check with the scrum master before proceeding to the high fidelity prototype design of the application meeting the project planners' goals and aims. Once the high fidelity prototype is developed and is proven by both the project planner and scrum master it will be given to the Lead programmer.

Once the Lead programmer has been given the green light, he will utilize the high fidelity prototype and the projects planner's goals and aims to begin the code. The coding will begin from coding the goals and intended application uses first then, coding the pages designs e.g headers, divs, and alignments. Once everything is programmed it will be checked with scrum master and project planner to ensure that all goals and aims are met correctly.

Simultaneously, while the project planner and programmer are doing their jobs the Scrum master will be overlooking them. Making sure that strictly deadlines are met on time and all goals and aims are being covered correctly before being presented to the project planner. Scrum master will also give the correct tools to the programmer and user interface designer to make sure they are on the right track to success.

Once all roles have completed their jobs, all of their work will then return to the project planner to make sure it is all complete correctly and ready to be launched to the public.

# **Scopes and Limits**

In our project, it is essential to outline the primary functions of our Chore application with further elaboration onto the reasoning and the constraints involved.

In our project what will be shown is:

#### 1) Have different sections

This is to categorise as many similar genres for different jobs like for education (tutoring or teacher positions), sports (for physical training) and business (for jobs that involve writing reports or analysing data). This is important so that users can easily navigate through pages in search of what they are looking for while also reducing our work.

#### 2) Allow user to do jobs

This is a major component of our application as if a user can view jobs but unable to select a job, then our application becomes redundant.

#### 3)Create/post jobs

While some users want to look for jobs, there needs to be jobs to be done in the first place which also needs to be updated constantly.

### 4)Search for a specific job

This is to allows users to have another way to search through our application as well as users who are specific in what they are looking for.

Contrastly what won't be shown is:

#### 1)User privileges

We don't want to be inclusive to our audiences in their position of using the website and instead want them to feel like they can do anything. This is so that they are comfortable in posting jobs.

#### **Duration of project**

The project will take up to 6 weeks with each member ideally contributing 6 hours each. We hope to finish this project 2 days early, that way we can gain feedback if possible as well as going over final checks to polish the project.

#### How much do we want to finish?

What we want to finish as a minimum is low fidelity mock-ups and prototypes. This is so that we can get an idea of how our application will look like and work as well as evaluating at the end any mistakes that could be improved for future reference. Conversely we want to at a minimum research how to make an app as while we know how to plan using tools like Invision and Prototype.io we don't know how to make an application by scratch.

#### Scope creep

Listing features that can be added

Possible features we may consider to add is linking our application to popular media apps such as Facebook.

https://docs.oracle.com/cd/E37975 01/doc.111240/e24475/constraints.htm#ADFMF826

# **Tools and Technology**

Many software and hardware programs can be used in the making of an app. Xcode can be used for iOS or if you want to accommodate to both iOS and Android users, you can use software like Android Studio, Eclipse and interlliJ for Android. Our group members don't have the experience to do it on our own but with the assistance of professionals to guide us in the right direction, the job will get done.

# **Testing**

The product will be tested by assessing the effectiveness and efficiency of the app. This can be carried out in specific steps. One of the first steps is to create a plan of how you will achieve this and who will be involved. Surveys are great if conducted correctly and can assist to identify who the potential user groups are. Also, conducting interviews allows us to further analyse the user groups and ask them for specific attributes they would like to implement in the app. After creating a quick mock-up of the product, we then present it to potential users and the whom we interviewed previously. It's more beneficial to have a rough copy earlier on than to leave it towards the end. Lab-based user testing will be conducted in a formal usability lab as is has high end facility and system design. When creating the plan, it should also include each of the set tasks that are going to be given to the testers. Elements such as ideal time to complete the task, starting state, possible deviations and any extra information should be provided.

Basic tasks will be tested first such as, agreeing to terms and conditions and making a profile. Then will move on other primary functions such as being able to receive and/or provide a service. When conducting the test, testers will be asked to vocalise their thoughts and feelings about the app. They will not be guided through tasks as that will be considered a bias approach. If questions such as "am I doing this wrong?" from testers are asked, responses such as "why do you think that?" will be given. After the tests, a short questionnaire with a Likert scale will be provided on how they felt about the app. Minor details such as text size, colour and formatting will be adjusted throughout the production process. These tests will be conducted until the users can effectively achieve set tasks in an efficient manner, resulting in the production of a final product. Once the final product has been created, and has been tested amoung more user groups, beta testers will be used. Beta testers will evaluate the final product to identify faults/problems prior to the product being released. This allows finishing touches to be added if necessary. The success of testing the app will be established once the majority of members in the potential user groups and interviewees are content with the app. After they and the Beta testers find no faults or issues regarding the app, it will be viewed upon a success in testing the app.

## **Timeframe**

Week	Rashimi	Huseyin	Joshua	Victor
9	Flesh out project idea	Flesh out project idea	Flesh out project idea	Flesh out project idea
10	Work on Tools and Technology/ Testing/ Risks	Work on Aims/ Roles / Progress and Planning	Work on low fidelity mockup/ Scope and Limits/ Risks	Work on Skills and Jobs/ Group processes and Communications
11	Work on low fidelity mockup	Work on low fidelity mockup	Work on low fidelity mockup	Work on low fidelity mockup

12	Work on Presentation	Work on Presentation	Work on Presentation	Work on Presentation
13	Work on Tools and Technology/ Testing/ Risks	Work on Aims/ Roles / Progress and Planning	Work on low fidelity mockup/ Scope and Limits/ Risks	Work on Skills and Jobs/ Group processes and Communications/ website
14	Work on design of the app	Work on design of the app	Work on design of the app	Work on design of the app
15	Work on design of the app	Work on design of the app	Work on design of the app	Work on design of the app
16	Begin making Business connections and sponsorships	Begin Programming app	Begin Designing Art	Begin Programming app
17	Continue making Business connections and sponsorships	Continue Programming app	Continue Designing Art	Continue Programming app
18	Continue making Business connections and sponsorships	Continue Programming app	Continue Designing Art	Continue Programming app
19	Continue making Business connections and sponsorships	Continue Programming app	Continue Designing Art	Continue Programming app
20	Test Prototype	Test Prototype	Test Prototype	Test Prototype
21	Polish UI/UX	Tweak bugs	Tweak bugs	Tweak bugs
22	Polish UI/UX	Begin Beta	Begin Beta	Begin Beta
23	Polish UI/UX	Continue Beta	Continue Beta	Continue Beta
24	Polish UI/UX	Continue Beta	Continue Beta	Continue Beta

## Risks

#### **Pre-determined risks**

When starting the project what as a group, we immediately identified that a risk would be time constraints, being considered due to the previous section. This is because while reading through the specifications of the report we realised that time will be taken away in both writing the report as there was more sections that needed to be written with more depth as well as re-editing the report to check for any grammatical errors. This risk also takes into account that though we had planned to do the project earlier, tasks would be delayed to later dates to to conflicts in each other's timetables.

## Actual Risks discovered during project

The first major risk that was evident in was our motivation to do work. While we were aware of the project, we became over confident on the task which made us complacent in our tasks .This then created a second risk being time constraints. While the project was limited to 6 weeks, by delaying our tasks, we decreased the time we could do any tasks which can lead to rashness and mistakes.

# **Group Processes and Communications**

Our group primarily uses the Facebook group chat to communicate and share files. We also use Google docs and sheets so that everyone can edit it. We also communicate very frequently as we can chat anytime we want through instant messages. Apart from tutorials, we don't do any physical meet ups at it may be inconvenient for everyone, but we do have Facebook group calls once a week to discuss the assignment.

If a group member does not respond, then we will try to do everything in our power to finish their part for the assignment, but luckily, we have not had that problem for this assignment. We have also made a timetable on Google Sheets with everyone's tasks and parts of what they should be doing. Overall all members of the group are communicating well.

## Skills and Jobs

The 4 positions that I would employ are as follows:

#### **Full Stack Developer**

A Full stack Developer is great for start-ups as they have the skills and experience for what is necessary, both back-end and front-end.

#### **Graphic Designer**

A Graphic Designer is necessary because without freshly made art and logos, the app would not get too far.

## **Programmer**

A programmer with knowledge of Swift and Java is needed to code for Android and IOS platform and to help the Full Stack Dev.

#### Marketer

A Marketer is needed as marketing can be the deciding factor in which our app with succeed or fail. Without good marketing, it will be hard to beat competitors. But with good marketing, awareness of the app's existence can be made and people will be willing to try it out.

# **Group Reflection**

#### <u>Group</u>

As a group, the positive highlights in this project was communication of tasks through email and messenger which took place on average every 2 days. What also went well was motivating each other to do different tasks, to not slow down in progress. That being said this is also a future improvement that we need to work on as a group as our motivation was initially not strong enough at the start which did cause delays in tasks. It was surprising as group that we saw a variety of ideas covered in depth like a game and a raspberry pie which was actually built. This had made us realise as a group that the IT industry requires a lot of effort and persistence.

#### Joshua Cayetano

As a group what worked well was that we communicated through the entire process of working through the project, which was especially prominent during the end stages. This was done through email and messenger which took place on average every 2 days. What was discussed was confirmation on roles as well as progressiveness in each task. What could be improved is again starting earlier as everything was left last minute, being the preparation of the presentation in terms of writing, little practice and writing the report as well as all members reading the outline as details were skimmed over and had to be rechecked. What I was surprised by was that the presentation wasn't as bad as I thought it

would be as while it wasn't great, thought there would be a lot of mistakes in terms of speaking. What I learnt through groups is that there will always be conflicts. To elaborate tasks will always be postponed and not done immediately. Also to be a group leader, I need to set clear dates of when things should be done and who should do what, not just putting it on a document as it can be overlooked. This has made me realise I need to be flexible and not rigid in tasks as that will get no progress done.

#### **Victor Huang**

I think we worked well as a team as everyone contributed without any or significant arguments. Everyone co-operated and did their respective parts, thus eliminating any sort of drama and useless arguments. However we could have improved doing things more quickly and efficiently and following the plan more. I was surprised by the fact that we as a group did not have many arguments.

#### Rashimi Wijesekara

I think that everyone did their respective parts and that everyone contributed equally. The group as a whole didn't butt heads often and agreed with most things. Which meant a lot of things flowed smoothly without much conflict. What we could have improved on was being more prepared for the presentation. I was still surprised at the fact that everyone remembered their speeches for the presentation and that no cue cards were necessary.

#### **Huseyin Bator**

One thing that worked well in our group that was surprising was the communication between us. This allowed us to help each other and give ideas to one another. One important thing that can be improved is each individual group member meeting deadlines. All of us slacked off a bit due to exams but it wasn't that bad we all ended up finishing the assignment on time. One thing I learned about our group was that we all had our own strengths and weaknesses this was seen through the questions asked by one another. One thing that was surprising was the amount of work that needed to be done during the assignment, in my opinion I did not think it was too much work.