



LIM JUN JIE

COMPUTER SCIENCE UNDERGRADUATE

Hello, I am Jun Jie! I am currently a Computer Science undergraduate. The gradual integration of technology into our lives has always captivated me. Ever since I enrolled in polytechnic, my passion for software engineering has continued to ignite as I work on a mixture of software and hardware projects. As I look to further my studies, my goal is to expand and sharpen my technical skillset to build awesome software.

CONTACT

@ limjunjie2711@gmail.com

📱 +65 8186 9606

Singapore



PORTFOLIO

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1. Resume
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Sincerely,
Lim Jun Jie

Thank you for taking the time to review my portfolio, have a good day!

Lim Jun Jie

limjunjie2711@gmail.com ♦ +65 81869606 ♦ Singapore ♦

EDUCATION

Nanyang Technological University (NTU) Aug. 2023 – 2027
Bachelor of Engineering, Computer Science

Temasek Polytechnic Apr. 2018 – 2021
Diploma in Computer Engineering

WORK EXPERIENCE

Firstcom Solutions Apr. 2020 – Aug. 2020
Web Development Intern

- As an intern, I collaborated with programmers to diagnose and troubleshoot eCommerce website projects using OpenCart and WordPress frameworks, ensuring seamless backend operations.
 - Contributed to over 20 successful website projects.
- Liaised with Project Executives, conducted quality assurance and routine maintenance of websites, identifying and refining content defects for improved backend functionality and user experience.

SAF Medical Classification Centre Nov. 2021 – Jul. 2023
Admin Support Assistant

- Main Point-Of-Contact for Pre-enlistees in the Overseas Full Medical Examination (OFME) Programme.
- Oversaw all admin-related matters to ensure timely and coherent execution of medical procedures for overseas pre-enlistees under OFME.

RELEVANT PROJECT EXPERIENCE

1) DSTA Brainhack 2023 (Hackathon) - EcoAdventures

2nd Runner Up – XRperience

- Developed a 3D educational and interactive game, utilizing Unity and VR technology, with a primary focus on promoting sustainability awareness and fostering good recycling behaviors among youth.

2) Pre-MRI Simulator (Collaboration with CGH)

- Engineered a “Smart Mattress” solution, leveraging hardware and software technologies such as Raspberry Pi and Python, allowing the CGH’s radiology department to capture and analyze patients’ biodata.

3) ClassTrackerPro Android Application

- Developed an Android application in Java for teachers to keep track of student’s attendance and records.

4) Western Delights Shopping Website

- Designed a dynamic and fully functional Western Food website using C# and ASP.NET framework

SKILLS

- **Technical:** Experience with Python, HTML/CSS, C, C#, Javascript, Java, SQL, OOP, ASP.NET

CERTIFICATIONS/AWARDS

▪ **DSTA Brainhack 2023 (Hackathon)** Jun. 2023

- *2nd Runner Up for XRperience*
- *Certificate of Achievement - Outstanding Performance*

▪ **Director's List Award 2020/2021 (Diploma)** 2020

▪ **Edusave Certificate of Academic Achievement** 2014 - 2016, 2018 - 2021

CERTIFICATES





CERTIFICATE OF ACHIEVEMENT

LIM JUN JIE

XRPERIENCE - 2ND RUNNER UP

N/A

Mr. Mervyn Tan
Chief Executive, DSTA

AWARDED ON 22 JUNE 2023



Scan to access
your digital certificate



CERTIFICATE OF ACHIEVEMENT

LIM JUN JIE

XRPERIENCE - OUTSTANDING PERFORMANCE

N/A

Mr. Mervyn Tan
Chief Executive, DSTA

AWARDED ON 22 JUNE 2023



Scan to access
your digital certificate



It is hereby certified that
LIM JUN JIE
having successfully completed the course of study was awarded the

DIPLOMA IN
COMPUTER ENGINEERING

by Temasek Polytechnic (Singapore) on 18 April 2021

A handwritten signature in black ink, appearing to read "John".

Principal

A handwritten signature in black ink, appearing to read "Daniel Low".

Registrar



**Ministry of Education
Republic of Singapore**

School Graduation Certificate

THIS CERTIFICATE IS AWARDED TO

LIM JUN JIE
Identification No: T0041320D
Bedok Green Secondary School

Year of Graduation: 2017

This School Graduation Certificate provides a holistic qualitative assessment of the student's personal qualities, academic and co-curricular development upon completion of the student's secondary education.

M I N I S T R Y O F E D U C A T I O N
S I N G A P O R E

A handwritten signature in black ink, appearing to read "WILLIAM".

Director-General of Education
Singapore

This certificate consists of 4 pages.

306917/0282



AWARDS FOR EXCELLENCE 2020

Director's List Award

is presented to

LIM JUN JIE

from

Diploma in Computer Engineering

for being among the top 10% of academic achievers

in the academic year

2019 / 2020

A handwritten signature in black ink that appears to read "Kiang" or "Kia Ngan".

Wong Kia Ngee
Director
School of Engineering

Stewardship • Excellence • Respect • Vibrancy • Innovation • Community • Empathy



CERTIFICATE OF APPRECIATION



Presented to

PTE LIM JUN JIE

For exemplifying the MCC Core Values

Dec 2022

LTC (DR) Lim Lian Kiat
Commanding Officer



EDUSAVE MERIT BURSARY 2021

is presented to

LIM JUN JIE

of

DIPLOMA
IN
COMPUTER ENGINEERING

TEMASEK POLYTECHNIC

for achieving good academic performance and
demonstrating good conduct

CHAN CHUN SING
MINISTER FOR EDUCATION

EDWIN TONG
DEPUTY CHAIRMAN
PEOPLE'S ASSOCIATION



People's Association

EDUSAVE MERIT BURSARY 2020

is presented to

LIM JUN JIE

of

**DIPLOMA
IN
COMPUTER ENGINEERING**

TEMASEK POLYTECHNIC

for achieving good academic performance and
demonstrating good conduct

A handwritten signature in black ink.

LAWRENCE WONG
MINISTER FOR EDUCATION

A handwritten signature in black ink.

CHAN CHUN SING
DEPUTY CHAIRMAN
PEOPLE'S ASSOCIATION



EDUSAVE MERIT BURSARY 2019

is presented to

LIM JUN JIE

of

COMMON ENGINEERING PROGRAMME

TEMASEK POLYTECHNIC

for achieving good academic performance and
demonstrating good conduct



SHAMSUL KAMAR BIN MOHAMED RAZALI

ADVISER TO

ALJUNIED GRC GRASSROOTS ORGANISATIONS



EDUSAVE MERIT BURSARY 2016

is presented to

LIM JUN JIE

of

SECONDARY 4

BEDOK GREEN SECONDARY SCHOOL

for achieving good academic performance and
demonstrating good conduct

A handwritten signature in black ink, appearing to read "SHAMSUL KAMAR BIN MOHAMED RAZALI".

SHAMSUL KAMAR BIN MOHAMED RAZALI

ADVISER TO

ALJUNIED GRC GRASSROOTS ORGANISATIONS



EDUSAVE MERIT BURSARY 2015

is presented to

LIM JUN JIE

of

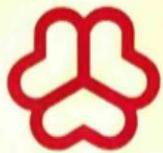
SECONDARY 3

BEDOK GREEN SECONDARY SCHOOL

SHAMSUL KAMAR BIN MOHAMED RAZALI

ADVISER TO

ALJUNIED GRC GRASSROOTS ORGANISATIONS



EDUSAVE GOOD PROGRESS AWARD 2014

is presented to

LIM JUN JIE

of

SECONDARY 2

BEDOK GREEN SECONDARY SCHOOL

A handwritten signature in black ink, appearing to read "Kee Wei Heong".

DR KEE WEI HEONG, JP, BBM

ADVISER TO

KAKI BUKIT GRASSROOTS ORGANISATIONS

TESTIMONIALS





Testimonial

Ministry of Education
Republic of Singapore

Lim Jun Jie was a student of Bedok Green Secondary School from 2013 to 2017 in the Normal Academic Stream.

Overall Performance

Jun Jie completes his assignments on time. He recognizes the importance of diligence and perseverance in order to succeed in life. He exhibits independence in his work and is able to cope under pressure effectively. In recognition of his exemplary attitude towards learning, he was awarded the Edusave Good Progress Award (2014) and Edusave Merit Bursary Award (2015, 2016). He is a humble student, always respectful of authority and receptive to advice. A very fun-loving individual, his cheerful disposition enables him to get along well with others.

Jun Jie was a member of the National Police Cadet Corps from Secondary One. He and his team represented the school in the Unit Overall Proficiency Award (2013) organized by the Uniformed Groups Headquarters and his team received the Bronze Award. He attended training regularly and took the initiative to guide and train the juniors.

He participated actively in the Values in Action (VIA) activities organized by the school. In Secondary Two, he participated in the activity Caring for the Elderly. His compassion and humility were evident when he interacted with the elderly. He was also a very enthusiastic participant during the class overseas Service Learning trip to Bintan in 2016.

Jun Jie is an independent learner who is able to respond to others in a positive manner. He not only works well on his own but also able to contribute in a team. With his considerable intellect, he has shown that he has the potential for greater achievements.

- End -

23 Sep 2022

To Whom It May Concern

Dear Sir/Mdm,

Letter of Recommendations for Mr. Lim Jun Jie

Lim Jun Jie graduated from Temasek Polytechnic with a Diploma in Computer Engineering in May 2021.

An independent learner, Jun Jie worked hard and performed to his very best, attaining a cumulative Grade Point Average (GPA) of 3.63 out of 4. He demonstrated perseverance, determination, eagerness to learn new skills and putting it to good use during his three years at Temasek Polytechnic. With his positive attributes, he is awarded the Director List for Academic Year 2019/2020.

Jun Jie worked on his Major Project "TPRF MRI Prep Simulator (Mattress)" along with his teammates. This project was in collaboration with Changi General Hospital (CGH), Singapore. The project involved hardware and software modules and aimed to help the clinicians, and radiologists to evaluate the suitability of a patient for the MRI scan. He actively involved in the project along with his teammates and contributed to realizing the working prototype. He was responsible for enhancing the prototype design based on the feedback received from the CGH. Jun Jie is a good team player and willing to accept responsibility.

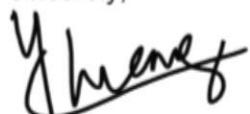
During his internship at Firstcom Solutions Pte Ltd, Jun Jie was able to apply the knowledge he learned to complete the tasks allocated to him. His company supervisor commended Jun Jie for being responsible and able to complete all his tasks on time. He is willing to help his teammates to work on urgent task and able to multi-task at the same time.

Jun Jie is a hardworking individual who is willing to learn and work on new assignments or tasks that he has not been exposed before. He is also a good team

player, take responsibility, and managed his time well. With his positive attitude towards learning and work, he will be an asset to any organisation he decides to join.

We wish Jun Jie all the best in his future endeavours.

Yours sincerely,



YAN Seow Chiang (Mr)
Course Chair
Diploma in Computer Engineering
School of Engineering
Temasek Polytechnic



Ref: 157K/13-3-1

13 December 2022

Attn: To Whom This May Concern

RE: LETTER OF COMMENDATION FOR GOOD PERFORMANCE AT MEDICAL CLASSIFICATION CENTRE (MCC), CENTRAL MANPOWER BASE (CMPB)

1 This is to certify that PTE Lim Jun Jie of Singapore NRIC TXXXX320D, is a National Servicemen (Full-Time) with Medical Classification Centre (MCC) located at Central Manpower Base (CMPB) since 29 November 2021. He will be completing his Full-Time National Service (FTNS) and transits to Operationally-Ready National Service (ORNS) on 21 July 2023.

2 During his tenure till date with MCC, PTE Jun Jie exhibits great enthusiasm and admirable work ethics as he works with his fellow colleagues in the brainstorming, refining and implementation of Overseas Full Medical Examination (OFME) and OFME Teleconsultation for the Pre-Enlistees (PE). As the main Point-of-Contact (POC) for OFME, he was instrumental in his deliverables and is often able to deliver and perform under minimal supervision.

3 PTE Jun Jie is patient, meticulous and is able to articulate his thoughts well. He shows no qualms, is confident and professional when conversing with the PE and their accompanying parents or guardians. Often, he welcomes criticisms as a mean for self-improvements. He is selfless with his time and will go the extra miles to lend a helping hand to his fellow peers when required.

4 PTE Jun Jie is a great team player and has good working relationship with colleagues from various departments. He is well-liked by his peers and colleagues. The organisation trusts that PTE Jun Jie has boundless opportunities for growth and he will definitely be a valuable asset to any organisation he joins in the near future.

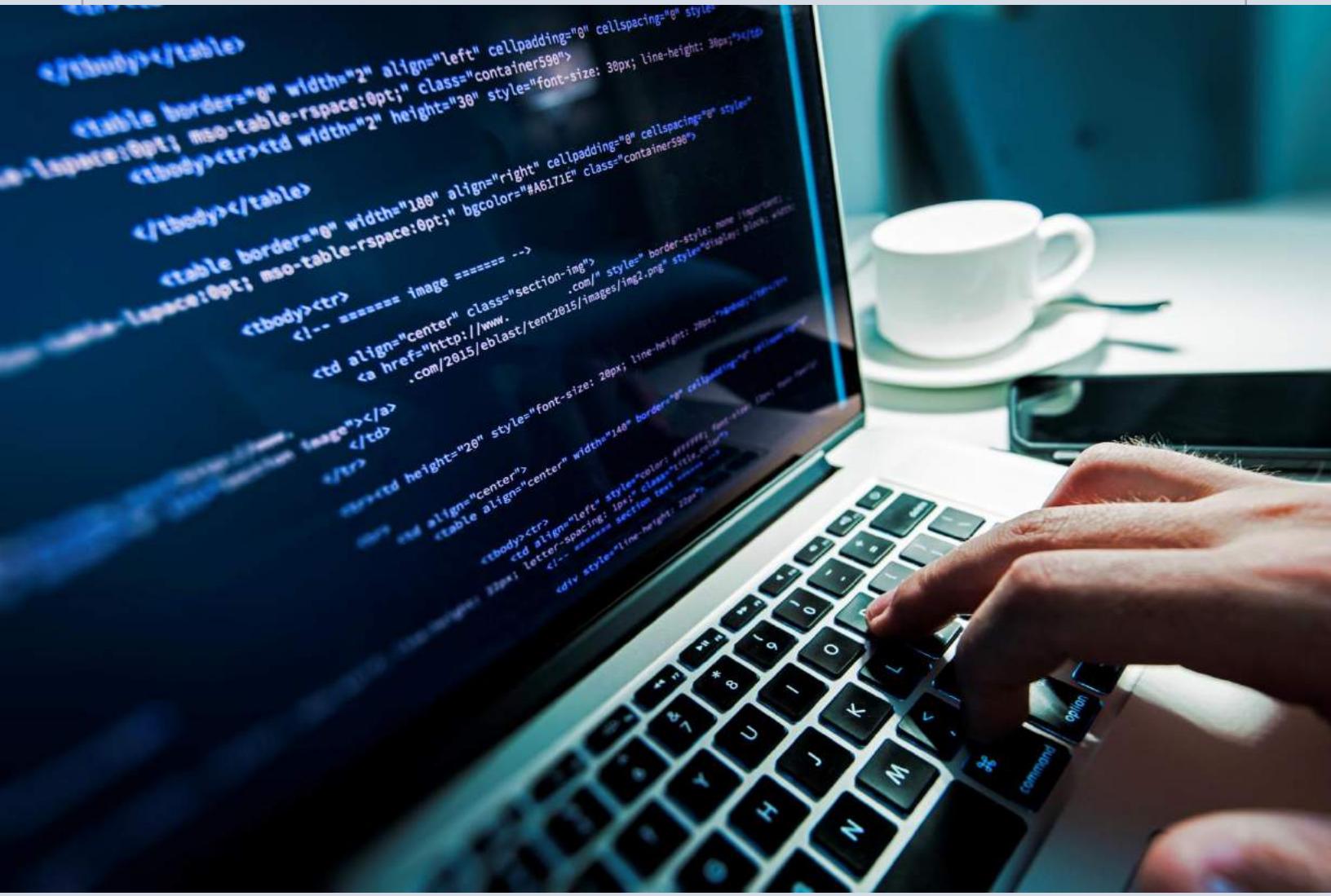
5 Do feel free to contact the undersigned at DID: 6373 1329 if you need any clarifications.

Thank you



DX12 POK BOON MENG
ASSISTANT DIRECTOR (MEDICAL AFFAIRS)
MEDICAL CLASSIFICATION CENTRE
CENTRAL MANPOWER BASE
MINISTRY OF DEFENCE

PROJECTS



Collaboration Project with CGH: Pre-MRI Simulator

Year: 2021

Module: Major Project

Grade: A

Role: Leader

Status: Completed

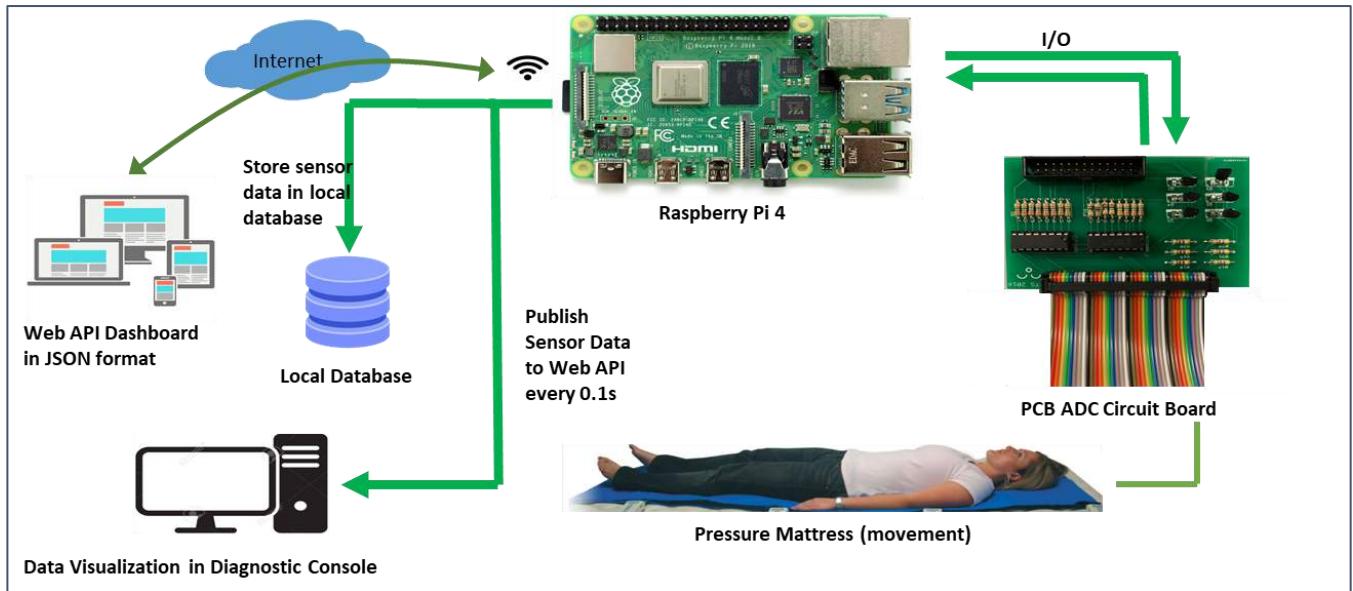
MRI is an important tool in the diagnosis and evaluation of diseases and injuries. The examination requires a patient to go through a “tunnel” that generates constant thumping/tapping sound for the entire duration of the scan. The total duration of the scan varies between 30 minutes to 1.5 hours depending on the number of body regions scanned. In order to produce diagnostic-quality MRI images, the patient is required to remain almost motionless throughout the procedure as fidgeting creates motion artifacts that may hinder accurate image interpretation.

Studies have shown that about 15% of patients suffer from claustrophobia and anxiety due to confined spaces and loud noises. This results in re-imaging due to movements in the tunnel.

This project in collaboration with CGH addresses the above problem. The patients will go through a simulation before they are scheduled for the actual scan. This is aimed to save time and resources.

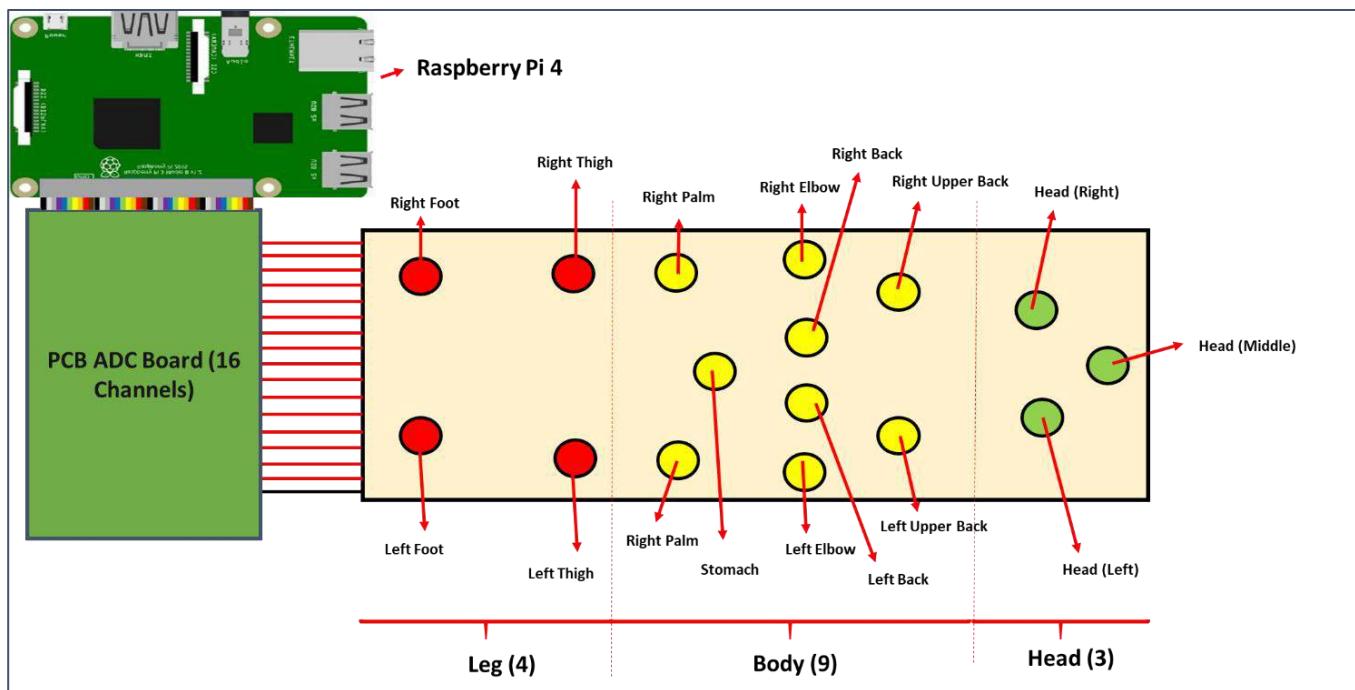
As such, the project aimed to monitor the movement of the body using an embedded sensor mat. The movement readings and status are sent to the diagnostic tool for further analysis. This enables the clinicians and radiologists of CGH to evaluate the suitability of a patient for the MRI procedure prior to scheduling the patient for the actual MRI scan.

System Architecture



This project aimed to design a pre-MRI simulator that can capture the movement data from the patient that is lying on the mattress. When movement is made on the mattress, the sensors embedded on the mattress will trigger, sending analog signals to the PCB ADC circuit board which will convert the analog signals into readable digital readings. Thereafter, the vibration readings will be sent to the Raspberry with the help of Raspberry Pi's GPIO ports. The vibration readings will be stored in a local database and sent to a Graphical User Interface (Diagnostic Console) for data visualization. In the Diagnostic Console, the clinicians, and radiologists of CGH will evaluate the suitability of a patient for the MRI procedure by monitoring the movement data prior to scheduling the patient for the actual MRI scan.

Wiring Diagram

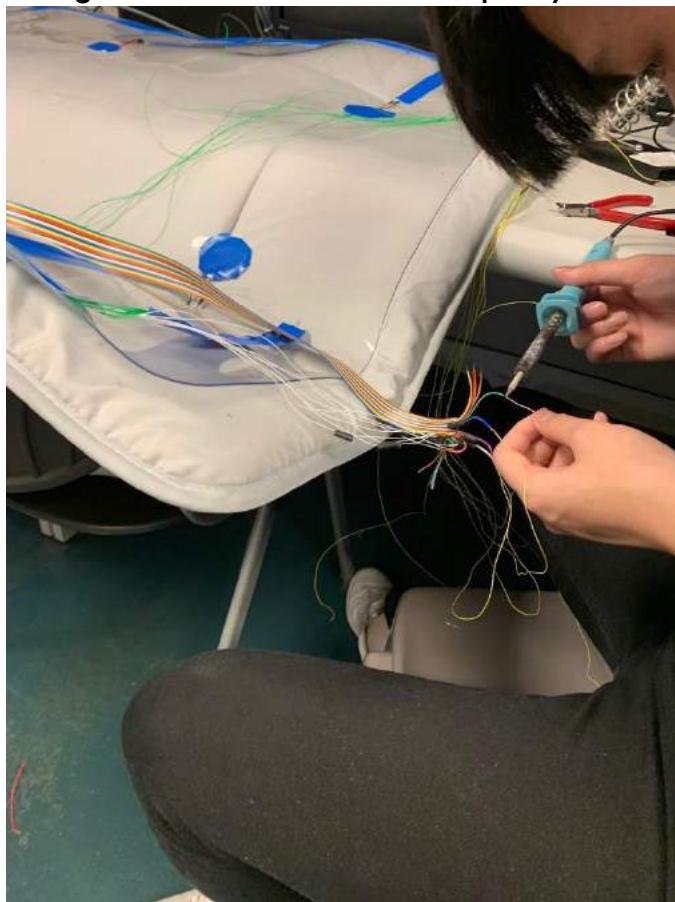


Hardware: Final Mattress Design

Sensors embedded on the mattress



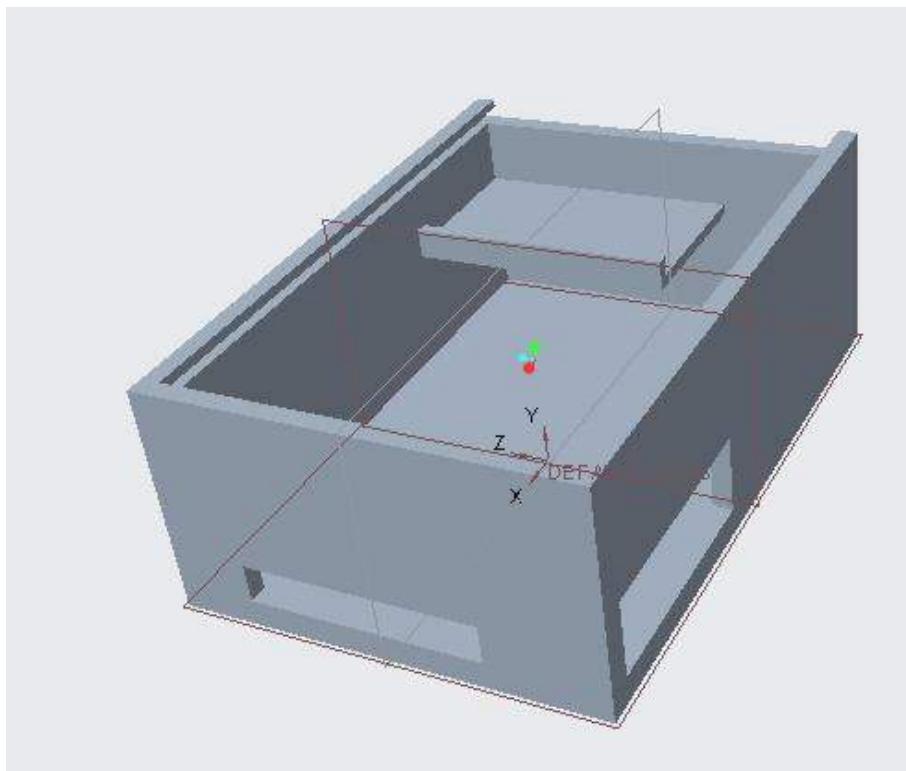
Soldering the embedded sensors to Raspberry Pi GPIO Ports



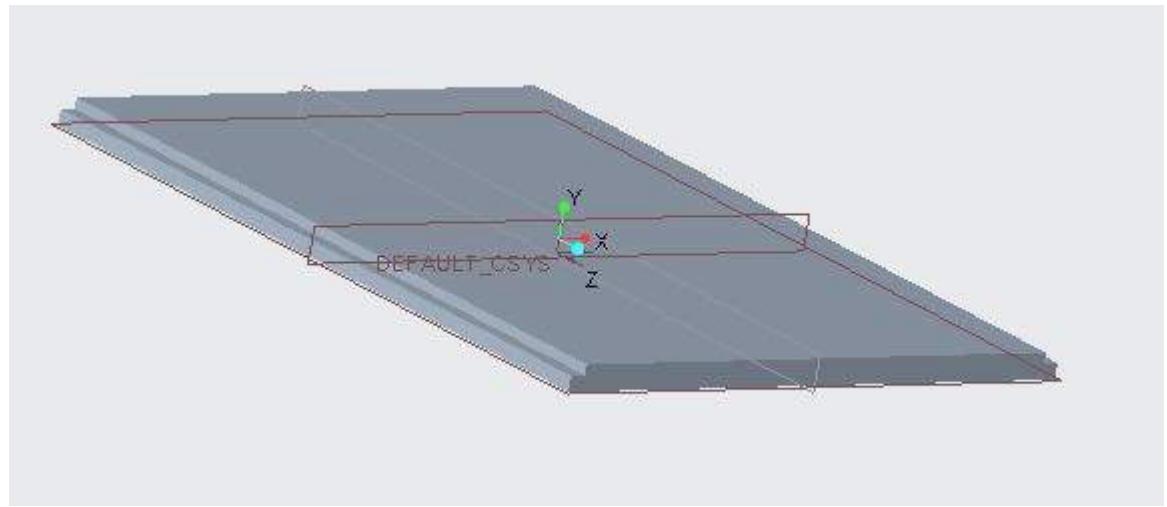
Final Mattress



Hardware: 3D Modelling of casing for storage

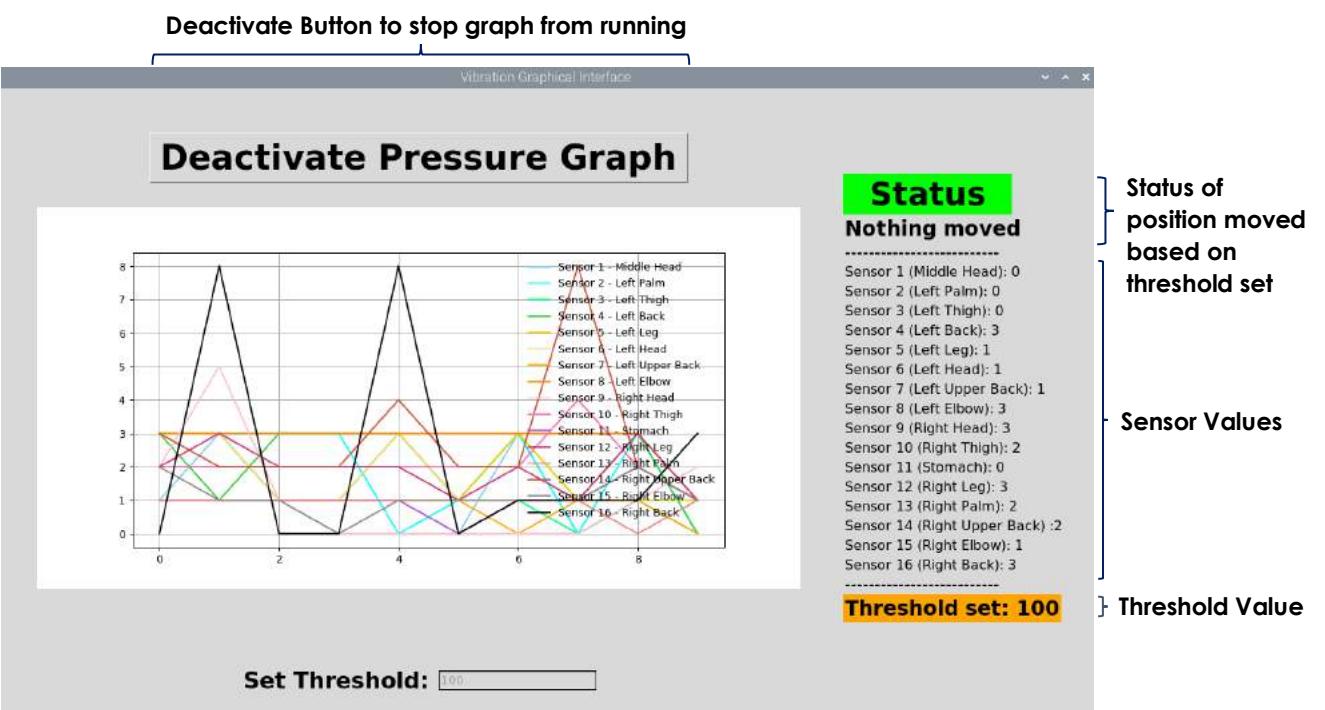
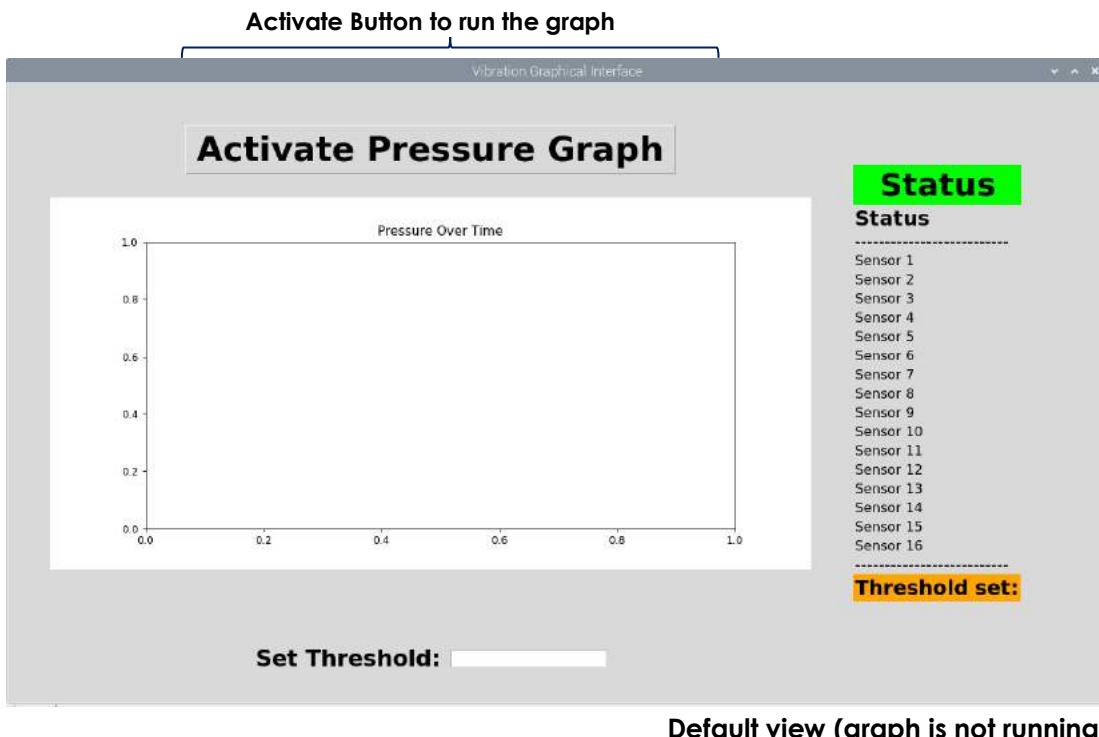


3D Model Box Casing designed, and 3D printed using CREO for storage of hardware such as Raspberry Pi, PCB ADC circuit board and wires.



3D Model Box Casing's Cover

Software: Graphical User Interface



Allows user to set an integer threshold value to determine movement, can't be set if the graph is running

Visualization of live time-series graph

Status of position moved based on threshold set

Sensor Values

] Threshold Value

“AFS” Attendance Tool Android Application

Year: 2021

Module: Mobile Device Application Development

Grade: Distinction

Role: Leader

Status: Completed

One of my favorite projects as it was my first time developing my very own mobile device application on the Android platform using Java.

As we dive deeper into the future of technology, it is important to reduce the amount of manual labor and supplies to improve operational efficiency and prevent the loss of documents. From my observations, student's attendance tends to be recorded in hardcopy. I feel that this process is tedious and manual, as it may be difficult for teachers to retrieve the hardcopies if they ever need it.

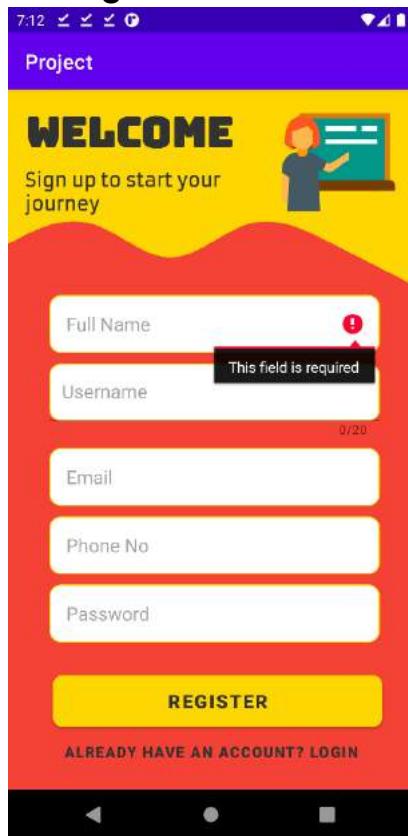
As such, I designed a meaningful application for teachers and lecturers which aims to allows ease of access in managing and editing students' attendance records and information.

Project Screens

Login Screen



Registration Screen



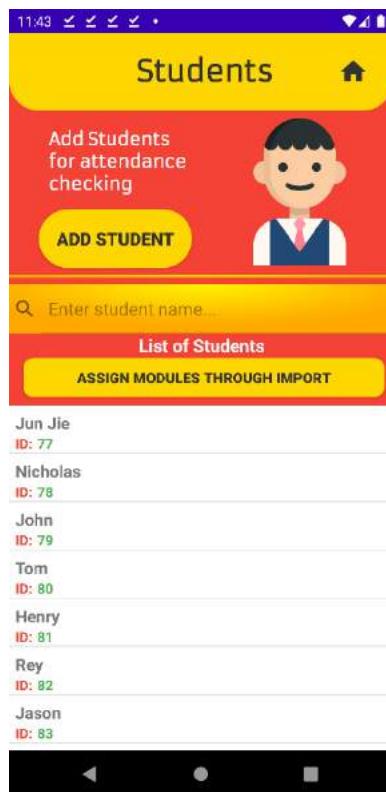
Dashboard



Dashboard (Continue)



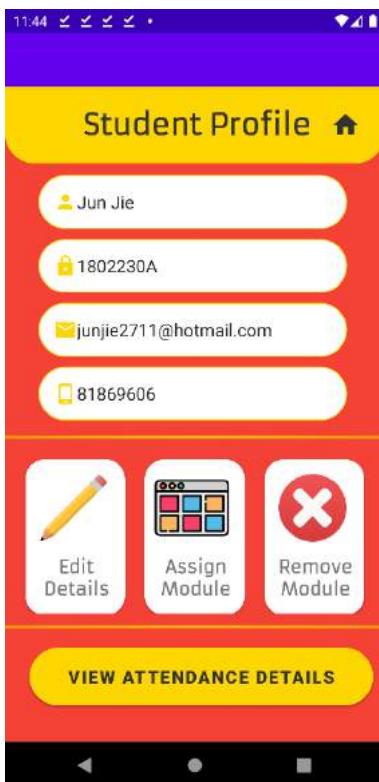
View Students Screen



Add Students Screen



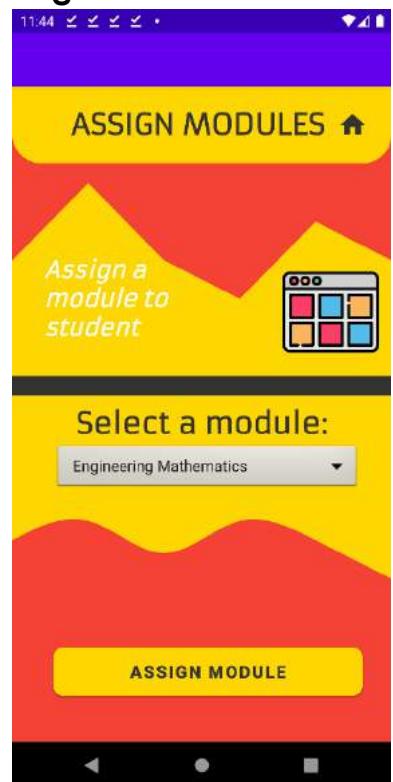
Students Profile Screen



Edit Students Details Screen



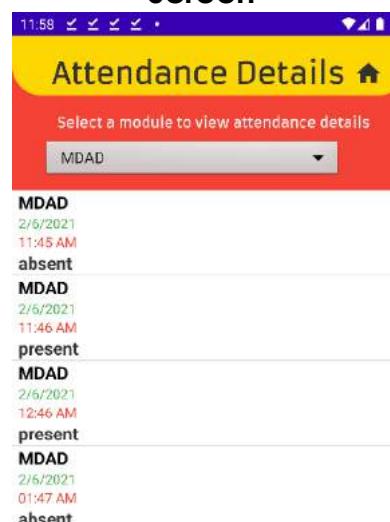
Assign Modules to Students



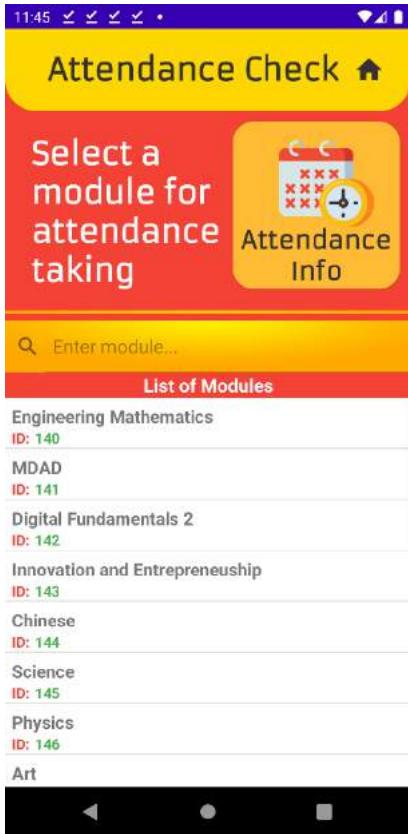
Unassign Modules Screen



View Students Attendance Screen



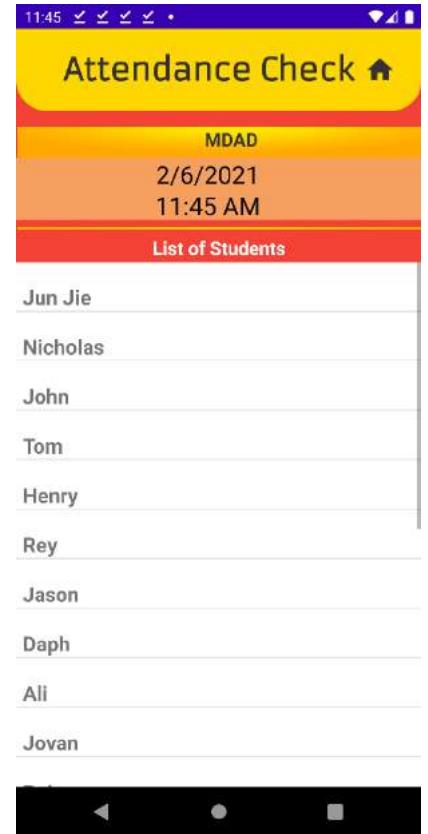
Selecting a module to mark attendance



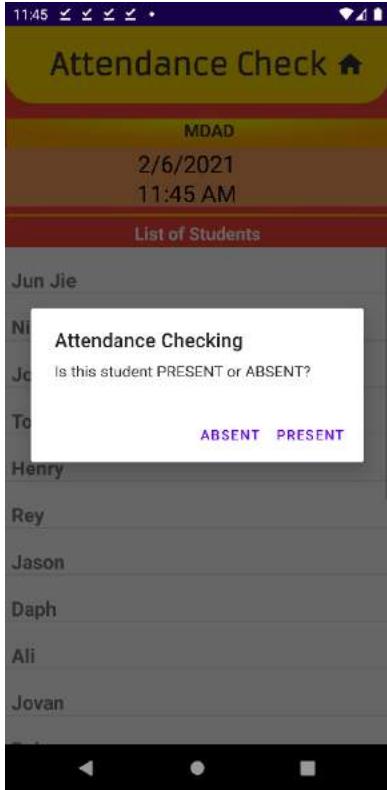
Selecting a date to mark attendance



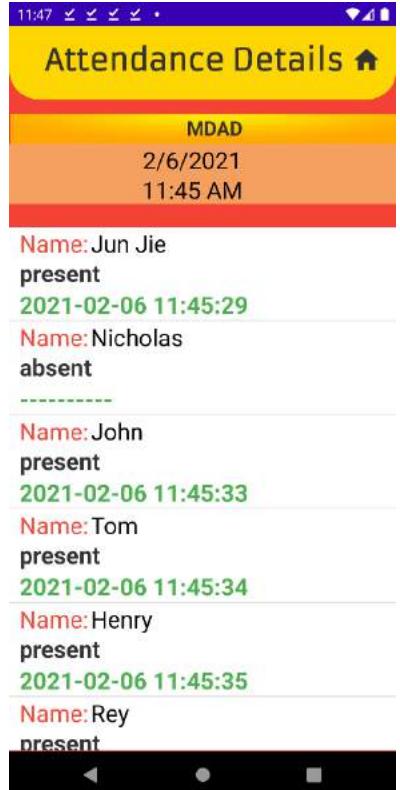
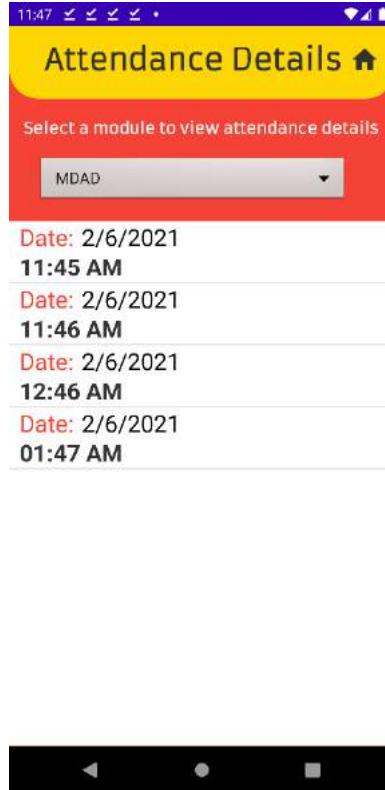
Nominal Roll for students in that module



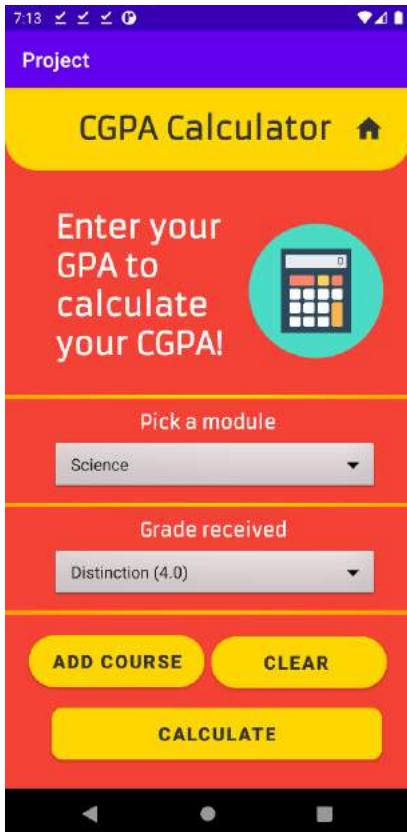
Marking Attendance



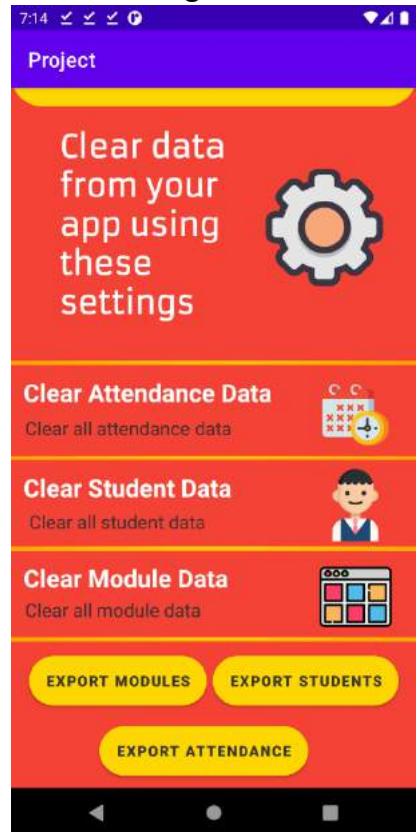
Viewing Attendance Details for a module



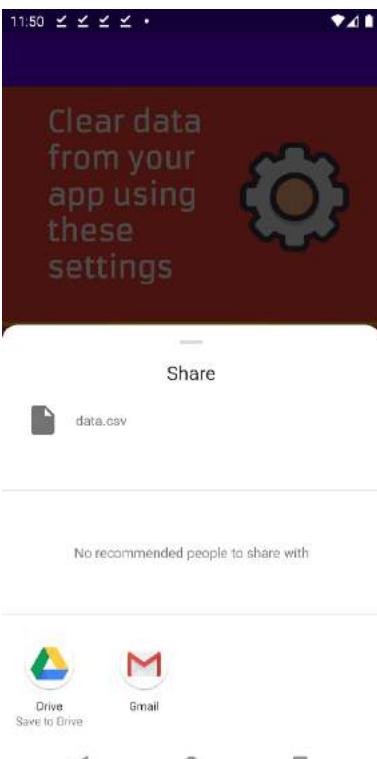
CGPA Calculator Screen



Settings Screen



Exporting Student Data to CSV file



Importing Student Data using CSV file

This screenshot shows the import screen. It has a light blue header with the URL 'junjie2711.atspace.cc/prod'. Below is a form for importing student data with fields for 'Student Name', 'Admin No', 'Email', 'Phone', and 'User ID'. A 'Choose File' button is shown with the message 'No file chosen'. An 'Import' button is at the bottom right. The main area shows a table of student data:

	A	B	C	D	E
1	Name	Admin No	Email	Phone	
2	Junjie	18022304	junjie2711@hotmail.com	1	
3	Nicholas	18022810	cnicholas@hotmail.com	1	
4	John	18023020	john@hotmail.com	1	
5	Tom	1802306W	tom@gmail.com	1	
6	Henry	182111090	henry@yahoo.com	1	
7	Roy	13091900	roy@mail.com	1	
8	Jason	15648958	jason@mail.com	1	
9	Daph	1280210Y	daph@gmail.com	1	
10	Ali	17200690	ali@www.com	1	
11	Javan	18042130	javan@gmail.com	1	
12	Rein	1801234F	rein@yahoo.com	1	
13	Donald	1701983B	donald@yahoo.com	1	
14	Isabelle	1709182S	isabelle@gmail.com	1	
15	Shannon	1701234P	shannon@gmail.com	1	
16	Keith	1701234Q	keith@aba.com	1	
17	Jonatan	1809934L	jonatan@yahoo.com	1	
18	Kevin	1609234H	kevin@yahoo.com	1	
19	Alfred	1902134H	alfred@yahoo.com	1	
20	Sean	1802341G	sean@yahoo.com	1	
21	Terrence	1801245K	terrance@yahoo.com	1	
22	Shawn	1701928R	shawn@gmail.com	1	

Smart Aquaponics Temperature Monitoring System

Year: 2021

Module: Internet of Things (IOT) Project

Grade: A

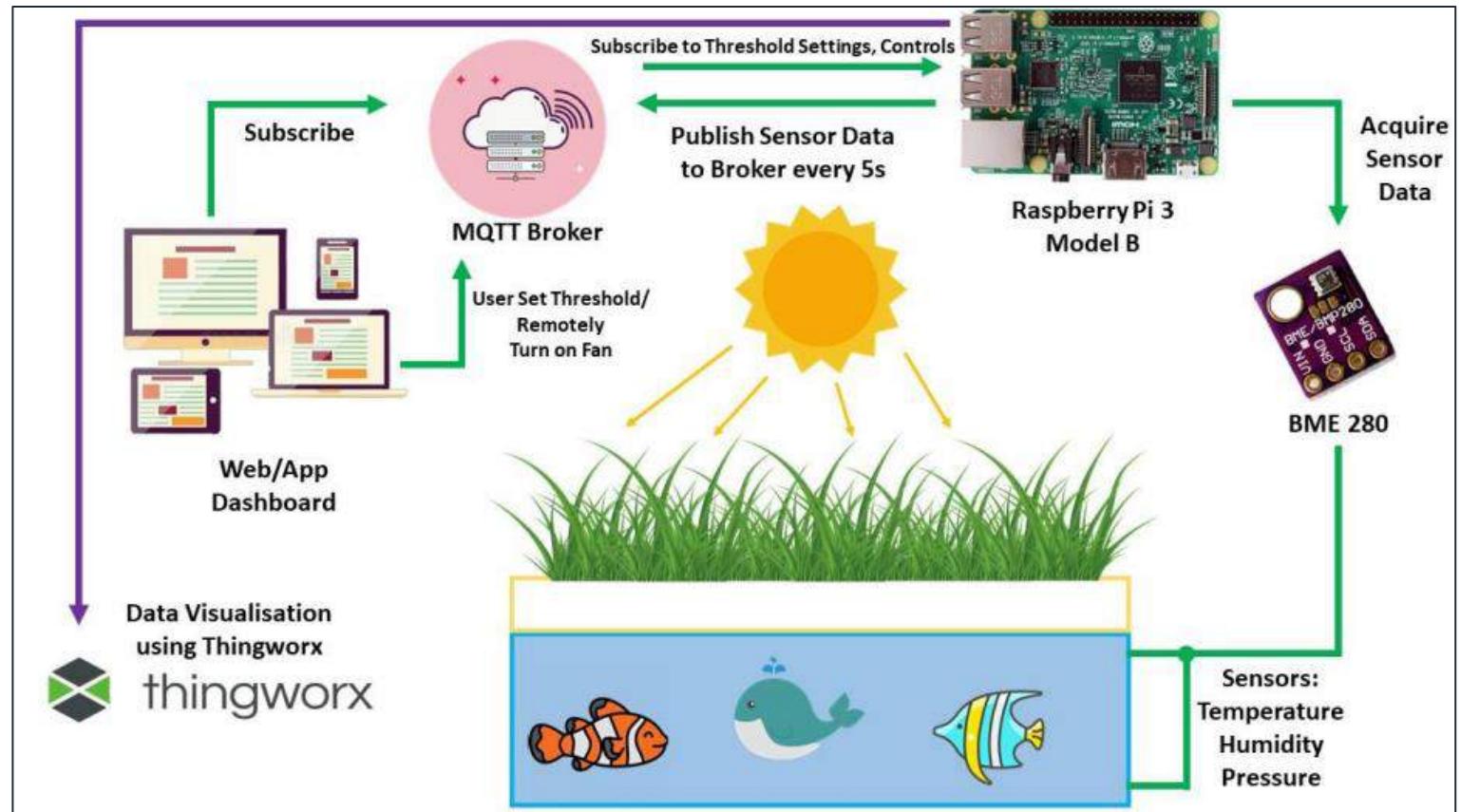
Role: Leader

Status: Completed

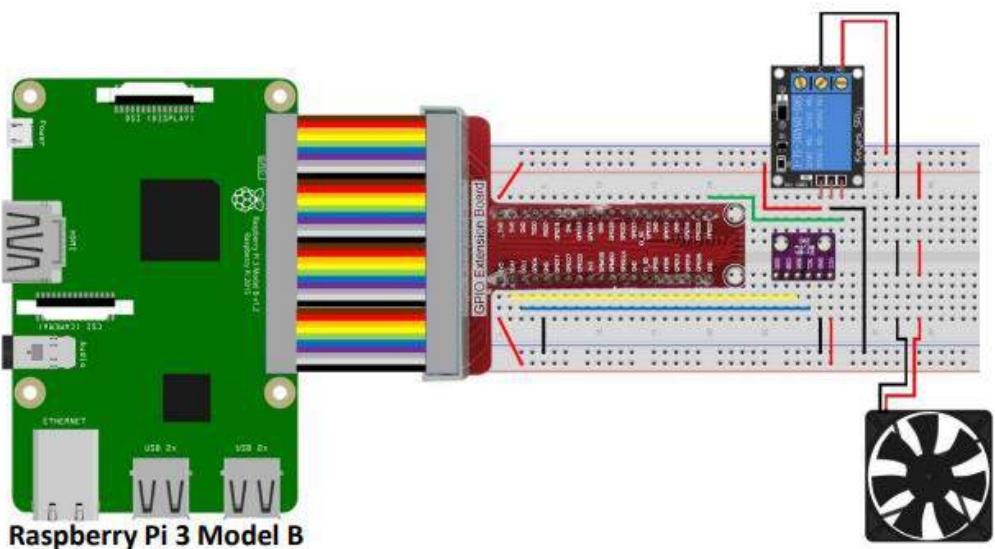
Aquaponics is now a growing trend in urban agriculture. It is a specific technique for agriculture product that combines aquaculture with hydroponics. With its growing trend, an owner planned to embark on creating a smart aquaponics system for the farm. It is important for the fishes in the farm to not get affected by the change. To ensure the health of the fishes in the farm, the main functions of a smart aquaponics system is to maintain a stable and consistent temperature for the water in the farm.

This project aimed to implement a smart system which allows farmers to always monitor the temperature of the fish farm. Once the temperature exceeds a set threshold value, the farmers will be alerted through a notification which prompts them to toggle the temperature of the farm via smart devices.

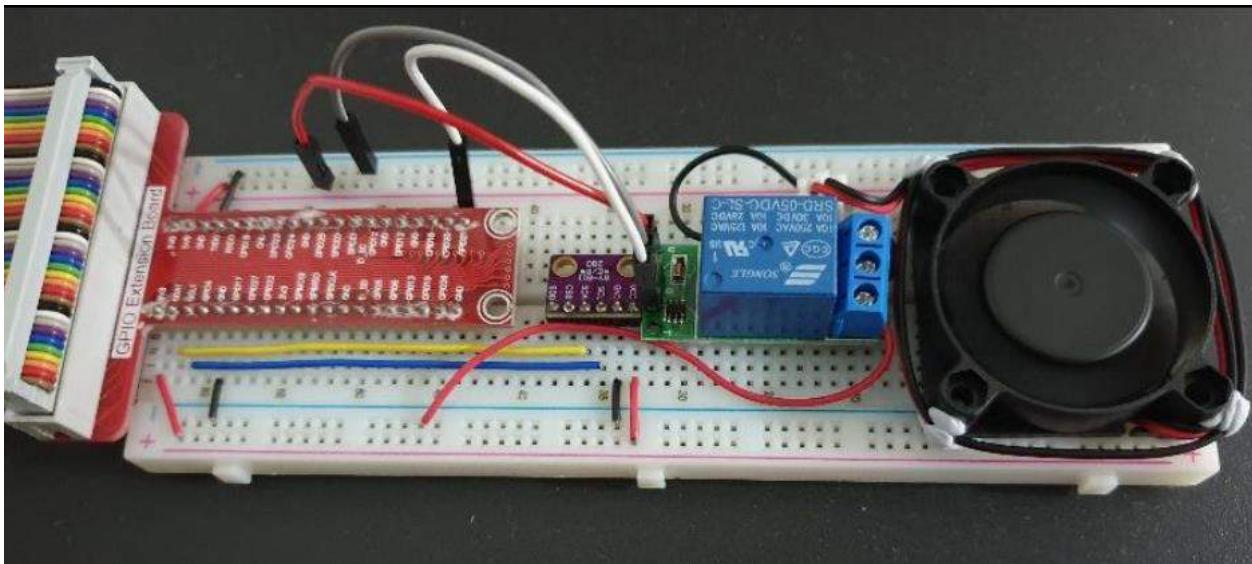
System Architecture



Pin Assignment and Circuit Connection



Project Execution



Circuit patched with Raspberry Pi 3 Model B, BME280 Sensor, Relay, Power Supply and Fan Connection

Activities Terminal Sat 10:36 ●
pi@raspberrypi: ~/Project

```
pi@raspberrypi:~/Project $ python3 bme280Codes.py
Date/Time: 01-Feb-2020, 10:34:31

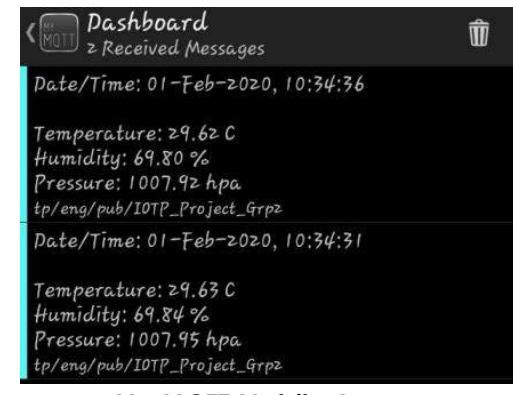
Temperature: 29.63 C
Humidity: 69.84 %
Pressure: 1007.95 hpa

Published Sensor Data to Thingworx

Created MQTT Client at 10:34:31
Connected to MQTT Broker

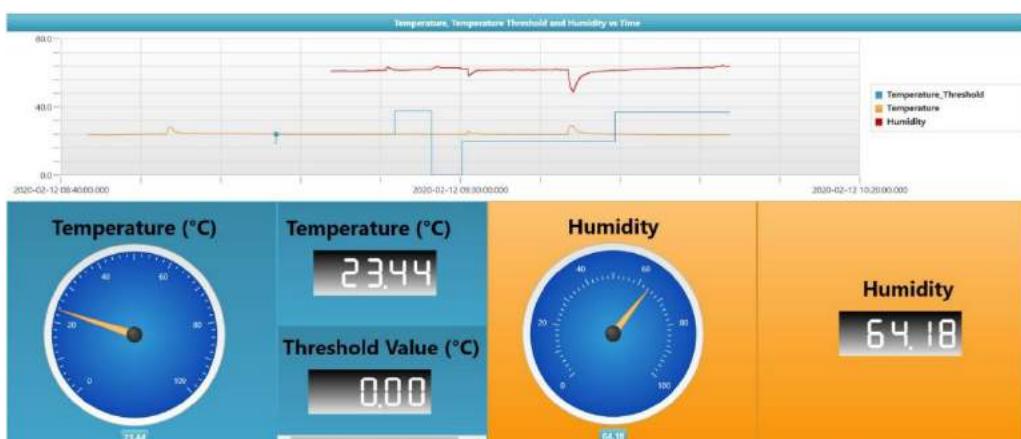
Sensor Data published to MQTT Broker

Disconnected from MQTT Broker
```

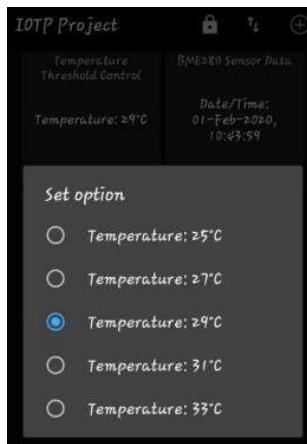


My MQTT Mobile App

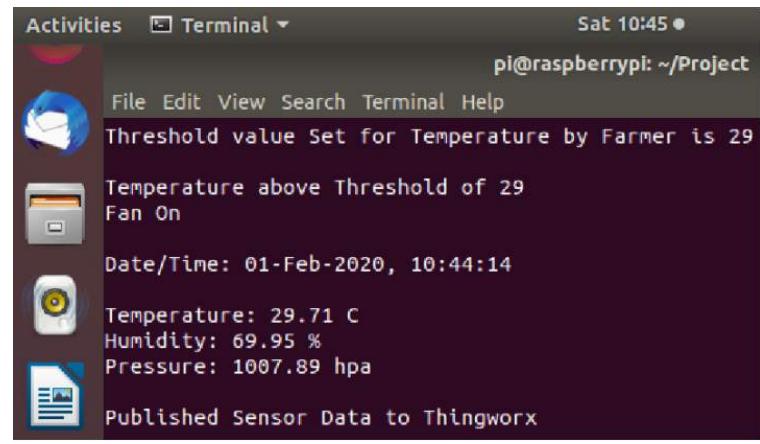
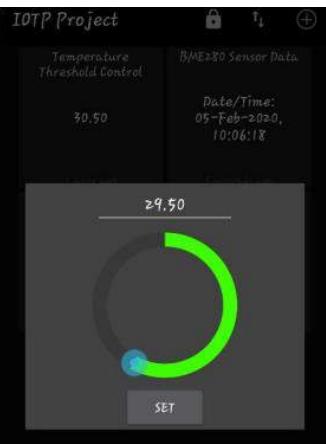
Publishing sensor reading over to MQTT Broker and ThingWorx Server for visualization, and display a message when the message is successfully published.



ThingWorx Dashboard



MQTT Dash App – Setting Threshold using
preset options or range control



Western Food Shopping Cart Website

Year: 2021

Module: ASP.NET Web Programming

Grade: A

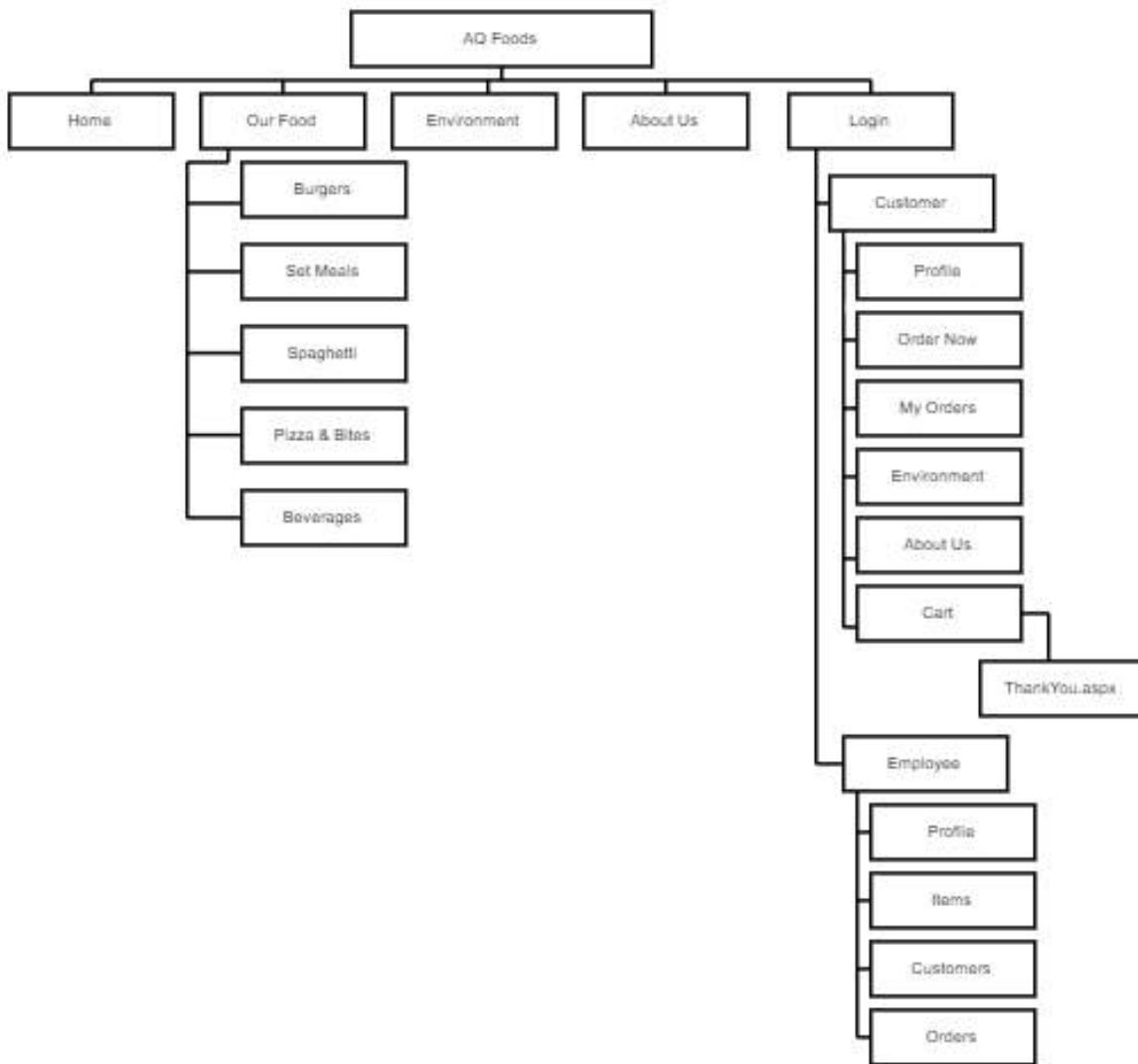
Role: Leader

Status: Completed

My first web development project where I built my own fully functional dynamic website that sells western food through a shopping cart system using the ASP.NET framework.

The website operates by access level, controlling the type of information presented to different individuals based on their access levels - Guests, Customers, and Employees. The project encapsulates the CRUD framework which allows customers to add items to their cart, checkout their food order and view their order history whilst also allowing employees to perform administrative actions.

Project Sitemap



Project Screens

Order Now!

Select type of food: Beverages

Coca Cola	Pepsi	Sprite	Ice Lemon Tea	100 Plus
Price: \$1.50	Price: \$2.50	Price: \$1.50	Price: \$1.50	Price: \$1.50
Quantity: 1				
Add To Cart				

Corona	Ice Mountain
Price: \$5.00	Price: \$1.00
Quantity: 1	Quantity: 1
Add To Cart	Add To Cart

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Tel: +65 92083102 | Address: Bishan Ave 2, 830291

View menu and adding items to cart

Chickanoos Burger

Super tasty and delicious burger wrapped with crispy, tender chicken topped with cheese and lettuce

Chickanoos Burger	Fish-T-Fillet
Price: \$7.00	Price: \$5.00
Quantity: 1	Quantity: 1
Add To Cart	Add To Cart

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Pop up showing the information of the menu

MY CART

S. No	Food ID	Food Name	Food Image	Unit Price (\$)	Quantity	Total Price (\$)
1	1	Chickanoos Burger		7.00	1	7.00
2	2	Fish-T-Fillet		5.00	5	25.00
3	3	Original Beef Burger		5.00	10	50.00
4	11	Vegan Style Pizza		20.00	1	20.00
5	12	Pepperoni Pizza		20.00	1	20.00
6	13	Cheese Chick Pizza		22.00	1	22.00

Total Price: \$104

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View food items in cart, remove item and proceed to checkout page

Thank you for shopping with us at AQ Foods!

Your Order ID Is #77

Food ID	Food Name	Food Image	Food Price (\$)	Quantity	Total Price (\$)
2	Fish-T-Fillet		5.00	5	25.00
3	Original Beef Burger		5.00	10	50.00
19	Pepsi		2.50	4	10.00
26	Grand Natori		9.00	1	9.00

Total Price: \$94

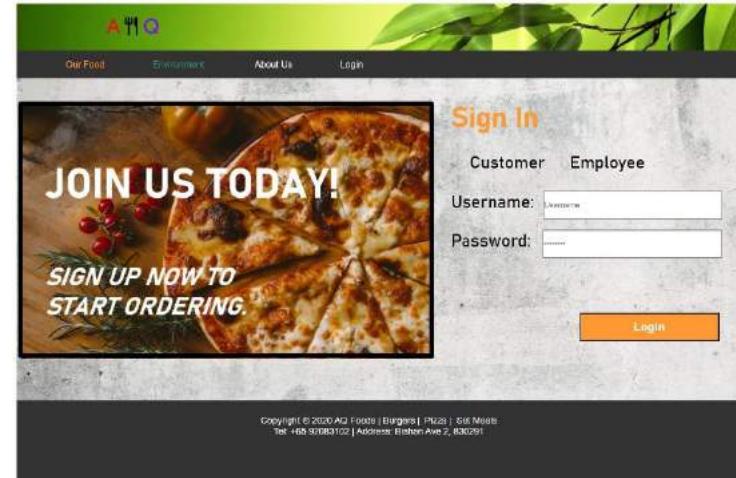
PROCEED

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Confirming order, Checkout page



Guest viewing menu



Login screen for Customer and Employee

Welcome Lim Jun Jie

Role: Manager

7/2/2020 12:44:07 AM

My Profile

Employee ID:	2
Employee's Name:	Lim Jun Jie
Employee's Username:	jun.jie2711
Employee's Email:	jun.jie2711@hotmail.com
Employee's Contact:	81868605
Employee's Position:	Manager

Profile Picture:

Edit

CLICK HERE TO EDIT PROFILE PICTURE

CLICK HERE TO CONFIGURE THE ITEMS PARTICULAR!

CLICK HERE TO VIEW AND EDIT CUSTOMERS PARTICULAR!

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Profile Screen