

ASSIGNMENT 3

PROGRAMMING PROJECT 1

Group Name: SS-184-Quaefacta

Team Members:

Aman Khan (s3811422)

Jack Allen (s3832293)

Jiajie Lu (s3779102)

Quoc Tran (s3827826)

Richard Forsey (s3857811)

Project Supervisor: Sumedh Shriram

Project Client: Lea Dias

Date: 31st Oct 2022

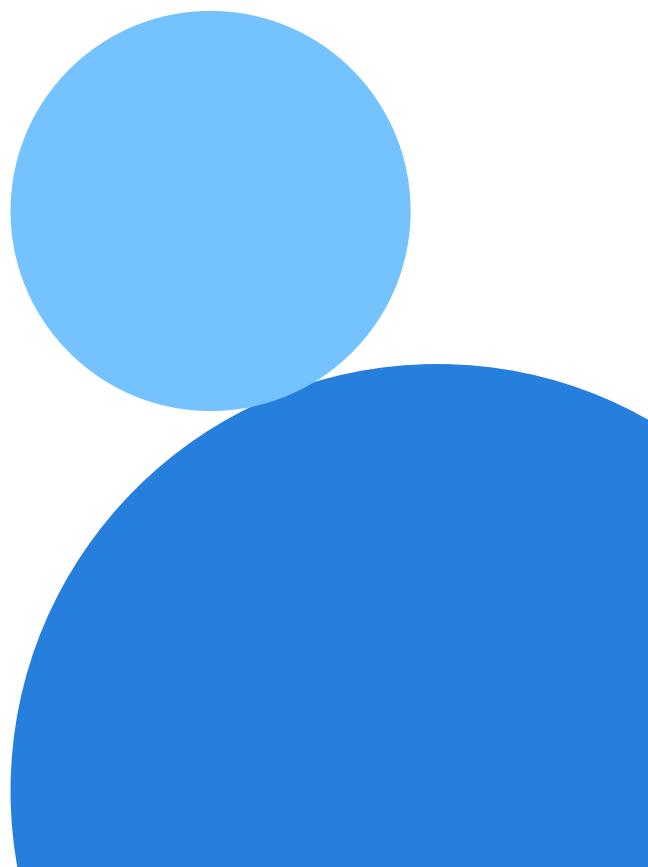


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1.0 GROUP PRESENTATIONS

The group presented their progress in week 6, 9 and 11. Below are the presentation slides.

1.1 Week 6 Presentation



Quaefacta Digital Health Wallet

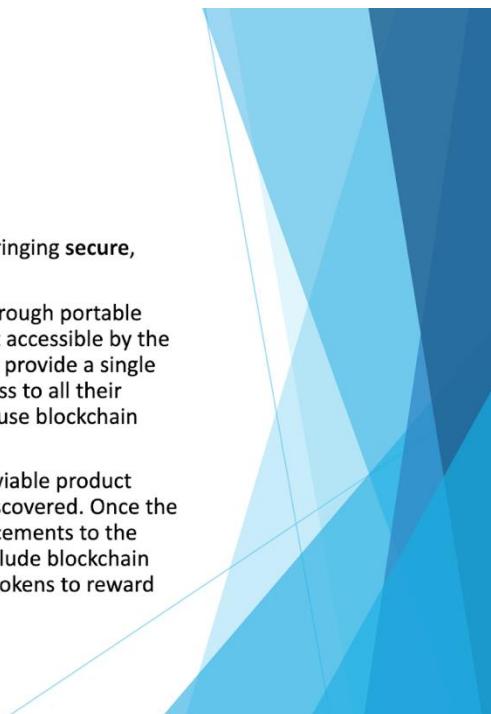
Aman Khan, Jiajie (Sheldon) Lu, Jack Allen, Richard Forsey, Quoc Tran



Quaefacta Health
EMPOWER. SECURE. CONNECT.

Project Description

- ▶ Quaefacta Health is a healthcare technology company focused on bringing **secure, user-centric and patient-oriented** solutions.
- ▶ Quaefacta's vision is to provide individuals with **their health data** through portable personal health records. Traditionally, patient health records are not accessible by the patients themselves. The goal of Quaefacta's Health Wallet app is to provide a single source of information where **patients own their data** and have access to all their medical records. Quaefacta cares about health privacy and plans to use blockchain technology to keep their users' information safe.
- ▶ We aim to develop the Quaefacta Health Wallet app to a minimum viable product (MVP). We will be testing the app thoroughly and fixing any bugs discovered. Once the application is bug free and ready for use, we will add further enhancements to the MVP depending on the time remaining. Potential enhancements include blockchain integration, integration with other systems and gamification (using tokens to reward users for using the app).



Functional Requirements

1. Users can register and login
2. Users can update their details
3. Users can upload health documents and information
4. Users can share this information to their healthcare provider
5. User information is secure and private

User Stories (1/2)

- ▶ **Account registration**
As a User, I want to sign up with new credentials, So that I can login into the system
- ▶ **Account login**
As a User, I want to login with my valid credentials, So that I can gain access into my account
- ▶ **Updating account settings**
As a User, I want to access settings, so I can change account details/ change how I interact with the mobile app.

Product Backlog

Projects: / Queefacts

Backlog

User Story ID	Description	Status
QUAEF-10	As a User, I want to give my consent prior to information being stored on the mobile app, so I am aware that my data is being collected - UT&C	To Do
QUAEF-11	As a User, I want to give my consent for UT&C every time I open up the app eg 'your data will not be used for any purpose, other than, COVID checking. For a plain language v...	To Do
QUAEF-12	As a User, I want to give electronic digital consent on the secure and private storage of my health information.	To Do
QUAEF-13	As a User, I want to give electronic digital consent to share my health information.	To Do
QUAEF-14	As a User, I want to know that my data is being encrypted and anonymised, so I can have peace of mind that my information is safe	To Do
QUAEF-15	As a User, I want to change my password, in case I forget it	To Do
QUAEF-16	As a User, I want to access my account with 2FA, so that I can guarantee account security	To Do
QUAEF-17	As a User, I want to access my account with 2FA, so that I can guarantee account security	To Do
QUAEF-18	As a User, I want to change my profile details, so that I can keep them up to date	To Do
QUAEF-19	As a User, I want to view/update Medicare and insurance details, so that I can easily access them on the system	To Do
QUAEF-20	As a User, I want to view/update insurance details, so that I can easily access them on the system	To Do
QUAEF-21	As a User, I want to view/update beneficiaries Medicare and insurance details, so that I can easily access them on the system	To Do

User Stories (2/2)

► Profile home page

As a user, I want to access my home page easily, so I can quickly view all my resources available to me.

► User dashboard

As a User, I want all general health notifications on my dashboard, so that I can keep up to date with the latest health news and trends

► Information on dashboard

As a User, I want links to the sources for information on my dashboard, so I can further develop my understanding on current health updates

Project Sprint Plan (1/3)

Sprint 1

Week 5 to 6

Get the app working again. Review the codebase left by the previous project groups and ascertain the level of work required to fix it up and rationalize it. Setup code testing, user test scripts and determine the degree of refactoring needed.

Explore, learn and plan.



Project Sprint Plan (2/3)

Sprint 2

Week 7 to 8

Refactor problem areas of the code, implement changes needed to prepare for new deliverables. Improve/implement areas such as AWS, security, CI/CD. Start writing documentation of our additions.

Develop, polish and complete.



Project Sprint Plan (3/3)

Sprint 3

Week 9 to 10

Add new features if possible and wrap up development so that there is a neat and clean bundle of delivery at the end of the project for ease of hand-off to the next group.

Consolidate, refine, document.

Technical Details

- ▶ **Frontend:** NodeJS with React
- ▶ **Backend:** Java Springboot
- ▶ **Platform:** AWS EC2 using Docker containers and Circle CI.
- ▶ **Database:** AWS RDS.



1.2 Week 9 Presentation

Quaefacta Digital Health Wallet Week 9

Aman Khan, Jiajie (Sheldon) Lu, Jack Allen, Richard Forsey, Quoc Tran



"The codebase is
fine!"

The codebase:



Our all-new direction!



Develop using a vertical slice technique.



Only move on to later features once existing ones are totally complete



Adhere to the principles of DRY and code re-use.



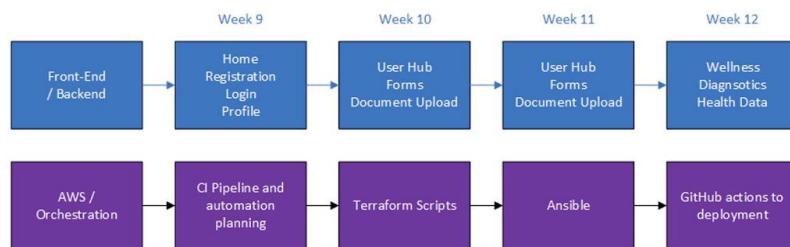
Make use of good design and engineering to ensure progress.



Include much better documentation

A lot of challenges

- ▶ We've had to totally re-shuffle our specializations
- ▶ Some members of the team will need to learn as they go
- ▶ Plans will fall apart, but planning is essential



A roadmap by section

Thank you!

Any questions?

1.3 Week 11 Presentation

Quaefacta Digital Health Wallet Week 11

Aman Khan, Jiajie (Sheldon) Lu, Jack Allen, Richard Forsey, Quoc Tran



Sprint Changes:

- ▶ Doing fortnightly sprints but tracking progress weekly instead of fortnightly
- ▶ Better control over the progress
- ▶ Weekly checks on teammates' progress
- ▶ Weekly documentation provided to the client and mentor

Sticking to the current methodology



Develop using a vertical slice technique.



Only move on to later features once existing ones are totally complete



Adhere to the principles of DRY and code re-use.



Make use of good design and engineering to ensure progress.



Include much better documentation

Milestones Achieved:

Front end

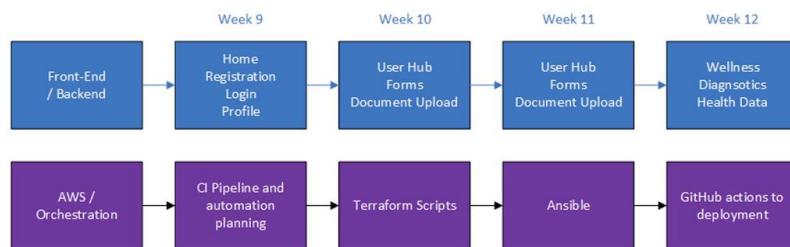
- ▶ Landing Page
- ▶ Login and Register Page
- ▶ Home Page

Back End

- ▶ Document Upload Feature
- ▶ AWS Services Started
- ▶ Terraform Scripts

Documentation

- ▶ AWS Orchestration Document
- ▶ Security Document



A roadmap by section

Thank you!

Any questions?

2.0 Group Member's Timesheets

We made an excel sheet for every group member's timesheets and started recording our time spent on the project from the second week itself. We kept the timesheet excel file in the following path: Files > General > Housekeeping > quaeFactaHealth_capstone_timesheet.xlsx.

Our timesheet excel file will be available in the submitted zip file.

3.0 TEAM COMMUNICATION

The team used two platforms for all the communication – MS Teams and Slack.

3.1 Microsoft Teams

Richard Forsey 25/7 9:30 am Edited
Hey Spendie Capstone, I was thinking we should add our mentor to this group so that we may more readily communicate with him, and he can keep tabs on how we are going?

Richard Forsey 25/7 1:19 pm
Sumedh Shriram, hello and welcome! I figure that this might be a better way to communicate than by email only.

Sumedh Shriram 25/7 1:37 pm
Hello Richard. Yup this is better. I was away sick last week so couldn't look at what has happened. I'll get in touch with the team soon and let's organise a time for a quick catch up.

Richard Forsey 22/7 5:48 pm
Spendie Capstone , hey everyone pleased to meet you!

Richard Forsey 22/7 5:57 pm
I hope we got at least one or two blockchain enthusiasts in our group😊

Quoc Tran 22/7 5:59 pm
I touched on it in another course and i'm no pro at it, but i do find it interesting

Richard Forsey 22/7 6:03 pm
Have you done SDAO or SEPT before?

Aman Khan 22/7 6:49 pm

New conversation

Aman Khan 22/7 6:49 pm I studied about blockchain in one RMIT unit where we had to make a whole report on it. I would like to explore more about blockchain. Further, I enjoy the AWS and UI part more than the DevOps. 1

Richard Forsey 22/7 6:55 pm Alright, so it seems we have about 1.5 interested in the Blockchain so far, and 1.5 interested in the DevOps. How are you both with AWS/cloud stuff? I've done a bit of AWS in my RMIT courses, and I recently got an Azure Fundamentals cert from MS, but I haven't done any of the cloud computing courses.

Richard Forsey 22/7 7:21 pm Ahh, I see on your LinkedIn that you've done the AWS Cloud Foundations Quoc, awesome! And you've also got cloud skills Aman.

Jiajie Lu 22/7 7:56 pm hi guys i m not the best i will try my best have to group with you guys

Richard Forsey 22/7 7:56 pm Jiajie, what would you say your strengths are?

Jiajie Lu 22/7 7:58 pm java html i think

22/7 7:59 pm although i have finish the aws cloud foundation long time ago 1

Quoc Tran 22/7 8:15 pm SEF and SEPT

Aman Khan 22/7 10:38 pm I recently did Cloud Computing course where we made a website using AWS cloud services. So, that knowledge and experience would def help. 1

 New conversation

Quoc Tran 1/8 11:40 pm Hey I found it in my junk mail 1
Hi Richard,

your first email ended up in my spam folder. in terms of weekly meeting times, Monday afternoons work well for us. 1pm, perhaps.

[See more](#)

22 replies from you, Richard, Quoc, and 3 others 

 Reply

4 August 2022

Sumedh Shriram 4/8 4:57 pm Hi team hope you got Vic's email. They've assigned you to Project 184. 1
Hope you get a quick start on the new project. Cheers

Richard Forsey 4/8 6:22 pm Sent the email to them a few minutes ago 😊 

 Reply

5 August 2022

Quoc Tran 5/8 10:34 am We should change our group name in canvas and not that it would matter much, but in teams also. I haven't got permission to do either, so you'll have to when you get a chance Richard Forsey.

Richard Forsey 5/8 11:35 am On it. 1

 Reply

 New conversation

 **Quoc Tran** 5/8 10:07 am
Spendie Capstone, our client is free 8pm weeknights for meetings. Do you guys have any preference on the day? I can do any

15 replies from you, Jack, Richard, and 2 others
[Reply](#)

11 August 2022

 **Aman Khan** 11/8 12:22 pm
Draft Project Submission
Hello everyone,
The Project Charter is due this week and we should get started with it as soon as possible. I did some homework and according to me below are the things we should include in our project charter:
Project Summary(Intro)
Project Sponsors/Investors
Stakeholders(users)
Project Leader/Client
Team Members and their roles
Project Methodology
Project Governance
Project Scope and Deliverables (core features)

Project Sprint Planning
Sprint Review
Infrastructure/tech/applications used

Meeting Minutes
[See less](#)

1 thumbs up

[New conversation](#)

 **Sumedh Shriram** 26/8 5:30 pm
Hi Quaeafacta Capstone , since next week is mid Sem break. It's not necessary that we have a meeting. Let me know if you want/need to meet and I'll make some time if required.

 **Aman Khan** 30/8 3:59 pm
Sorry for late reply Sumedh. Sure, whatever suits best. Cheers!

[Reply](#)

7 September 2022

 **Richard Forsey** 7/9 3:07 pm
Quick chat in "General" ended: 23m 35s
[Reply](#)

 **Richard Forsey** 7/9 3:07 pm
Okay guys, going to write a quick summary of a chat myself and Aman just had.

The short of it is that the current basis of work that we have is a trash fire and probably not worth trying to work into shape. There is no possibility of setting up user testing, fixing the backend, or even refactoring the front-end because everything there is just a mess and inconsistent done. The main point is a bunch of stuff that has exceeded its internal comment
[See more](#)

 **Richard Forsey** 7/9 3:10 pm Edited
At the very least we could say our first sprint was a success, as we had to look at what we've got and decide what to do 😊

[Reply](#)

9 September 2022

 **Richard Forsey** 9/9 6:13 pm
https://en.wikipedia.org/wiki/Fast_Healthcare_Interoperability_Resources

[New conversation](#)

there today. It's dynamic and is easy to get started with if you want to create ...
www.freecodecamp.org

3 replies from Quoc and Richard
↪ Reply

12 September 2022

Richard Forsey 9/9 8:15 pm
<https://typeorm.io/> Quoc Tran, Jack Allen

40 replies from Richard and Quoc
↪ Reply

13 September 2022

Aman Khan 13/9 5:06 pm
Sprint Planning and Retro
Sprint Planning and Retro are done now. Sprint Planning was almost completed by Quoc already but the Sprint Retro is also taken care of now. Guys, before the mentor meeting, just have a quick look at the documents and let me know if you have any suggestions for amendments. Cheers!

↪ Reply

14 September 2022

Richard Forsey 14/9 4:54 pm
Jiajie, Aman, Jack You guys have fallen a bit behind on your timesheets, you should look into updating it before the memory of what you've been doing totally fades.

↪ Reply

New conversation

Meeting
Recorded by: Richard Forsey
23m 11s
This recording is set to expire. View or change the expiration date [here](#). [Learn more](#)

23 August

- 🎥 23/8 8:00 pm Meeting started
- 👤 Patrick (Guest) has temporarily joined the chat.
- 👤 Lea Dias (Guest) has temporarily joined the chat.
- ⌚ 23/8 8:02 pm Recording has started
- ⌚ 23/8 8:04 pm Patrick (Guest) no longer has access to the chat.

Jack Allen 23/8 8:33 pm
sorry guys I dont want to interrupt but my friend got locked out so im letting them in

- ⌚ 23/8 8:33 pm Lea Dias (Guest) no longer has access to the chat.
- ⌚ 23/8 8:44 pm Recording has stopped. Saving recording...
- ⌚ 23/8 8:44 pm Meeting ended: 44m 22s

Meeting
Transcript

Type a new message

Meeting

Transcript

Meeting Recorded by: Richard Forsey

41m 45s

This recording is set to expire. View or change the expiration date [here](#). [Learn more](#)

30 August

30/8 7:57 pm Meeting started

Richard Forsey 30/8 7:57 pm No meeting this week

30/8 7:57 pm Meeting ended: 20s

Jiajie Lu 30/8 7:57 pm ok

30/8 7:57 pm

Type a new message

Richard Forsey 10/8 12:01 pm Aman, would you like to do a rotating team-lead situation where we take it in turns by week?

10/8 8:31 pm Sure. Or we could both just help each other out while managing the project.

11 August

11/8 12:24 pm Guys, sorry for not attending the mentor meeting yesterday. I thought there won't be any meeting as we had Sumeedh with us on Tuesday as well. Did I miss anything important?

I have send a message in the main teams channel about the project draft submission. Please have a look and lemme know if there seems to be amendment in the table of contents and how should we go about distributing work for this document?

11/8 12:25 pm I could get started with the Sprint Planning and Review today if you all are fine with it.

Jiajie Lu 11/8 12:48 pm Edited i will finish the Stakeholders, Project leader, Team Members and their roles, Project Summary and project Sponsors/Inverstorss

12 August

Jack Allen 12/8 12:44 pm Edited

Type a new message

Jiajie Lu 12/8 2:02 pm 1
Assignment 1-Draft Project Document... ...
this is the example of it

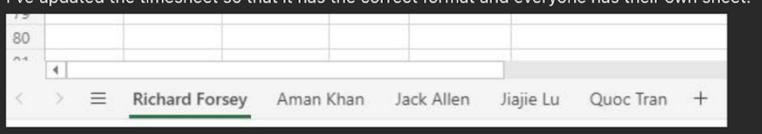
Quoc Tran 12/8 11:20 pm 1
Jack Allen 12/8/22 12:44 pm
Hey guys I've started editing the draft document and adding some information but I'm a bit confused on the structure. Looks like we...
I'm up for a call tomorrow

Jiajie Lu 12/8 11:49 pm
Quoc Tran 12/8/22 11:20 pm
I'm up for a call tomorrow
same

13 August

Jack Allen 13/8 9:11 am
Okay everyone free at 1pm?
Or if a different time is better I don't mind

Type a new message

Richard Forsey 13/8 2:12 pm 1
I've updated the timesheet so that it has the correct format and everyone has their own sheet.


13/8 10:33 pm
Guys, I have uploaded a very detailed Sprint Planning doc. Please have a look and lemme know if there are any amendments required or just amend the doc and add it to the main doc 😊

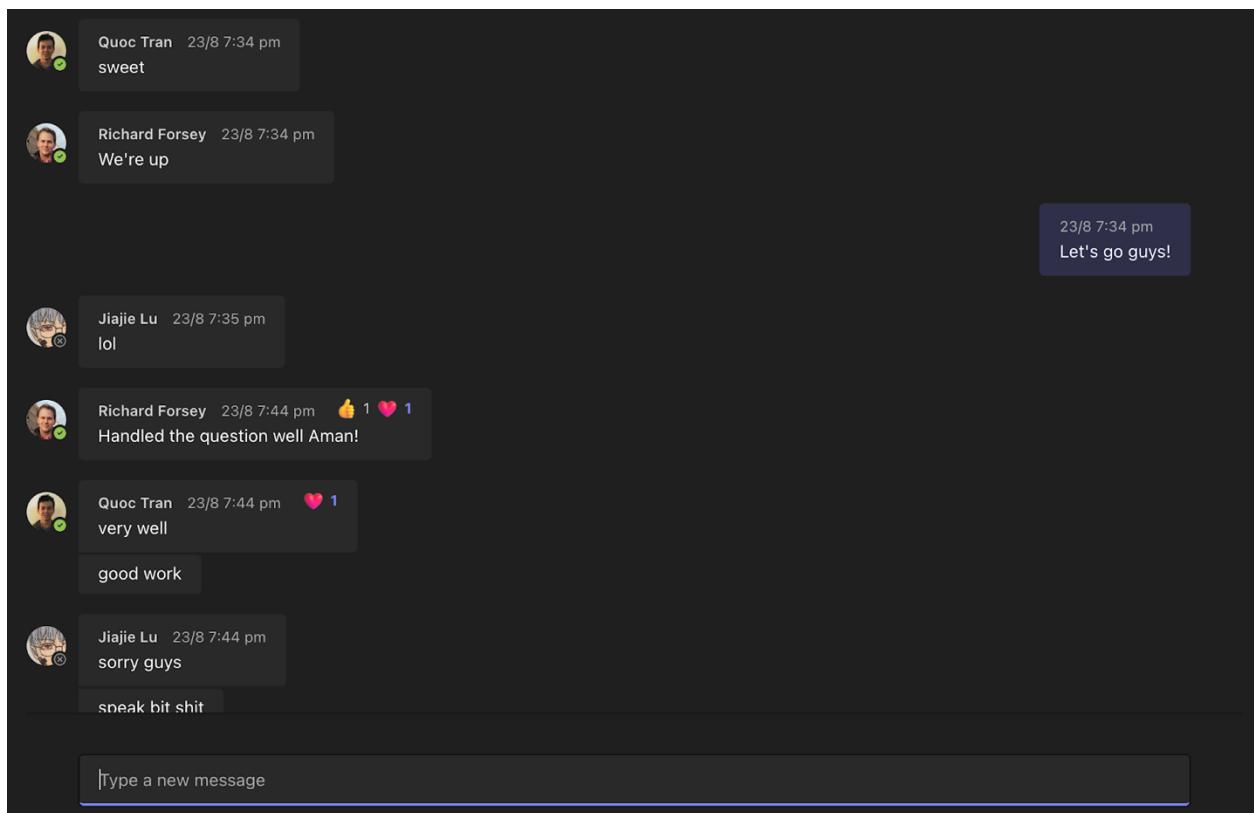
13/8 10:34 pm 1
I have not been very active lately as I got Flu 2-3 days ago and I was not able to cover much uni work in the last few days as I spent most of my time on bed but my participation will go higher in the coming few days, so if I miss out anything please fill me in. Cheers!

Richard Forsey 13/8 10:38 pm 1
Yeah I know the feeling man, get well soon!

13/8 10:41 pm 1 @
Do fill in your timesheet Aman Khan

13/8 10:48 pm 1
Timesheet done Richard Forsey. Thanks 😊

Type a new message



3.2 Slack

rmit-secondterm-22 ▾

+ Add a bookmark

 Thanks @Richard Forsey, @Quoc Tran - Patrick will join the call Tu Sunday, August 21st

Could you please send him an invite s3601997@student.rmit.edu.au

Cheers

I'll check this

Bizarre though

 lea.dias 8:51 PM

Hi Richard and Quoc, I think you need to register your own account for AWS and use this 12 digit key

 This file was deleted.

I think you need to register yourself independently to use the AWS console, then use your email for log in and create a password. Once you are in should then have access to the console where you can use the secret ID, password etc to log into DHW project (edited)

Patrick should also be able to help

Your email is your IAM user name

 Richard Forsey 9:05 PM

image.png ▾



Sign in as IAM user

B I S | ⌂ | ⌂ ⌂ | ⌂ ⌂ | ⌂ ⌂

Message #rmit-secondterm-22

+ | ☰ ♀ | ☺ ☻ | ☺ ☻ | ☺ ☻ | ☺ ☻

rmit-secondterm-22 ▾

+ Add a bookmark

 Also tonight I took the step of killing the GitHub actions script, which as we discussed, are not needed for the infrastructure which as we discussed, are not needed
Wednesday, September 7th

Also, clearly the ECS and EC2 need to be culled first, looking at that billing, the RDS and S3 bucket weren't incurring any costs.
1 

 lea.dias 12:30 AM
Thanks Richard

They won't be able to bill my credit card hopefully this time

 Richard Forsey 12:41 AM
Ah I see my mistake from before, I was in the wrong region

image.png ▾



 Richard Forsey 11:35 AM
image.png ▾

Successfully terminated i-0529ca209dfaacc46,i-0595d1e30ff23a03

B I S | ⌂ | ⌃ | ⌄ | ⌅ | ⌆ | ⌇ | ⌈ ⌉

Message #rmit-secondterm-22

+ | ⌂ | ⌃ | ⌄ | ⌅ | ⌆ | ⌇ | ⌈ ⌉ | Aa

rmit-secondterm-22 ▾

image.png ▾ Wednesday, September 7th



 lea.dias 12:21 PM
Thanks Richard! I might fully close the account and review for the future.

 Aman Khan 4:39 PM
Hello Lea, is it possible to have a meeting this weekend(or Friday)? Me and Richard had a long discussion about our current situation and we have been working on the project so that we could have a clear path to work on. We went through the code and found out that it would take ages to amend/refactor the existing code. It would be more feasible to start over and take the available code as reference and examples. So, please let me know if you could take out some time for a meeting.

 lea.dias 5:30 PM
Yes of course we can meet on Friday or weekend! I have a few meetings on, could you please give me a few times you are available on Friday and Saturday so I can check my calendar and let you know asap. Thank you!

 Aman Khan 6:21 PM
Okay sure. I'll just discuss with my group about their availabilities as I want some of them to participate with me

 lea.dias 6:43 PM
Thanks Aman

Also, it might be worth speaking to your mentor and Vic, if there are other projects that are not working, maybe we can pull in more resources to juggle them. Just a thought.

 Richard Forsey 11:42 PM
I don't think that would be possible at this point in the semester.

B I S | ⌂ | ⌃ | ⌄ | ⌅ | ⌆ | ⌇ | ⌈ ⌉ | Aa

Message #rmit-secondterm-22

+ | ⌂ | ⌃ | ⌄ | ⌅ | ⌆ | ⌇ | ⌈ ⌉ | Aa

rmit-secondterm-22 ▾

Thursday, September 8th ▾

 **Aman Khan** 4:06 PM
Yes, I agree with Richard. We are entering Week 7 this Monday and I guess there is no group who's unallocated to a project by now. But even then give it a shot, we can discuss it with the mentor in the next meeting on Tuesday.

Lea, I talked to the group and most of us are available tomorrow. Could we have a meeting tomorrow anytime between 12PM to 8PM? Cheers!

 **Richard Forsey** 4:09 PM
I'll be able to join if it's in the evening, say, after 5.30 (edited)

 **lea.dias** 5:17 PM
Hi Aman and Richard thanks for this - how about 5.30pm Melbourne time? I'm free then.

The reason I suggested checking with Vic, is because last term some of the industry partners pulled out mid term leaving the students without a project. So if this happens to be the case this term, we could bring them across. It's probably highly unlikely, but worth a shot!

 **Aman Khan** 6:46 PM
5:30 sounds good (edited)

Friday, September 9th ▾

 **lea.dias** 10:10 AM
Could you please send a teams link Aman? Cheers

 **Aman Khan** 11:52 AM
I will send the link to you for the meeting at 5:30PM Melbourne time ✌

1 1

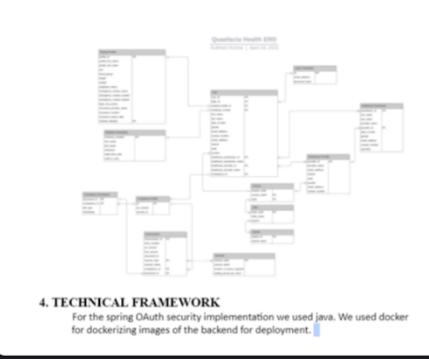
 **lea.dias** 5:31 PM
Message #rmit-secondterm-22

+ | ⚡ | 🤗 | ☺ | @ | Aa

rmit-secondterm-22 ▾

Saturday, September 10th ▾

 **Richard Forsey** 10:58 AM
Alas, this appears to be a low resolution one.
image.png ▾



4. TECHNICAL FRAMEWORK
For the spring OAuth security implementation we used java. We used docker for dockerizing images of the backend for deployment.

And isn't readable
But, what I mean by a program flow diagram, I mean more of a page navigation diagram with some extras

1 1

 **Quoc Tran** 11:30 AM
I've set up a user table, the API and logic for registering a user
2 files ▾

B I ⚡ | 🤗 | ☺ | @ | Aa

Message #rmit-secondterm-22

+ | ⚡ | 🤗 | ☺ | @ | Aa

rmit-secondterm-22 ▾

 **Richard Forsey** 5:27 PM Saturday, October 15th Well what I mean by making it be generic is that the use path would be Document Upload -> X } where X could be any other page. Skin Lesions, Vaccinations, etc

 **lea.dias** 5:28 PM oh ok so you mean pick the category first > then do the upload, take photo, choose from gallery > view/share doc? This also works for me

 **Richard Forsey** 5:30 PM Rather { Screen > Document Upload > Screen }

 **lea.dias** 5:30 PM What does the screen have on it? Could you share an example pls

 **Richard Forsey** 5:31 PM Anything, it could be the medicare screen, the vaccine screen, the add medication screen

 **lea.dias** 5:32 PM Example Pathology > Document upload/take photo/upload gallery > Screen (view/share) it cannot just be a doc upload - it needs to have take photo and gallery upload too

 **Richard Forsey** 5:39 PM So you start at any screen of 'A', when you press "upload" on an 'A' screen, you go to 'B' to do the upload, and when finished you return to 'A' when the document uploaded in the appropriate way.

image.png ▾

B I S | ⌂ | ⌄ | ⌅ | ⌆ | ⌇ | ⌈ ⌉

|Message #rmit-secondterm-22

+ | ⌂ | ⌃ | ⌄ | ⌅ | ⌆ | ⌇ | ⌈ ⌉ Aa

rmit-secondterm-22 ▾

 **Jack Allen** 10:09 AM Tuesday, September 20th Hi @lea.dias, I've put together a plan for AWS with a focus on minimising cost for you. The AWS plan pdf file has a diagram of what the AWS structure is and the AWS Summary pdf file has explanations for cost and what each service does. The first page of the AWS summary describes the AWS services available. The AWS plan page is just some smaller details in case you were wondering about some aspects of the AWS plan.

2 files ▾

 **Aws Summary Quaefacta.pdf** PDF

 **AWS plan.pdf** PDF

 **lea.dias** 5:32 PM Hi Jack, thanks for this analysis - lets definitely talk about this on the call today - I am really annoyed re the AWS as I have outstanding charges from the AWS account and I am just nervous that it will start charging again once we start adding data to the app. My preference for this project was to move away from cloud services and use local storage for the project and look at alternatives for data storage. At least this is what I thought we had discussed. Lets take this up in the meeting today. Cheers

 **Richard Forsey** 6:29 PM Sure thing Lea

On that point, I was wondering when was the current AWS account registered?

 **lea.dias** 6:41 PM It was last term Richard. So it was an expensive exercise!

 **Richard Forsey** 6:48 PM Well, what we were thinking was for the purposes of development, we could just use one of our free accounts which then means we can ensure there is no charge for anything and that anything we put up will be pulled down for certain by just deleting the account.

The main thing we would be developing would be the automation scripts which can be run at any time you wish to deploy, from any given account. The capstone group could register for AWS accounts with student emails, and continue on from where we left off.

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|Message #rmit-secondterm-22

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4.0 Sprint 1 Documentation

4.1 Sprint 1 Planning with Backlog

Quaefacta Sprint Planning Notes

Sprint: 1

Date: 18/08/2022

Scrum Master: Aman Khan, Richard Forsey

Product Owner: Lea Dias

Development team: Aman Khan (s3811422)

Jack Allen (s3832293)

Jiajie Lu (s3779102)

Quoc Tran (s3827826)

Richard Forsey (s3857811)

Not Attended: N/A

1. Goal

- *Fill product backlog*
- *Setup all accounts and access (such as AWS)*
- *Get the website running again*
- *Testing of login, signup, dashboard functionalities*
- *Debug any UI issues*
- *Enable SSL encryption*

2. Duration of the sprint

2 weeks

3. What is the team's vision for this sprint?

This project has a heavy focus on end-to-end testing of the website. We have included the testing of the beginning stages of a user signing up, logging in, and navigating around the website. We will focus on error handling of forms, expected behaviours of page transitions, and any inconsistencies in the UI.

Our client has asked for improved security features and as a start we will enable SSL encryption to ensure secure connections to the website to protect user privacy.

We have also added a ticket for the upkeep of the AWS environment as the website has suddenly stopped working. We need to get it running again and ensure it stays running reliably.

4. Estimation in story points

Our scale for estimate of effort/story points is using the Fibonacci sequence starting at 3. This way harder tasks scale more, and we don't have numbers that end up being too similar to one another.

We have committed 82 story points this week. Each estimate is shown in the right column in the image below.

QUAEF Sprint 1 17 Aug – 31 Aug (11 issues)		69	13	0	Complete sprint
<input checked="" type="checkbox"/>	QUAEF-4 As a User, I want to login with my valid credentials, So that I can gain acc...	USER TESTING: LOGIN, SIGNUP ...	3	TO DO	QT
<input checked="" type="checkbox"/>	QUAEF-5 As a User, I want to sign up with new credentials, So that I can login into t...	USER TESTING: LOGIN, SIGNUP ...	3	TO DO	QT
<input checked="" type="checkbox"/>	QUAEF-8 As a User, I want to access settings, so I can change account details/ cha...	USER TESTING: UPDATE DETAILS	8	TO DO	QT
<input checked="" type="checkbox"/>	QUAEF-6 As a User, I want all general health notifications on my dashboard, so that I ca...	USER TESTING: DASHBOARD	8	TO DO	JA
<input checked="" type="checkbox"/>	QUAEF-7 As a User, I want links to the sources for information on my dashboard, so I ca...	USER TESTING: DASHBOARD	8	TO DO	JA
<input checked="" type="checkbox"/>	QUAEF-9 As a user, I want to access my home page easily, so I can quickly view all my r...	USER TESTING: DASHBOARD	3	TO DO	JA
<input checked="" type="checkbox"/>	QUAEF-37 As a User, I want a visually appealing login page so I can easily login	UPDATE THE OVERALL LOOK OF...	5	TO DO	JL
<input checked="" type="checkbox"/>	QUAEF-40 As a User, I want a visually appealing profile page so I can easily naviga...	UPDATE THE OVERALL LOOK OF...	13	TO DO	JL
<input checked="" type="checkbox"/>	QUAEF-39 As a User, I want a visually appealing home page so I can easily navigat...	UPDATE THE OVERALL LOOK OF...	13	TO DO	JL
<input checked="" type="checkbox"/>	QUAEF-29 As a User, I want my http request to be encrypted, so that my personal information is protect...	SECURITY	5	TO DO	AK
<input checked="" type="checkbox"/>	QUAEF-41 As a User, I want the website to run reliably, so that I can always have access to it	AWS UPKEEP	13	IN PROGRESS	RF

4.2 Sprint 1 Retrospective

Quaefacta Health Sprint Retro Notes

Sprint: 1

Date: 6/9/22

Scrum Master: Richard Forsey, Aman Khan

Product Owner: Lea Dias

Development team: Aman Khan (s3811422)

Jack Allen (s3832293)

Jiajie Lu (s3779102)

Quoc Tran (s3827826)

Richard Forsey (s3857811)

Not Attended:

1. Things That Went Well

The team is punctual and communicates well in the team's channel. We have set clearly defined tasks for each member and are organised.

2. Things That Could Have Gone Better

If we understood the issues in the code earlier, we could have given a more accurate diagnostic at an earlier time. This would let us begin our development tasks earlier and not have such a tight deadline to work with.

3. Things That Surprised Us

The website suddenly stopped working in AWS, so we were not able to interact with it and begin our testing. We have still managed to write test cases based on the Figma diagrams but cannot commence testing until the site is running again.

Upon further investigation, we noticed the front end and backend are two separate entities and not connected to one another through code. While we work on establishing this connection, we can turn off all AWS resources to save on costs.

When we figured how to get both backend and frontend to run locally, we were surprised to find that they were not connected through code. The front-end used local storage and the backend had large sections of code commented out where they were trying to implement the log in feature. The tables used in the backend do not match the front-end format, and so there will be a lot of work to transform data into the correct format and create the API calls to connect the backend to the front end.

4. Lessons Learned

We have learnt that situations are not what they always seem, and that you should investigate the code to understand what is really happening. Another important take away is that having good up to date documentation will help avoid confusion and get new project members started much quicker.

5. Final Thoughts

There will need to be more development on connecting the front end to a real database. While this is happening, testing of the application will have to take less priority, as an in-depth testing cannot be done until the application is functioning properly.

We should continue to write test cases for front end interactions and form handling but cannot test the backend connections.

We also intend to write clear and concise documentation about how to get local environments running, and the state of the project so that future developers can easily pick up where we left off.

5.0 Sprint 2 Documentation

5.1 Sprint 2 Planning to Backlog

Quaefacta Sprint Planning Notes

Sprint: 2

Date: 06/09/2022

Scrum Master: Aman Khan

Product Owner: Lea Dias

Development team: Jack Allen (s3832293)

Jiajie Lu (s3779102)

Quoc Tran (s3827826)

Richard Forsey (s3857811)

Not Attended: N/A

1. Goal

- *Create User table and API*
- *Create login and signup pages that communicates with backend*
- *Integrate security features into the signup and login process*
- *Debug any UI issues*

2. Duration of the sprint

2 weeks

3. What is the team's vision for this sprint?

With this sprint our direction has changed dramatically. We will now focus on developing a functional web application with a fully connected front end and back end, a fully functional “vertical slice” of the application. We will aim to have the sign up and login abilities by the end of this task.

We are aiming to have a solid foundation with a frontend communicating to a backend and able to display that backend data onto the UI. This was completely missing from the previous iteration of the project and would take much longer to try and fix that.

We will be using the Figma(prototype) given by the client as a guide to make this website and we would be working as a team to complete the development of the website. We have assigned the tasks to each individual and made some changes to the task distribution strategy.

4. Estimation in story points

We have committed 136 story points this week. Each user story has subtasks that are assigned to individuals as seen in the right of the image.

We chose stories for the fundamental features of a new user signing up and logging in.

The screenshot shows the Jira interface. On the left, the 'Backlog' board is visible, displaying a list of user stories under 'QUAEF Sprint 2' (6 Sep – 20 Sep, 6 issues) and 'Backlog' (10 issues). Each story card includes a summary, priority (e.g., P1), assignee (e.g., QT, RF), and status (e.g., TO DO). A 'Create sprint' button is also present. On the right, a detailed view of a specific story, 'QUAEF-45', is shown. The story summary is 'As a user, I want my signup information to be stored in the database so that I can log in'. Below it, there's a 'Description' field with placeholder text 'Add a description...' and a 'Child issues' section listing four sub-tasks: 'QUAEF-75 Create User Database', 'QUAEF-76 Create working Signup frontend', 'QUAEF-77 Create PUT API for User table', and 'QUAEF-78 Integrate security features to store user data s...'. The 'Order by' dropdown is set to '0% Done'.

5.2 Sprint 2 Retrospective

Quaefacta Health Sprint Retro Notes

Sprint: 2

Date: 06/09/22

Scrum Master: Aman Khan

Product Owner: Lea Dias

Development team: Jack Allen (s3832293)

Jiajie Lu (s3779102)

Quoc Tran (s3827826)

Richard Forsey (s3857811)

Not Attended: None

1. Things That Went Well

The team's primary success in this sprint was its selection of the appropriate direction. After completing a thorough examination, we learned that the Quaefacta website is not functional because both the front end and the back end are damaged. Initially, we set out to conduct extensive testing on the Quaefacta website that was, apparently, operational. The website was obviously made utilizing a variety of methodologies and styles; therefore, it was unclear how well those teams communicated and collaborated when the project was previously supervised by three different teams.

After several discussions, we concluded that starting over and using the front-end code as a guide would be preferable because it would take 4-5 weeks to refactor and modify the current code. We met with the client again and gave her the big picture; she accepted our efforts to resolve the problem at hand and decided to follow the proposal we made. Finding the issue and developing a workable solution while keeping the time limit in mind required teamwork.

The team uses the team channel effectively and arrives on time. We are organized and have assigned each member clearly defined tasks. Another accomplishment for this group is that every member believes in completing work and not leaving it half-cooked, as well as everyone has a decent assessment of time and makes fair claims about the goals that we can achieve.

2. Things That Could Have Gone Better

The team had a clear vision of doing user testing on the website as well as other duties such as AWS, security, and blockchain development. The primary goal was to complete user testing; therefore, the team began by creating user stories for testing and adjusting the product backlog accordingly. Individuals also took up duties such as AWS and security and began to research and work on them.

We made the oversight of believing that the website is functioning and active till the end of week 6, but our development team discovered that the website was not even working. Then we had more meetings, and the team chat room just filled up with solutions to the problems and queries. It may have been prevented if we had tested the website before beginning to work on user stories for testing and secondary activities such as AWS and security.

3. Things That Surprised Us

The first surprise was an issue that knocked us off our feet was the fact that the website on which we were to do user testing was not even functional. Our efforts were futile when we learned that the code was faulty and that the backend was useless, whereas the frontend was not connected to the backend. Following a meeting with the client to discuss the inconsistencies in code and the fact that the website is non-functional, we concluded that the entire issue was the consequence of bad collaboration and coordination between the three teams previously working on this project.

We devised the idea of beginning website construction with a vertical slice technique to ensure that everything is in order and that there are no discrepancies in the code. Another thing that astonished us was the tremendous participation of the team members, as everyone is eager to learn and work on this project, and they are all willing to volunteer to take on tasks.

4. Lessons Learned

We've learned that circumstances aren't always what they appear to be, and that you need look into the code to figure out what's going on. Another key takeaway is that having up-to-date documentation can help eliminate confusion and get new project members up and running much faster. One important takeaway from this sprint was to always verify and double-check everything before labelling it as complete. Previously, we distributed work in a haphazard manner without setting deadlines, but today we distribute work with precise requirements and deadlines.

We've also learned how to work effectively as a group and how to negotiate with the client. Back-to-back meetings have made us more mature and familiar with the client and her objectives. We've learnt how to deal with a negative situation and move on as a group rather than as individuals.

5. Final Thoughts

More work will be required to connect the front end to a real database. While this is going on, testing the application will have to take a back seat because thorough testing cannot be done until the application is fully functional.

The development team is tasked with rebuilding the website using the old front-end code as a guide. We're using a vertical slice approach and pushing ahead as a team. When it comes to task distribution, we are explicit and clear. We are now in the development phase, with many changes in the plans that have occurred as a result of the website's failure to work.

Finally, we may conclude that, despite hitting a snag, we are still on our path to success since we are working as a team, adhering to appropriate scrum methodology, and keeping a close eye on all development.

6.0 Sprint 3 Documentation

6.1 Sprint 3 Planning and Backlog

Quaefacta Sprint Planning Notes

Sprint: 3

Date: 20/09/2022

Scrum Master: Aman Khan

Product Owner: Lea Dias

Development team: Jack Allen (s3832293)

Jiajie Lu (s3779102)

Quoc Tran (s3827826)

Richard Forsey (s3857811)

Not Attended: N/A

1. Goal

- *Create User Profile Page*
- *Create the feature of document(and forms) upload*
- *Complete CI Pipeline and automation planning*
- *Complete Terraform Scripts*
- *Create a road-map for the following weeks*
- *Get started with the Security and AWS Documentation*

2. Duration of the sprint

2 weeks

3. What is the team's vision for this sprint?

Our previous sprint drastically altered our course. We began by concentrating on creating a completely working web application with a fully integrated front end and back end, a fully functional "vertical slice" of the programme.

We have a solid base with a frontend interacting with a backend and displaying backend data on the UI. This was entirely lacking in the first iteration of the project and would take significantly longer to rectify.

The team's goal is to achieve consistent development on all aspects of the project, including the front end, back end, AWS services, security feature implementation, and documentation.

We are creating this website utilising the Figma(prototype) provided by the customer as a reference, and we will be working as a team to complete the creation of the website. We have given tasks to each participant and modified the work allocation approach.

4. Estimation in story points

For this sprint, we have set aside 123 story points. As seen in the picture on the right, each user story comprises subtasks that are allocated to individuals.

We picked stories which helps a user upload a document or a form to his/her user profile.

We would work on these user stories as a group, utilising our particular skills.

7	As a user, I want to view my personal information on the profile page so that I can check that it is up to date	Lea	High	34	Have a fully functional profile page. GET API for user table to populate the profile page.
8	As a user, I want to edit my personal information on the profile editting page so that I can update my details	Lea	High	34	Have a fully functional edit profile page. UPDATE API for user table.
9	As a user, I want to be able to upload a document in my rprofile so that I can keep a medical record.	Lea	High	55	Create a feautre to accept a document upload

6.2 Sprint 3 Retrospective

Quaefacta Health Sprint Retro Notes

Sprint: 3

Date: 20/09/22

Scrum Master: Aman Khan

Product Owner: Lea Dias

Development team: Jack Allen (s3832293)

Jiajie Lu (s3779102)

Quoc Tran (s3827826)

Richard Forsey (s3857811)

Not Attended: None

1. Things That Went Well

The previous sprint's key success was the team's identification of the suitable direction.

After beginning anew and developing fresh plans, we began to define weekly targets and distribute responsibilities based on an individual's competence, rather than following the same lines as the prior groups working on this project. The massive work of developing a website for our customer based on their specifications was well started. The client meetings became longer as we became more mindful that we were on the correct track and as we became more enthusiastic that we were making progress and getting closer to the final goal.

Looking at the mistakes made by past groups working on this project, we understood that communication is the most important component of executing the master plan that we presented to our client. Our lead developer took it upon himself to ensure that everything was on track in terms of technical progress, and the project lead made sure to stay in touch with the team members and offer them a friendly hand whenever they needed one, in addition to handling the documentation with the assistance of the development team.

Another positive aspect of this group is their timeliness, as they consistently arrive on time for meetings and actively participate in the discussion.

The team communicates successfully over the team channel and arrives on time. We are well-organized, and each member has well defined tasks. Another milestone for our group is that every member believes in finishing work and not leaving it half-finished, and that everyone has a reasonable appraisal of time and makes reasonable claims about the goals that we can reach.

2. Things That Could Have Gone Better

During the first sprint, the team had a clear goal of performing user testing on the website in addition to other responsibilities such as AWS, security, and blockchain development. We made the mistake in the first sprint of assuming that the website was operational and active till the end of week 6, but our development team realised that the website was not even operational. Because the end of the semester was coming, all team members were a little distant and were unable to participate much in group discussions, which slowed development.

Meetings have been cut from 7-8 last week to 4-5 this week. Individuals were required to focus on their work, however owing to increasing pressure from other assignments and having an excessive study load, task completion was delayed by 1-2 days. Due to his assignments, the project lead was less active on the team's channel than the prior week. However, we are pleased to note that all members are demonstrating a favourable attitude towards assisting one another when someone is trapped with another project or an unavoidable engagement.

3. Things That Surprised Us

The great level of team engagement and willingness to volunteer for duties continues to astonish us. The team has been actively participating in meetings and task assignments as they constantly work to improve their abilities. After the client placed their trust in the team and the team made every attempt to go above and beyond the client's expectations, the relationship between the client and the team improved. We communicate with the client frequently to ensure that we are following the appropriate course and meeting their needs.

The team actively participates in all activities and makes sure to inform the client our concerns about any anomalies in the website's design (figma).

4. Lessons Learned

We've learnt that conditions aren't always what they appear to be. Another important point is that having comprehensive documentation may assist to avoid uncertainty. With each passing week, we learn more about our team members' skills and working styles, which has aided all of us in better understanding each other and, as a result, improved the efficiency of our group. We're studying how the industry operates and how to prioritise and divide jobs effectively. As the conclusion of the semester approached, we were besieged with assignments, and we managed time to attend meetings as well as accomplish our individual jobs to assist the team develop every week.

We've also learnt how to operate well as a team and how to communicate with the client more effectively. Back-to-back sessions have helped us evolve and get more familiar with the client and her goals. We've learned how to deal with adversity and go forward as a group rather than as individuals.

5. Final Thoughts

We eventually completed the MVP with basic functions after putting in a lot of effort, and we are now expanding on our work by creating extra pages for the webapp.

The team has been extremely responsive and has made weekly improvement. The lead developer has been tremendously helpful and supportive of the whole development team, and all members have demonstrated their value by giving their all and constructing this webapp from the ground up. Every member has worked tirelessly and has provided a weekly progress report to the client, mentor, and project lead.

We are transparent and unambiguous about work distribution. We are currently in the late stages of expanding our work on a daily basis. We have been upgrading the Figma(design) in accordance with the client's specifications, and we have also created several document submissions pages for the webapp.

Finally, despite hitting a hitch, we can conclude that we are still on the right track since we are working as a team, following suitable agile methodology, and keeping a careful check on all development.

7.0 Sprint 4 documentation

7.1 Sprint 4 Planning and Retro

Quaefacta Sprint Planning Notes

Sprint: 4

Date: 05/10/2022

Scrum Master: Aman Khan (s3811422)

Product Owner: Lea Dias

Development team: Jack Allen (s3832293)

Jiajie Lu (s3779102)

Quoc Tran (s3827826)

Richard Forsey (s3857811)

Not Attended: N/A

1. Goal

- *Finish the implementation of ‘document upload’ feature*
- *Add functionality for the upload of additional document types*
- *Amend the Figma design and making additional webpages for document upload feature*
- *Add Privacy Policy and ToU*
- *Complete Ansible scripts(AWS)*
- *Complete Github actions to deployment*
- *Project documentation including Technical documentation*

2. Duration of the sprint

2 weeks

3. What is the team's vision for this sprint?

We intend to maintain our momentum after making steady progress in the previous sprint. Our team members' efforts have resulted in accomplishments. We have a solid foundation with a frontend communicating with a backend and showing data from the backend on the UI. In addition, we have built the webapp's major functionality, document upload. Users may now upload any document/form to the webapp and save it to their profiles because the S3 bucket is now linked to the webapp.

The team's aim is to establish consistent development across all elements of the project, such as the front end, back end, AWS services, security feature implementation, and documentation.

We modified the Figma with the client's consent and in compliance with the client's specifications. We are developing this website using the Figma(prototype) provided by the client as a guide, and we will be working as a team to accomplish the project. We assigned tasks to each participant and changed the work allocation strategy.

4. Estimation in story points

For this sprint, we aim to finish 136 story(effort) points. We updated our product backlog and added new user stories in which we would be working on functionality like Terraform command for AWS, security features/policy and further web deployment.

We had a discussion within our group and then we finalized the story points. Below is a screenshot of the user stories we aim to complete by the end of this sprint.

10	As a user, I want to be able to upload different types of documents so that it is easier for me to keep a record.	Lea	High	21	Make a dropdown menu to select the type of document and make those types compatible
11	As a user, I want to see privacy policy and terms of use agreement so that I could ensure that my data is secure.	Lea	High	13	Have a page showing the Privacy Policy and the terms of use agreement
12	As a product owner, I want to be able understand the AWS services that can be used for my application so that I can make an informed decision on application hosting.	Lea	High	13	Have a detailed plan and report on each AWS service, with a description and expectation of costs associated
13	As a product owner, I want to be able to easily put up and take down AWS services with a simple Terraform command	Lea	High	21	Have a full functioning terraform script that can take down and put up the AWS services required, and a guide explaining the process for anyone who is unfamiliar with terraform
14	As a product owner, I want to be able to easily deploy my web application to the AWS ec2 instance with the use of an Ansible script	Lea	High	34	Have an ansible script that successfully deploy the web application front end and backend so that they can be accessed from the internet.
15	As a product owner, I want user documents uploaded in a secure file storage system so user data is stored securely and efficiently	Lea	High	34	Have documents stored in an S3 bucket

7.2 Sprint 4 Retrospective

Quaefacta Health Sprint Retro Notes

Sprint: 3

Date: 20/09/22

Scrum Master: Aman Khan

Product Owner: Lea Dias

Development team: Jack Allen (s3832293)

Jiajie Lu (s3779102)

Quoc Tran (s3827826)

Richard Forsey (s3857811)

Not Attended: None

1. Things That Went Well

Now that the group of students have become an actual team with clear direction and better understanding of their final goal, we have been making steady progress in all respects. Our conversations with the client have improved. The communication and collaboration of all the team members is at all time high and everyone is getting comfortable working with each other,

Every individual in this team is voluntarily fulfilling responsibilities and taking tasks. Everyone is working on the project with serious intent to finish it.

The massive work of developing a website for our customer based on their specifications was well started. The client meetings became longer as we became more mindful that we

were on the correct track and as we became more enthusiastic that we were making progress and getting closer to the final goal.

The project lead and the lead developer have been in constant touch with the entire team, mentor and the client and have been elucidating the tasks and concepts to the client and the entire team time and again.

All our progress is well documented as we completed our fourth fortnight sprint.

Another positive aspect of this group is their timeliness, as they consistently arrive on time for meetings and actively participate in the discussion.

The team communicates successfully over the team channel and arrives on time. We are well-organized, and each member has well defined tasks. Another milestone for our group is that every member believes in finishing work and not leaving it half-finished, and that everyone has a reasonable appraisal of time and makes reasonable claims about the goals that we can reach.

2. Things That Could Have Gone Better

Things have been going fairly well for the team for this sprint. The team's workflow has been evenly distributed and the client has acknowledged our effort and is very happy with the progress.

Because the end of the semester is here, all team members were a little distant and were unable to participate much in group discussions, which slowed development. As the goals of the project are being met and the client is happy, the team is in a relaxed state of mind and have been progressing steadily.

Individuals were required to focus on their work, however owing to increasing pressure from other assignments and having an excessive study load, task completion was delayed by 1-2 days. However, we are pleased to note that all members are demonstrating a favourable attitude towards assisting one another when someone is trapped with another project or an unavoidable engagement.

3. Things That Surprised Us

The great level of team engagement and willingness to volunteer for duties continues to astonish us. The team has been actively participating in meetings and task assignments as they constantly work to improve their abilities. After the client placed their trust in the team and the team made every attempt to go above and beyond the client's expectations, the relationship between the client and the team improved. We communicate with the client frequently to ensure that we are following the appropriate course and meeting their needs.

The team actively participates in all activities and makes sure to inform the client our concerns about any anomalies in the website's design (figma).

4. Lessons Learned

We've learnt how to have formal conversations with the client and how to be clear in our conversations with our client and our mentor. We also learnt the correct way of task distribution amongst the group. Another important point is that having comprehensive documentation may assist to avoid uncertainty. With each passing week, we learn more about our team members' skills and working styles, which has aided all of us in better understanding each other and, as a result, improved the efficiency of our group. We're studying how the industry operates and how to prioritise and divide jobs effectively. As the conclusion of the semester approached, we were besieged with assignments, and we managed time to attend meetings as well as accomplish our individual jobs to assist the team develop every week.

We've also learnt how to operate well as a team and how to communicate with the client more effectively. Back-to-back sessions have helped us evolve and get more familiar with the client and her goals. We've learned how to deal with adversity and go forward as a group rather than as individuals.

5. Final Thoughts

At the end of our final sprint, we have successfully built our application as per our client's requirements and the client is happy with our result. The MVP required for the Capstone Project submission is ready and we are very pleased to be a part of this entire experience. The team has been extremely responsive and has made weekly improvement. The lead developer has been tremendously helpful and supportive of the whole development team, and all members have demonstrated their value by giving their all and constructing this webapp from the ground up. Every member has worked tirelessly and has provided a weekly progress report to the client, mentor, and project lead.

We are transparent and unambiguous about work distribution. We have been upgrading the Figma(design) in accordance with the client's specifications, and we have also created several document submissions pages for the webapp.

Finally, everyone is happy with the accomplishments we achieved in a span of 7-8 weeks after going through a hitch in our path. We have successfully fulfilled our client and mentor's expectations and requirements and have had a holistic development in our personalities. We

are quite motivated to build on the skills and experience we got by completing this capstone project and making progress in our careers after this project submission.

8.0 Meeting Minutes and Timesheets

General Minutes - Week 2 + 3

Date	Notes	Action Items
27/07/22	<p>3.23pm</p> <ul style="list-style-type: none"> Richard sent an email to contact client from Spendie, Anouk. <p>7pm Weekly meeting</p> <ul style="list-style-type: none"> Team met up with mentor, Sumedh Shriram, and discussed the way this course would work and expected outcomes. 	<ul style="list-style-type: none"> Confirm contact with Anouk to discuss the deliverables for the project Team members to read up on assignment 1 and prepare documentation
30/07/22	<p>2.44pm</p> <ul style="list-style-type: none"> Team discussed in chat about not yet being able to reach Anouk. 	<ul style="list-style-type: none"> Send another email to Anouk
01/08/22	<p>11.26am</p> <ul style="list-style-type: none"> Richard sent a second email to contact, Anouk. Question was raised about what would happen if Anouk is AWOL. Sumedh asks us to send an email to Vic to express this concern. Richard sent the email. <p>10.00pm</p> <ul style="list-style-type: none"> Quoc started documentation for assignment 1 	<ul style="list-style-type: none"> Follow up with email to Vic to try and contact Anouk.

	1pm Meeting with client <ul style="list-style-type: none">• Team spoke with client about the nature of the work 7 pm Weekly meeting <ul style="list-style-type: none">• Team has had ethical objections to the work, has contacted RMIT staff about resolving the issue• Informed mentor of situation	
03/08/22	<ul style="list-style-type: none">• Vic confirmed new project 'Advance development and deployment of Quaefacta's Digital Health Wallet'	<ul style="list-style-type: none">• Contact client to discuss project
04/08/22	<ul style="list-style-type: none">• Contacted client, Lea Dias, and booked a time slot to meet in week 4.	

Week 4

Date	Notes	Action Items
09/08/22	8pm meeting with client <ul style="list-style-type: none">• Discussed the outcomes of the project.• We will focus on end to end testing of the currently developed project• User testing• Testing for front end, and back-end logic• UI/UX consistency• The results of the testing will be a solid foundation MVP with as minimal bugs as possible	<ul style="list-style-type: none">• Download Slack• Get access to git hub project• Get access to Google docs• Read user stories and

	<ul style="list-style-type: none"> • Security Layer is already implemented, but will need to be included • As a stretch goal, blockchain and gamification reward integration 	think about testing
0/08/22	<p><u>7pm Weekly meeting</u></p> <ul style="list-style-type: none"> • We discussed our project with Sumedh - we will be doing testing on the functionality of the health wallet to ensure it is working as intended and fixing any bugs we come across. We all also agreed that we think we will be able to achieve what has been asked of us. 	
3/08/22	<p>Team meeting on MSTEams</p> <ul style="list-style-type: none"> • Finished up Assignment 1 documentation. • Discuss user stories and project scope 	<ul style="list-style-type: none"> • Set up weekly scrum meeting • Set up Jira board

Week 5

Date	Notes	Action Items

6/08/22	<p>8pm meeting with client</p> <ul style="list-style-type: none"> • Aman and Richard to alternate being project leads. • Lea approves, also suggests possibly having two leads, one for backend and one for front end • Meetings to be recorded for future reference • Aman to focus on security role • Richard to focus on AWS • Quoc to focus on frontend/backend/ user testing • Sheldon to focus on front end. Consistent UX/UI • Jack to focus on back end/ user testing 	<ul style="list-style-type: none"> • Write out 30-50 user test scripts based on testing the completeness of the user stories • Basic UI testing and writing defect tickets • Populate Jira board with clearly defined tasks
7/08/22	<p>7pm Weekly meeting</p>	<ul style="list-style-type: none"> • Product backlog • Sprint 1 planning notes • Jira board populated

	<p>Sprint 1 Planning</p> <p>8/08/22</p> <ul style="list-style-type: none"> • Jira board (Sprint 1) <p>https://quaefactacapstone.atlassian.net/jira/software/projects/QUEF/boards/1</p>	<ul style="list-style-type: none"> • Presentation 1 • Get website working again • Test login, signup, dashboards • Enable SSL • UI debugging
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Week 6

Date	Notes	Action Items
23/08/22	Group meeting to work on presentation	
23/08/22	<p>8pm meeting with client</p> <ul style="list-style-type: none"> • A general catch up about what we did during the week. Our client seems pleased with our methodology and progress. • Client asked Aman to do more research in cyber security and create a document with ideas and graphs. 	<ul style="list-style-type: none"> • Create a cyber security research document with ideas and graphs • Research on ways to reduce AWS costs • Get website running again • Get backend working locally

		<ul style="list-style-type: none"> • Continue writing user scripts
24/08/22	<p>7pm Weekly meeting</p> <ul style="list-style-type: none"> • Catch up with mentor to show sprint 1 progression 	<ul style="list-style-type: none"> • Sprint 2 planning notes • Sprint 1 retrospective • Figure out local environment for testing

Mid Semester Break

Date	Notes	Action Items
30/08/22	<p>8pm meeting with client</p> <ul style="list-style-type: none"> • N/A 	
31/08/22	<p>7pm Weekly meeting</p> <ul style="list-style-type: none"> • N/A 	

Week 7

Date	Notes	Action Items
06/08/22	<p>8pm meeting with client</p> <ul style="list-style-type: none"> • Discussed the state of the project. We cannot progress with testing without making the connection with the front end to backend. • Team and client agreed our focus should be on developing connection between frontend and backend. 	

<p>09/08/22</p> <p>5.30pm meeting with client again</p> <ul style="list-style-type: none"> • Further discussed the state of the project. • Team and client agreed we should overhaul the entire project. Start with a fresh code base while extracting what we can from existing project. 	<ul style="list-style-type: none"> • Backlog grooming with new user stories. • Work on user signup and login features for front and backends
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9.0 Jira Board

The screenshot shows the Jira Software Backlog board for the Quaefacta project. The sidebar on the left contains links for Quaefacta (Software project), PLANNING (Roadmap, Backlog, Board), DEVELOPMENT (Code), Project pages, Add shortcut, and Project settings. The main area displays the Backlog under the 'Backlog' tab. It shows two sprints:

- QUAEF Sprint 2** (6 Sep – 20 Sep): Contains 4 issues. One issue is labeled 'SIGNUP' and another is 'LOGIN'. Status columns show counts of To Do (13), In Progress (21), and Tested (21).
- QUAEF Sprint 3** (26 Sep – 10 Oct): Contains 4 issues. One issue is labeled 'PROFILE'. Status columns show counts of To Do (34), In Progress (21), and Tested (21).

At the bottom right of the board, there is a 'Quickstart' button.

The screenshot shows the Jira Software interface for the Quaefacta project. The left sidebar has sections for PLANNING (Roadmap, Backlog, Board), DEVELOPMENT (Code, Project pages, Add shortcut, Project settings), and a note that the user is in a team-managed project. The main area is titled 'Backlog' and shows a list of issues under 'QUAEF Sprint 4' (Oct 16 - Oct 30). The issues include QUAEF-54, QUAEF-71, QUAEF-70, QUAEF-67, QUAEF-66, QUAEF-68, QUAEF-64, QUAEF-63, and QUAEF-69. Each issue has a status column (e.g., To Do, Testing) and a 'Start sprint' button.

10.0 Product Backlog after completion of the project

PRODUCT BACKLOG						
ID	ITEM	OWNER	PRIORITY	EFFORT	STATUS	DEFINITION OF DONE
1	As an unauthenticated user, I want to access a landing page, so that I can access the app or learn more about the business	Lea	High	21		
2	As an authenticated user, I want to access the application home page so that I can navigate to different sections of the app	Lea	High	21		
3	As a user, I want to access the signup page, so that I can register for the app	Lea	High	13		Have a fully functional signup page. User Table implemented.
4	As a user, I want my signup information to be stored in the database so that I can log in	Lea	High	13		PUT API for user table created.
5	As a User I want to access the login page so that I can login to the application	Lea	High	21		Have a fully functional login page. Have GET API for user table.
6	As a User I want my login information to be authenticated so that only users with my password can access my account	Lea	High	21		Have logic to check login credentials are correct. Store logged in user.
7	As a user, I want to view my personal information on the profile page so that I can check that it is up to date	Lea	High	34		Have a fully functional profile page. GET API for user table to populate the profile page.
8	As a user, I want to edit my personal information on the profile editing page so that I can update my details	Lea	High	34		Have a fully functional edit profile page. UPDATE API for user table.
9	As a user, I want to be able to upload a document in my profile so that I can keep a medical record.	Lea	High	55		Create a feature to accept a document upload
10	As a user, I want to be able to upload different types of documents so that it is easier for me to keep a record.	Lea	High	21		Make a dropdown menu to select the type of document and make those types compatible
11	As a user, I want to be see privacy policy and terms of use agreement so that I could ensure that my data is secure.	Lea	High	13		Have a page showing the Privacy Policy and the terms of use agreement
12	As a product owner, I want to be able understand the AWS services that can be used for my application so that I can make an informed decision on	Lea	High	13		Have a detailed plan and report on each AWS service, with a description and expectation of costs

A ID	ITEM	OWNER	PRIORITY	EFFORT	STATUS	DEFINITION OF DONE
9	5 As a User I want to access the login page so that I can login to the application	Lea	High	21		Have a fully functional login page.
10	6 As a User I want my login information to be authenticated so that only users with my password can access my account	Lea	High	21		Have GET API for user table.
11	7 As a user, I want to view my personal information on the profile page so that I can check that it is up to date	Lea	High	34		Have logic to check login credentials are correct.
12	8 As a user, I want to edit my personal information on the profile editing page so that I can update my details	Lea	High	34		Store logged in user.
13	9 As a user, I want to be able to upload a document in my profile so that I can keep a medical record.	Lea	High	55		Have a fully functional profile page.
14	10 As a user, I want to be able to upload different types of documents so that it is easier for me to keep a record.	Lea	High	21		GET API for user table to populate the profile page.
15	11 As a user, I want to see privacy policy and terms of use agreement so that I could ensure that my data is secure.	Lea	High	13		Have a fully functional edit profile page.
16	12 As a product owner, I want to be able understand the AWS services that can be used for my application so that I can make an informed decision on application hosting.	Lea	High	13		UPDATE API for user table.
17	13 As a product owner, I want to be able to easily put up and take down AWS services with a simple Terraform command	Lea	High	21		Create a feature to accept a document upload
18	14 As a product owner, I want to be able to easily deploy my web application to the AWS ec2 instance with the use of an Ansible script	Lea	High	34		Make a dropdown menu to select the type of document and make those types compatible
19	15 As a product owner, I want user documents uploaded in a secure file storage system so user data is stored securely and efficiently	Lea	High	34		Have a page showing the Privacy Policy and the terms of use agreement
20						Have a detailed plan and report on each AWS service, with a description and expectation of costs associated
21						Have a full functioning terraform script that can take down and put up the aws services required, and a guide explaining the process for anyone who is unfamiliar with terraform
						Have an ansible script that successfully deploy the web application front end and backend so that they can be accessed from the internet.
						Have documents stored in an S3 bucket

11.0 Contribution Form

RMIT UNIVERSITY

SCHOOL OF SCIENCE

COSC2408 PROGRAMMING PROJECT 1, CAPSTONE PROJECT

STATEMENT OF CONTRIBUTIONS

1. The members of the group must agree on the percentage contributions.
2. Each member of the group needs to sign and date this form.
3. The contributions must add up to 100%.
4. A project will not be marked until we have the signed, scanned copy of this form.

Project Title: SS-184-Quaefacta Digital Health Wallet

Supervisor: Sumedh Shriram

Group Number: SS-184-Quaefacta

Project ID: P000184CSITCP

Name	Student Number	Percentage	Signature	Date

Richard Forsey	s3857811	26		31/10/2022
Aman Khan	s3811422	21		31/10/2022
Jiajie Lu	s3779102	13		31/10/2022
Jack Allen	s3832293	19		31/10/2022
Quoc Tran	s3827826	21		31/10/2022

1. The scanned form must be included in the zip file that is the draft submission for assessment task 3: Management, Communication, Presentation.
2. The scanned form must be included in the zip file that is the final submission for assessment task 3: Management, Communication, Presentation.

12.0 Link to GitHub Repository

GitHub Repository - <https://github.com/RichardForsey89/QueafactaHealthMk2.git>

13.0 Link to Figma design

Figma - <https://www.figma.com/file/d2f3aOXbAfDxwGDgl6iX87/QF-Vaccine-app?node-id=0%3A1>

14.0 Analysis of ACS code of ethics

Australia Computer Society's code of ethics

As proud members of ACS, we acknowledge that we uphold the honour, dignity, and the effectiveness of being a professional. We made sure to follow the ACS guidelines to complete this project which aims to provide a digital platform for the medical services to the consumers.

Quaefacta Digital Health aims at providing a platform for its consumers to keep a safe log of their health record and safekeep their documents on their portal. We also take pride in having been associated with Quaefacta to bring this project to life as we started developing the application for our users in the fourth week of our semester. At the end of the semester, we are happy to provide our client, Lea Dias, with a MVP (Minimum Viable Product) having a lot of functionalities set out by her during the start of our project.

14.1 The primacy of the public interest

This project aims to provide the users a safe portal to keep a track of their health records including GP consultations, vaccine tracker, medical document upload, etc. By developing this application, we are acting in the interest of the public as we are providing an easy and safer way of keeping their medical documents and medication history in one application.

14.2 The enhancement of quality of life

Quaefacta Health thrives to enhance the quality of life of our users by providing them a easy to use and safe platform for all their medication and medical records including additional features like mole detection, vaccine tracker, health news, etc to be added to the application later.

14.3 Honesty

We are happy that we have been honest in our approach with the client as well as ourselves about our capabilities. We honesty represented our skill and knowledge to the client, mentor and our team-mates. We made sure we are keeping a strict control on our code and enhanced our skills and knowledge to counter a problem. We also honestly represented the problems in the existing codebase to the client.

14.4 Competence

We familiarized ourselves with the entire project and the stakeholders before proceeding with the development so as to keep in mind about the stakes. We were honest in every approach, and we showed that we are valuable to the client by showing competence in every situation and showed accomplishments in our weekly progress checks.

14.5 Professional Development

At every step of this project, we got to learn something. Initially, when we started the project, we were new to things like dealing with the client, voicing our concerns to the client, documenting every meeting's key points, keeping a log of the progress, etc. Not only did we enhance our communication skills, we had a holistic development which involved learning new coding practices, enhancing our coding knowledge, learning more about cybersecurity and the wide facilities provided by AWS. We grew into professionals together as a team with the guidance of our mentor and the client.

14.6 Professionalism

After learning about the good this project will deliver to the society, we all got excited and started giving it priority over our other commitments as it was going to be a big step in the betterment of the society by giving them a safe and easy to use platform to store and keep a track of their medical records with additional functionalities like vaccine tracker, GP appointments, Health news, etc.

15.0 Analysis of learning outcomes

We've learned that circumstances aren't always what they appear to be, and that you need look into the situation to figure out what's going on. We also learnt that having up-to-date documentation can help eliminate confusion and get new project members up and running much faster. Previously, we distributed work in a haphazard manner without setting deadlines, but today we distribute work with precise requirements and deadlines.

We've also learned how to work effectively as a group and how to negotiate with the client. Back-to-back meetings have made us more mature and familiar with the client and

her objectives. We've learnt how to deal with a negative situation and move on as a group rather than as individuals. In the end, we learnt how to complete a project as a team and how to enhance your personal skills to complete the project and make yourself a better professional.

15.1 Critical thinking

There were a few instances during the project where we lost inertia and were uncertain on what to do next but after having discussions with the entire up and throwing many ideas on the table, we always used to get to a solution using critical thinking abilities. Time and again, we had to discuss among the group about our next steps and even in order to complete our individual sections in the project, we used the ability of critical thinking to get things done.

15.2 Problem solving

Initially, we got a project which could have used people's personal details and may have caused them financial losses but at the end we ended up solving that major problem by getting our teaching team involved and changing the project entirely. Having such a start set our path for the entire project in terms of the ability to solve problems. During every sprint, we had many instances where we had to use our problem-solving skills to tackle with a situation and get things done.

15.3 Responsibilities

This project helped us get a holistic development by honing all our skills like problem solving, critical thinking, creative thinking and handling responsibilities. We all have handled problems and had fair share of responsibilities throughout our school and university life but this project gave us a responsibility in which the stakes were higher than usual. We were meant to build an application for the society and the common people are the major stakeholders as their medical and personal details would be stored in the application, handling such a responsibility made us concerned and careful at every step of this project. We all feel more responsible after the project as handled the expectations and the responsibilities in the project well.

15.4 Teamwork

We started as a group of 5 students in week 3 of our semester but after spending almost 10 weeks together, we are a strong team now. We handled all the problems and the responsibilities together as an understanding and supportive team. Every team-member gave their best to bring this team to the point where we could solve any problem together. We had sleepless nights together and we tasted glory together. Initially, we had difficulty in assessing each other's capabilities and point of views but now we have built trust and faith in our team members after working with them and after getting to know them during the entirety of this project.

15.5 Creative Thinking

Creative thinking is an ability which was put to use in almost every scenario during this project as we thrived to get to the best version of ourselves after each week and we thrived to use creative thinking ability to find solutions and amendments throughout the project. We had to become creative in order to convert that blueprint of the application into something usable by the society. We had long discussions with the client about the enhancements in the design and development of the application instead of just following the instructions given by the client as we all were using our ability to be creative during the entire project and trying our best to make the best final product for our client and our users.

16.0 References

ACS Code of Ethics 2014 (provided by RMIT)

Creative-thinking.html

Critical-Thinking.html

Problem-Solving.html

Responsibility.html

Team-Working.html

All these documents were provided by RMIT. Link below:

Management, Communication, Presentation 2022, Instructure.com, viewed 30 October 2022,
<https://rmit.instructure.com/courses/90484/assignments/730488>

