

DEAKIN UNIVERSITY

CAPSTONE TEAM PROJECT (B)

ONTRACK SUBMISSION

Company Progress Report

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April 20, 2024





CHAMELEON

FOR OUR SMARTER WORLD

Task 6.1P

Chameleon



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Executive Summary

Our Mission

Given the complexity of energy application needs today, IoT systems are being designed to address a wide variety of existing problems.

At Chameleon, our mission is to research, create, test, document and deploy IoT-based solutions to enhance life through the application of smart city technologies. Including the building of smarter cities, homes, transportation, and energy management systems.

Our Structure

Four active company divisions,

Chameleon Security (CS)

City of Melbourne Open Data (MOP)

Chameleon Website (CW)

Electric Vehicle Adoption Tools (EV)

Chameleon Security

The Chameleon Security Project engages with the City of Melbourne Open Data Project (Melbourne Open Playground – MOP), Chameleon EV and the Chameleon Website Project, to perform security testing, development of security guidelines, and recommendations, to guide the other projects in the security of their systems and applications. The Chameleon Security Project was formerly engaged under the MOP Project, however, has been separated to operate as its own entity, to enable security testing of all projects that fall under the Chameleon company.

City of Melbourne Open Data

The City of Melbourne Open Data partners with The City of Melbourne to support knowledge expansion and application development among businesses, researchers and software developers. Using an educational platform 'The Melbourne Open Playground' (MOP) explores the potential applications of Open Data, aligning its initiatives with Melbourne's Smart City strategies.

Chameleon Website

The Chameleon Website is a user-friendly and informative gateway to the Company, it targets potential clients and the public to showcase the company's initiatives and achievements. The website continues to evolve aimed to enhance user experience and engagement using responsive design, mobile optimisation and SEO strategies. These objectives aim to communicate Chameleon's vision and projects to create a dynamic and secure online presence.

EV Adoption Tools

The EV Adoption Tools project is dedicated to promoting the increased adoption of Electric Vehicles (EVs) in Australia. This initiative supports the reduction of fossil fuel dependence, decreases greenhouse gas emissions, and positively impacts the environment.

Leadership Team

Acting Director: A/ Prof. Chathu Ranaweera (Associate Professor)

Chameleon Security

Communications Lead: Nathan Tien Le Nguyen

Code Lead: Kartik Kaushik

Coordination Lead: Theodore Savvidis

Leaders: Theodore Savvidis, Kartik Kaushik, Nathan Tien Le Nguyen, Miriam Azmy, Hamish Andrew Burnett, Pascal Traczewski, Shuodong Xing, Su Myat Win

City of Melbourne Open Data Project

Project Leads: Mollie Fernandez, Te' Claire, Alison Collins

Data Science Team Leads: Rhutavaruni Kharade, Harley Ngo

Web Development Team Leads: Kasey Wu, Sakif Hasan

Leaders: Kashish Bansal, Madhuvaishali Thakoor, Mukul Singh, Samiha Haque, Sim Simranjit Singh, Hoang Duy Vu, Thomas Rostov, Suraj Kuwar, Adrian Thilina Weerasinghe, Akintomiwa, Katrine Chan

Chameleon Website

Leaders: Chris Hole, Matheesha Nirvan Palliyaguruge, Varun Chaudhary, Umair Mohamed Feroze

EV Adoption Tools

Project Lead: Akshit Singh

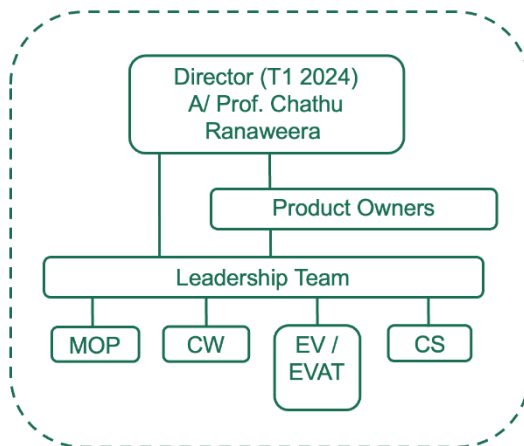
Data Science Team Lead: James Davies

Web Development Team Lead: Akshit Singh

Mobile App Development Team Lead: Kaelen Mackinnon

Leaders: Akshit Singh, Kaelen Mackinnon, James Davies, Yuvraj Singh Sekhon

Company Structure



Mission & Vision

Our goal is to use IoT technology to create and implement smart city solutions that are efficient, sustainable, and improve energy use, transportation, and urban living.

@Chameleon-Company

Trimester 1 Goals and Objectives

This trimester Chameleon seeks to continue the development of its independent security team, to strengthen the security of all digital products within Chameleon helping to quickly identify and secure any potential attack vectors. The City of Melbourne Project seeks to develop more use cases and implement existing use cases and get the site up and running. The website team seeks to further enhance its UX and design (focusing on the mobile experience) and implement multiple backend services (such as Firebase and Mailgun) and transfer from AWS to GCP hosting solutions. The EV Adoptions Tools project seeks to develop a website and mobile app that can support multiple use cases including optimisation of EV charger locations and EV route planning aligned to user preferences.

Projects Overview

Chameleon Security

Overview

The Chameleon Security team intends to operate independently within the company with a dedicated focus on strengthening the digital security of its projects. This trimester the security team aims to align its work with the Melbourne Open Data Project (MOP) and Chameleon Website Project. The overarching goal is to proactively identify and address potential vulnerabilities, as shown through different initiatives. E.g. SQL Injection testing, compliance audits aligned with national and international security standards, and the execution of a variety of security attacks, (including ARP Spoofing, Header Injection attacks, and Directory Traversal attacks, on both the Chameleon and MOP websites).

As a team, we will be working closely with the Chameleon Website Development team to ensure high-quality security, and through this collaboration, it will improve the overall project where possible. The security team will aim to not only work on the security of the projects and web pages of the company, but also encourage the development of the wider project, through documenting findings, and using problem solving, to aid in the growth of the wider project landscape. Ultimately, this will also aid in the project handover at the end of the eleven weeks.

Goals and Objectives

The project includes the development of a training program which includes the usage of the security applications, identifying potential vulnerabilities and ensuring the platform's robustness, to ensure that the platform concretely demonstrates the practical application of open data. It is designed to meet the needs of a variety of stakeholders, including industry professionals, government agencies and academic researchers. The aim of this project is to find the different vulnerabilities in the Chameleon and MOP websites, by usage of the different attacks such as SQL Injections, XMAS scans etc, while the long-term aim is to encourage the use of data and provide innovative and informed solutions to contemporary issues within Melbourne City Council.

Aims This Trimester

The aim for this trimester, is to continue the smooth transition of the security team from the other teams. While we will still set out to perform security tasks on behalf of the other teams, we will also focus on performing our own tasks as well. Following this, the aim for this trimester, is to perform security testing, develop security guidelines & lastly, to recommend other projects, security features & vulnerabilities that the development teams should be aware of.

Deliverables

- Collaborate with City of Melbourne (MOP), and Chameleon Website teams, to create a Security page on both websites.
- Perform Authentication and Authorisation testing, to ensure only valid users are allowed to access the website.

- Contact HardHat Company, to enquire about collaboration between companies.
- Document current security attacks and how Chameleon can harden web applications to stay protected from cyber-attacks.
- Develop various security policies and procedures. This includes documenting various policies, covering Privacy, IoT, Intellectual Property, Remote Access, Security Awareness and Training, Access Control, Network Security, and Incident Response plans.
- Complete Security auditing, and Compliance Auditing, in line with national and international security standards.
- Inspect DNS configuration on the Chameleon website, and address security vulnerabilities.
- Conduct and document Cyber Security Risk Assessment and a Third-Party Component Assessment.
- Execute SQL injection attacks on the Chameleon, and MOP websites, to ensure the database cannot be manipulated.
- Carry out ARP Spoofing attack on the MOP website and document findings.
- Perform Input Validation for MOP website, to detect, and prevent malicious input.
- Perform Directory Traversal attack on Chameleon website, to prevent other files on the server from being accessed.
- Perform Port Scan on both MOP and Chameleon websites, to identify open ports which can be used for malicious activity.
- Perform Header Injection attack on Chameleon website.

Mid Semester Update:

Since commencing the Security project this term, we have made strong progress on achieving the deliverables. As the MOP website is up, and running, testing has been performed against both the Chameleon website, and the MOP website. With the MOP website hosted, there is an increased attack surface, which the Security team can test. This ensures that there are enough tasks for everyone to perform. A range of tests and reports have been completed, targeting both the Chameleon, and MOP websites, including Access Control Policies, Cross Site Scripting, DDoS attacks, Directory Enumeration, Security Proposals for the EV website, Automated Vulnerability Scans, Nessus Scans, User Input Validation, and XMAS/NULL/SYN Port Scans.

Security Project Team Members:

Name	Student ID	Contributions week 1-5
Leader Miriam Azmy	220268915	These past weeks I have completed a business continuity plan that allows Chameleon to continue to function as a business despite any security breaches. Additionally, I have completed a compliance and privacy policy document for the other company's teams to apply in their work and maintain best practices. I have also been heavily involved in leadership and development for the team. Ensuring everyone can up skill and work on various technical and team skills. Focusing on reaching out to other team members and other teams to better produce their work for its specific needs. I plan on continuing to work closely with

Name	Student ID	Contributions week 1-5
		other leaders in security and the teams of Chameleon to maintain the company and its objectives. My own tasks coming up involve a security questionnaire for the wider teams and compliance audit for the Web/MOP/EV teams.
Leader Hamish Andrew Burnett	222282244	<p>Over the past five weeks, I have completed a range of tasks, including attending, or watching recordings, of all weekly meetings, and all OnTrack tasks required. I have performed several leadership tasks, including assisting juniors with onboarding, contributed to the completion of group tasks, watched the leadership meetings (live, or recorded), hosted the weekly security meeting for week five, and took the Minutes of this meeting. As a senior leader, I have also regularly answered questions from the junior students, to assist them in their development.</p> <p>In recent weeks, I have performed upskilling on SSL, and checking the validity of SSL certificates, which are used to secure websites. I then checked the validity of the Chameleon website's SSL certificates. It was found that the certificates were valid, however, they could be enhanced, to provide further security. A report was produced and published.</p>
Leader Nathan Tien Le Nguyen	221365574	<p>In the first following 1-2 weeks, myself & Theodore have been working together to establish the security team & how we should prepare for the first 1 –2 weeks, in this overall time we have used leadership skills & worked with the other mentors in weeks 0 too now, we have organised what days to establish meetings with the security team & introduced ourselves. I have been working on upskilling on leadership. I have worked with Theo with leadership task. I did a presentation introducing the security team to the director. In the following weeks 3-4 I worked on upskilling on DDoS. I have also written 2 documents explaining (theory of DDoS) & what procedures to do in the case of a DDoS attack. I have just finalised my attack document & will now be working on during week 6 the finalisation of document on theory.</p>
Leader Leon Jude Netto	218723755	<p>In weeks 1-3, I commenced project planning and conducted research and upskilling on various systems around the CI/CD pipeline for the Chameleon website to develop a Digital Preservation Policy. The policy addresses vital components of the Chameleon infrastructure, namely the Google Cloud Platform, Docker, and GitHub. The policy encompasses versioning protocols, backup procedures, compliance standards, documentation and auditing strategies, ensuring a holistic approach to digital preservation. In week 4, I finalised the Digital Preservation Policy. I also started to research and upskill on Clickjacking attacks and how this can be conducted to exploit the Chameleon website. This is currently on-going and the next task I aim to complete. In addition to my security projects, I remained actively engaged in our team's weekly meetings, offering support to team members as needed.</p>
Leader Theodore Savvidis	220562771	<p>Set up the initial start of the Security team by creating group chats, organising meetings and sending out the welcome message and other comms to the team. As a leader, led the team through our weekly meetings every week. Set up the Trello Board with new cards Organised the GitHub. Answered any questions they had via Teams and our</p>

Name	Student ID	Contributions week 1-5
		meetings. Joined and participated in the leader meetings every week. Took the minutes for a couple of our meetings. Assisted juniors with any questions they had and assisted with leading them through these early weeks. Completed my OnTrack tasks for myself and the company wide tasks. Created a questionnaire for third-party assessments. Conducted the third-party assessments. Upskilled in ITL to be a leader and manage. Upskilled by learning and participating in a SC-900 crash course and obtained the certificate. Conducted a DDoS test and report on the Chameleon website.
Kartik Kaushik	221453995	For the first couple of weeks i spent time in figuring out the company Trello board and assigning the tasks in that for me. In the initial phases I guided the juniors as well and completed by documentation for the last trimester as well. I did the API testing for the chameleon website and planning to complete my open port report on the chameleon website which I created in the previous trimester. In the break time I did more upskilling in the tools which are required for finding the vulnerabilities in the chameleon website. My latest contribution is the conduction of the cross-site scripting attack on the website which required a lot of upskilling and tools which I mentioned in my tasks report.
Adam Tay	213149152	First two weeks I spent time going through the company's Trello and GitHub, following up with work and documentations I had done from last trimester, as well as getting organised with what tasks I plan to do. From weeks two to five I have been working on doing research and upskilling for drafting and completing a network security policy and an access control policy. Completed the network security policy in week 4 and in progress to complete the access control policy in week 5, planning to begin research for the next two planned policies to implement for Chameleon, a password management policy and a remote access policy.
Adam Sarin	217342706	During week 1-2 I spent my time going over documentation from the past trimester and reading the reports from my peers at the time that I had missed, as well as practicing my skills via upskilling. I also setup my virtual machines in-regards to testing on the Chameleon Site as well as a self-hosted MOP site which did not end up getting used as a working link was provided for MOP to work on instead. Weeks 3-4 I finished more upskilling as well as worked on, and finished my report on MOP where I re-enacted tests, I had previously run on the Chameleon Site last trimester, this was a cross-site scripting report, and I uploaded it to the GitHub. I also contributed to group meetings with my peers as well as plan to work on another report in which I try to identify file vulnerabilities on MOP.
Adrian Thomas Thaus	222275741	I spent Weeks 1 to 3 familiarising myself with the company's GitHub, Trello, and Teams pages. I had also begun the 'Collaboration with HardHat' task where I brainstormed collaboration ideas, methods of organising, and who to contact before discussing and clarifying my ideas in the next meeting. In this meeting, it was established that our own limited tasks would mean any collaboration would not be viable and so I discarded the task.

Name	Student ID	Contributions week 1-5
		Weeks 4 to 6 I have set up and experimented with the Evoleon app under the 'Vulnerability Test Evoleon APP' task I had created. I am upskilling in this area in hopes of discovering opportunities for testing and outlining specific details for the task.
Ahmad Rahman	222035605	In week 1, I was getting familiarised with the unit and how it worked and deciding on a company. I joined the company in week 2. During week 2 and 3 I started to learn some stuff about the company and my project such as team meetings, task contributions, expectations and everything. I started to understand Trello and GitHub. During week 3, I started to upskill in my task that I chose called Secure Coding Review. I started working on my report during week 4 and finalized it now. Once I upload my review, I will start upskilling on my next task. I aim to finish my next task in the upcoming weeks. I attended all the team meetings actively and discussed with some team leaders as well regarding the project and tasks.
Bipanjeet Singh Sodhi	222093716	<p>Week 1: Got introduced to the team and the 22 resources. I was also added to the Chameleon team's GitHub and Trello boards. I also started having look at the list of backlog tasks on Trello.</p> <p>Week 2:</p> <p>Picked my first task on the Trello board which was on Port Scanning – XMAS, NULL, FIN, and SYN scan. I had initially no idea on the port scanning techniques so I spent this week upskilling via YouTube and other useful articles.</p> <p>Week 3 and Week 4:</p> <p>Through these two weeks, I set up MOP website on my virtual machine locally. Then I carried on performing those port scans on the MOP website. Later in the week, I managed to complete my report writing and uploading it on to Teams and GitHub.</p> <p>Week 5:</p> <p>This week I picked the next task on Trello which was on Data retention policies. I have started upskilling on the topic and look forward to completing it by the next week. Also updated my mentor on my ongoing status.</p>
Brock Dylan Alexiadis	220256787	I started by getting familiar with the unit's procedures and choosing my company in Week 1 of the trimester. I set up the necessary resources, like Microsoft Teams, Trello, GitHub, etc in Week 2. I began and completed my first task by Week 3, which was a quick port scan. Next, I started upskilling by studying about Nessus scanning in Week 4 to get ready for my next assignment. Week five I finished off the scanning and reporting on the new MoP website. I'm now upskilling about mobile phone security policy in Week 6 to get ready for my next assignment.
Dan Blair	223215521	In weeks 1-3 – I onboarded to the Chameleon company, familiarised myself with objectives, resources, processes, and the security team. I designed and developed the Chameleon IoT Policy Document. Additionally, I researched cybersecurity practices, installed Oracle Virtual Machines and established a local hosting environment with Kali for penetration testing the MOP website. I also completed Git and GitHub upskilling.

Name	Student ID	Contributions week 1-5
		<p>In week 4 – I conducted vulnerability scanning of the MOP website using Nikto as well as manual observation. I also performed port scanning using Nmap to identify open ports and services, facilitating insights into potential vulnerabilities. In week 5 I have begun developing process instructions to establish IoT client/server using Constraint Application Protocol (CoAP).</p> <p>Throughout the semester I have actively participated in all weekly team meetings. I have taken the minutes for the first three weeks, summarising discussions, outcomes, and action items to support team coordination and communication.</p>
Harry Tierney	221190865	<p>Weeks 1-2 I began by understanding the core of Chameleon and what the overall goal was for each department including Chameleon Security. Week 2 also included upskilling in Git, GitHub and Trello as they were the needed for project division. Week 3-4 was used to upskill and start a Red Team Report, looking to report on some of the vulnerabilities that may be present on the server that hosts the Chameleon and MOP Websites. After performing initial tests, I decided to move towards a research project for the red team report, reporting on current CVE exploits that may affect the server. Week 4 also saw the creation of a phishing campaign that I have built into Week 5, with it being completed at the beginning of Week 6. The Red Team Report will be continued to work on to build a good database of exploits that may affect Chameleon.</p>
Jason Galletti	219594483	<p>Weeks 1-2: Onboarded to Chameleon Security company, introduction to team's resources and overview of tasks.</p> <p>Weeks 2-4: Configured pen testing tools in Kali, commenced working on tasks, vulnerability scanning and manual testing chameleon and MOP application links. that were provided and prepared a report on DNS Security.</p> <p>Weeks 5: Research and investigation into the current infrastructure other teams we are conducting security tests for and begin to prepare a model for future testing that is line with the work other teams are deploying, this includes building a lab in GCP, deploying current code through GitHub actions, and Cloud Run. Review of the Strategic plan and security plans against the current set Trello tasks. Reached out to the Dev team leads for MOP and Chameleon web applications to discuss and understand how they are managing the infrastructure as code with considerations of utilising GCP security features or an external vendors WAF.</p>
Jesvin Sabu	222052497	<p>Week 1: Joined Chameleon Security group and was added to the team group chat, Trello board and GitHub.</p> <p>Week 2: I finished setting up my Kali machine and picked up my first task on Trello board User-input validation on the MOP website. I also did some upskilling on the topic and identified the key objectives of the task.</p> <p>Week 3 and 4:</p>

Name	Student ID	Contributions week 1-5
		<p>I managed to host the MOP website locally on my Kali machine to perm tests on it. In week 4, I completed my report on user-input validation on the MOP website and the finished report was uploaded to MS Teams.</p> <p>Week 5:</p> <p>Started upskilling on my next task SQL documentation, which I plan to complete in the coming weeks.</p>
Julian Holland	220330887	<p>Throughout the first few weeks I have contributed within each meeting and reached out to fellow students in order to familiarize myself with the team. Furthering this, I began the process of upskilling, and considering my options for contributing to the team. After week three I had completed my first practical task, which was a security vulnerability scan of the MOP website using OWASP ZAP. I also created a report for this and uploaded it to the Teams site. Since then I have been working on another practical task with another student, including tactics for a red team attack. Alongside this, I am currently working on launching a slow loris DDoS attack with a report. I will also be hosting the team meeting for Monday the 15th.</p>
Rewniz Patell	221267802	<p>Weeks 1 – 2 I familiarized myself with the Chameleon structure and expectations for the trimester. This included understanding the GitHub processes, meeting times, expectations and expected contributions by students. In week 3 I started upskilling my knowledge and skills for my ‘Security logging and monitoring’ report, and in week 4 I had finished and finalized my report, and submitted it. Additionally, I assisted with SQL injection test on the MOP website. I upskilled for this task in week 3, and then assisted with the report on week 4. This task was a joint report, with another member of Chameleon Security. During week 5, I am aiming to move onto my next project, and upskill for that, before finishing it during week 6.</p>
Tolulope Ebenezer Akin-Dada	223022696	<p>In week 1-3, I undertook a project titled “Getting Started with GitHub” which I had completed. This project talks about how to setup GIT and GitHub repository and use common GIT commands. In week 4-5, I started another project titled “Anomaly Detection”, during these weeks, I did an upskilling on Nmap and Wireshark tools. Upon starting the project, I also did an upskilling on Kali Linux. In week 5, I had been able to install the necessary tools needed for this project, run a network scan on MOP website using Nmap port scan command and was able to extract the MOP test website data packet using Wireshark tool.</p> <p>To be able to get this project completed, I started further upskilling so that I can investigate whether there are anomalies in MOP test website.</p>
Lucas Kocon	218510242	<p>Within the formative weeks before working again at Chameleon, I had studied and familiarised myself the many changes in reorganising since completing my junior capstone work in T1 2023. No upskilling was made during my time as senior as my experience with Trello and GitHub had been practiced outside of capstone.</p> <p>In the first sprint, I offered advice in project local-hosting, as they had noted their demand for local-hosting to perform security testing for the company projects that minimises risk of damage.</p> <p>Alongside offering an old solution for newer members, I was working in providing new technical contributions to what had become an old</p>

Name	Student ID	Contributions week 1-5
		<p>product: I was working in implementing a Content Security Policy for the old MOP website I had advised but was never made, before finding in a mentor meeting that the new MOP website with a new tech stack had been implemented without my knowing about it, leaving my work obsolete.</p> <p>After that, I have been working on Linux-based local-hosting solutions to provide a safe and up-to-date product environment for security testing.</p>
Pascal Traczewski	220493959	In the first 3 weeks I was doing my research on cyber threats and prevention report I'm writing up, looking through specific guidelines used in a cyber security workplace, in the next weeks it has been about putting all the ideas into formats that is understood by non-technical employees and technical employees along with all the work on the report I have been familiarising myself with the different uses of GitHub and the chameleon website.
Sanchit Mahajan	222463578	In the first two weeks I did contribution in the documentation of the chameleon team since was from the another company couple of weeks it took me to understand the basic idea of the company and after that I did the upskilling in the various types of the tools such as the burp suite which is required for the cross site scripting. For the vulnerability testing and the HTTP header analysis on the Chameleon website I completed those sprints in till the week-3. After that I did another upskilling in the different tools which are required for the tasks completion. My efforts include in the contribution of the tasks of the team involving the security protocols and finding the vulnerabilities of the chameleon website.
Shuodong Xing	219368407	In first 3 weeks, upskilling with CyberSecurity. In week4, do a security evaluation regard to MOP website, provide and identify clearly and real v vulnerabilities, XSS attack, transparent embed attack, backend Nginx vulnerabilities. Develop tutorial codes example to show case using Zustand state management tool provide necessary role-based control, and key notes regard to backend, content security policy set up, to check and identify the input request to give a well-prepared proposal. Contacted with Team leader and discuss solution can collaborate the work.
Su Myat Win	222385178	Week 1 and 2 is mainly trying to understand the projects. In week 3, I finished assigning tasks on Trello and GitHub. Those weeks were mostly upskilling and attending leadership and team meeting. During those weeks I researched on the security awareness policy, documented them and created draft policies. In week 4, I started working on security awareness and training policy and finished writing report. In week 5, I planned to do data backup policy and started finding resources and currently implementing and planned to finish soon. After I finish the data backup policy, I will do research on the remaining policies in Trello and start to implement for Chameleon.
Usman Tariq	217034263	Throughout weeks 1–3, I led the development of a detailed guide for installing Kali Linux and aided seniors in preparing a guide for utilising 'Burp Suite'. In addition, I tested the MOP website on a local server and ran a port check to find any exposed ports. In weeks 4 and 5, I advanced

Name	Student ID	Contributions week 1-5
		to performing SQL injection attacks on both the MOP and Chameleon websites, aided by appropriate research. I also ran vulnerability checks and HTTP header analysis on the Chameleon website. Upcoming plans include SSL/TLS vulnerability testing, XSS and CSRF testing, dictionary and file enumeration, authentication, authorisation, logging, and monitoring testing. My efforts include proactive involvement in improving security protocols and hands-on investigation of potential vulnerabilities.
Anena Ghosh	223792694	Week 1 - I had chosen one project which is Chameleon Security. I spent time making notes regarding project. Week 2- I started familiarizing myself with Chameleon and Trello board as these are the main components for the project. I set my Microsoft Teams, started attending meetings. Week 3 to 4- I started upgrading my knowledge by researching about Nessus scanning. I also upskilled myself regarding Wireshark tools. Week 5- I will begin with the research of policies that will be implemented in the Chameleon security so that I can get a better understanding with the final submission.
Aashrith Gunnichetty Krishna Prasad	222453913	First Week: Chameleon Security is the Project I Have Chosen. I took some time to jot down some notes about the project. Since the Trello board and the course material constitute the backbone of the project, I began working on my assignments in Week 2 after reviewing all of the material. Got down to business on my responsibilities. I have finished testing the API and burpsuite, and I am currently in the middle of finishing up my other responsibilities. Since I consider burpsuite and API testing to be crucial, I dedicated weeks three and four to learning as much as I could about these subjects. Additionally, I improved my knowledge of Kali Linux and its associated tools. In Week 5, I intend to acquire a better grasp on the final submission by starting with the outstanding duties and finishing all the others.
George Chia	219600175	Week 1 to 3. I was in the website team. I attended the session but not much was going on as it lacked the leadership, and we didn't settle on the meeting time until week 3. I ended up changing to the security team. It suited my major more and the meeting time met my schedule. I've attended the week 4 meeting before the break. And introduced me to the team. I've asked the leader for updates and links to join the Trello board. I've start upskilling on Git and GitHub and did pull requests to my home PC and had a look at the codes. I've did some research on CLI attack tools based on Kali Linux. It's currently only consisted of a couple of commands. More to be added on in the coming weeks.

City of Melbourne Open Data Project – Melbourne Open Playground (MOP)

Overview

Since 2014, the City of Melbourne has been at the forefront of Open Data in Australia. Collaborating with Deakin, they drive increased utilisation of their Open Data by businesses, researchers, and developers. Integral to their smart cities' strategy, the Melbourne Open Data Playground (MOP) website will feature MOP's operations, security details, and use cases aligned with its goals and objectives.

Goals and Objectives

The project objective is to create an educational platform focused on practical open data applications tailored for various stakeholders, including industry experts, government agencies and academic scholars. The long-term goals are to data mine and track the City of Melbourne's open data, provide innovative solutions to the challenges faced by the City of Melbourne, increase data usage rate, and support urban smart strategies.

Aims This Trimester

The focus is to systematically address each published and upcoming notebook, modifying and updating code to ensure proper functionality when downloaded.

The aim of the Data Science team is to develop an IoT based collection of use cases that align with the City of Melbourne's three predefined areas of interest (Business, Environment and Wellbeing). The team intends to complete an entire set of use cases while also preparing a backlog for the next trimester.

The primary goal of our web development team is to integrate our website with user cases supplied by the Data Science team, enabling easy access through a sophisticated database solution. Additionally, we aim to deploy, rigorously test, and ultimately host the City of Melbourne's website. Our efforts will also extend to enhancing the website's design, framework, and features, ensuring a seamless and engaging user experience.

Another major focus for the project leadership is to update the API for all published notebooks, create new use cases, complete unfinished use cases, propose new use cases, improve organisation in GitHub and MS Teams directories, and generate multiple new use cases for future backlogs.

Deliverables

Data Science Team

- Prepare for the release of completed analysed use cases.
- Create 5 new use cases ideas to ensure the teams continued output.
- Develop 3-8 relevant and valuable use cases.
- Continue to update data and API for early project cases to ensure the latest analysis.
- Replace local files with online sources for older cases to improve analysis reproducibility.
- Continue to update and improve the file systems of GitHub and Teams to provide efficient guidance.
- Continue to complete the backlog in Trello.

Website Development Team

- Publish all completed use cases.
- Ensure the establishment and maintenance of a fully functional website with uninterrupted operational capacity.
- Establish a dedicated database and integrate a webpage on the site where the data science team can seamlessly upload their work.
- Enhance the design system by refining symmetry and incorporating more intricate details. The objective is to develop a purpose-driven design that enhances the overall user experience.
- Conduct testing for the website.
- Deployment of the website and ultimately host the website.
- Incorporate the Next.js framework for streamlined website routing functionality.
- Integrate useful features such as account management functionality and multi-language support within the system.
- Migrate from traditional CSS to Tailwind for a more efficient and straightforward approach to website styling.
- Ensure the website is responsive across various platforms for seamless user experience on desktop, tablet, and mobile devices.

Mid Semester Update:

Data Science Team

- Created 5 new use cases ideas and located archived ideations, updated onto Trello to provide workflow.
- Update of file systems on GitHub and Teams to provide efficient guidance.
- API v 2.1 code update – unlimited records from Melbourne Open Data
- Audit and documentation of existing use cases.
- 34 use cases in progress during Sprint 1 (weeks 3-5)

Web Development Team

- Deployed a version of the website on google GCP.
- Completed the design system and created the mock-ups in Figma.
- Started developing the database [Both firebase and mongoDB]
- Migrated project from react to nextjs.
- Started designing the mobile view of the website.
- Started working on CI/CD pipelines.
- Started developing all the webpages from the design.

Melbourne Open Data Project Team Members:

Data Science Team

Name	Student ID	Contributions week 1-5
Project Lead Mollie Fernandez	217285498	This trimester I have contributed as a leader and in a technical capacity. My contributions include creating a road map for our Data Science Team which visualised all aspects of the capstone unit to help the team to stay on track. I laid the groundwork for the 2.1P Company task by creating a draft document and contributing to its development. I arranged our initial client meeting and organised the first Data Science team meeting, where I briefed newcomers on their roles for the trimester. In Week 3, I expanded our ideation document with four new use case ideas and ensured ongoing communication with the client. I facilitated the scheduling of weekly Data Science team meetings and began work on my use case. By week 5, I had completed my use case, and uploaded it for review on GitHub. I also have actively participated in code reviews and providing feedback on other submitted use cases.
Project Lead Alison (Ali) Collins	222364505	This trimester I have made technical and leadership contributions. I worked collaboratively with project leaders to develop the Trello sprints and Team Delivery Roadmap. I initiated carrying out an audit of existing use case, identifying the way data was extracted and creating summary documentation for this. I have contributed to company tasks 2.1 and 6.1 (notably co-creating the skeleton document for 6.1). I have led by example in meetings - company, project leaders and project meetings; hosting, writing minutes and setting agendas for each meeting type at different times. Started new use case Argyle Square Events Bin Fill Level (pre-processing data, feature correlation and predictive modelling). I have completed upskilling in GitHub and conducted code review in pull requests, giving feedback and approving as necessary.
Project Lead Te' Claire	220320033	As Project Lead actively engaged in all weekly meetings and fostered a collaborative environment, successfully onboarding 45 members, providing mentorship. Significant technical contributions including publishing ODSQL API v2.1 guide for 'export' endpoints resulting in unlimited API requests and developing machine learning guide targeting data pre-processing and predictive modelling. Initiated communication channels across Company, Leaders, and MOP meetings, ensuring clear and efficient information flow. Project management, supporting decision-making processes, overseeing use case development (Trello management across divisions), GitHub branch management, and MOP task coordination (Chameleon Tasks 2.1 and 6.1). Continuously leading by example participating in all weekly meetings (Company, Leadership, MOP, Mentor) as an active participant and volunteer (hosting/ minutes/ setting agenda). Completed New Use Cases (pre-processing/ cleaning data, analytics, predictive analyses model, dashboards) Foot Traffic Analysis (part 1) and Eco-Metrix (previously known Soil Analysis). Commencing Foot Traffic Analysis (part 2), ML guide, updating API/ rewrite entertainment location projects (sprint 2), Chameleon Task 11.1.

Name	Student ID	Contributions week 1-5
Data Sci Lead Ha Trang (Harley) Ngo	222100745	I prepared and presented the onboarding presentation. I am mainly in charge with managing GitHub, including cleaning GitHub, checking and approving pull requests. I participated to every leadership/company/team/mentor weekly meetings and hosted one leadership meeting. I kept track and helped closely 2 junior members with their use cases. With my use cases, I am finalizing the last part of "Art-finder" and aim to start my second use case "Mental Wellbeing" starting from Week 5.
Data Sci Lead Rhutuvvaruni Kharade	222021231	In the first two weeks helped other leaders with onboarding presentation and completing the assigned tasks. Worked alongside Alison and other leaders to clean and reflect new changes in Trello. Helped with approving requests on GitHub. Actively participated in leadership/company/ DS team/mentor weekly meetings. Helped a few students with basic onboarding questions and tried to resolve their queries. Helped a few juniors with navigate various chat groups.
Madhuvaish ali (Vaishali) Thakoor	218335436	During the initial weeks, I dedicated time to familiarize myself with onboarding materials and attended GitHub and Trello sessions to upskill. My primary focus was on developing the support services use case, which involved analysing datasets related to support service locations, bus stops, and tram tracks. I used data wrangling techniques to handle missing values and irrelevant data, transforming it into a usable format for analysis. Additionally, I applied clustering algorithms such as KMeans to identify clusters of support services in different areas. Integrating heatmaps, I visualized the density of services, providing insights into areas with concentrated services and potential gaps in coverage. As a junior leader, I took minutes for leadership meetings in both Week 3 and 4, gaining valuable insights into the team's needs. I maintained strong communication within my team by actively participating in all team meetings and engaging proactively.
Thomas Alexander Rostov	221260666	From the start of the trimester, I have been familiarizing myself with the company structure/objectives and technologies used, such as GitHub/Trello, and have also been upskilling where needed. I've read over the existing documentation and past submissions, to get a better understanding of what's expected. I have also attended all company/leadership meetings and have taken the minutes for a meeting in week 5. As for my technical contributions, I'm currently working on an individual use case, analysing pedestrian movement based on factors such as time, temperature and humidity. So far, I have cleaned and merged the datasets that I'm using and performed visualizations to get insights. I have prepared it for ML and am experimented with multiple models and parameters. I am also working on making a more interactive use case, using widgets which I am experimenting with and plan to implement.
Sachitha Sadeep Kasthuriarac hchi	223270464	During the past six weeks, I have significantly enhanced my project management and version control skills, particularly with GitHub and Trello. I utilized a variety of learning resources, including online tutorials, webinars, and community forums. This effort included studying past GitHub repositories to align with my team's work dynamics. With guidance from senior team members, I effectively set up GitHub branches and cloned the Melbourne MOP repository for my

Name	Student ID	Contributions week 1-5
		current project, "Smart Bin Optimized Waste Collection Route." This project, developed using Jupiter Labs, has involved importing and pre-processing data, such as dropping and renaming columns. I have also begun the initial phase of data analysis and visualization, laying the groundwork for more advanced phases of the project. This period of intensive learning and application has been crucial in progressing my project effectively.
Samiha Haque	223935632	Throughout weeks 1 to 5, I familiarised myself with the onboarding resources while simultaneously upskilling in GitHub, Git commands, and Trello. My use case was Public Event Planning, where I analysed three datasets on event details, parking locations, and banner placements. Thorough data wrangling, I transformed categorical locations into geolocations and vice versa, scaled the datasets, addressed missing data, and used KNearestNeighbors to detect 8 potential event locations based on event names and 5 closest parking spots and promotional banner locations. I also used folium to visualise the combined results and created a pull request on GitHub. Additionally, as a Junior Leader, I actively participated in all weekly meetings, ensured the timely submission of Company Task 2.1P on OnTrack on behalf of the juniors, created new use case Trello cards, took meeting minutes during the Week-4 Data Science team meeting and effectively communicated and collaborated with my team members and leaders.
Akintomiwa James Aremu	222497446	For the past six weeks, I've embarked on a journey of continuous upskilling, delving into various resources to broaden my knowledge. I've created time for myself in learning about GitHub, API utilization, Trello, and delved into the basics and core of machine learning. This has empowered me to tackle real-world challenges. For instance, I'm currently working on a project from Melbourne Open data, focusing on optimizing bus stop locations and pedestrian facilities, aiming to alleviate congestion and foster a healthier urban environment. Leveraging my technical skills, I'm currently trying to integrate machine learning techniques, particularly clustering, with spatial analysis to extract actionable insights for urban planning. Currently, the project stands at an impressive 80% completion. Moreover, I've actively contributed to team endeavours, assisting colleagues in setting up their Git environments and creating visualizations for stakeholder presentations. This journey has not only expanded my skill set but also enriched my collaborative spirit within the team.
Dinuk Nadishan Kariyawasam Senadheerage	223237065	During the trimester, I've immersed myself in a project aimed at enhancing pedestrian safety in Melbourne's urban areas. Through extensive self-guided learning and collaboration with senior team members, I've honed my skills in project management and version control tools, particularly GitHub and Trello. With a focus on the "Enhancing Pedestrian Safety" initiative, I've made significant progress in data pre-processing and analysis using Jupiter Labs, laying a solid groundwork for further optimization. In addition to my project work, I've actively participated in data science team meetings, contributing insights and ideas to ongoing discussions. Furthermore, I've created a

Name	Student ID	Contributions week 1-5
		comprehensive guide on securely storing API keys, ensuring data security in our projects. Moreover, I've been committed to supporting friends and colleagues in their upskilling efforts, sharing my expertise on leveraging GitHub and Trello effectively. These past weeks have been characterized by intense learning, growth, and tangible advancements in both technical skills and collaborative teamwork towards the goal of improving pedestrian safety in Melbourne's urban landscape.
Katrine Kit-Ying Chan	221375343	Over the past 6 weeks, I navigated the onboarding process, utilising provided documentation to set up my workspace and enhanced my skills with GitHub, Trello, and the Conda Environment. I dedicated time to understanding Melbourne's City vision and goals, and previous use cases, ultimately selecting the bird habitat use case for further exploration. To support this, I familiarised myself with API and obtained relevant data from the Melbourne Open Data Website. Subsequently, I undertook pre-processing of the initial dataset and conducted preliminary data visualisation to extract insights. Moreover, I enhanced my skills in several libraries which I had not used before, including Folium and GeoPandas. Additionally, I contributed to team efforts by volunteering to take minutes during our week 3 DS meeting and assisting and submitting Task 6.1P for the juniors.
Venuka Hirusha Wijenayake	223048223	Over the past six weeks, I have diligently focused on enhancing my skills in project management and version control tools, specifically GitHub and Trello. I utilized resources such as YouTube and educational forums to deepen my understanding of these platforms. During this period, I thoroughly reviewed existing use cases and GitHub repositories to familiarize myself with our team's projects. With valuable guidance from senior team members, I successfully managed to clone the Melbourne MOP repository and created my own branch to work independently. My project involvement included selecting and initiating a new use case titled "Tree History." Utilizing Jupyter Notebook, I imported datasets through APIs and completed the data pre-processing steps, such as dropping and renaming columns. Currently, I have finished the first part of the data analysis and visualization, marking significant progress in my project work.
Adrien Auguste	214528565	My Contribution: I overcame early issues whilst using API by applying two methods including SLQ queries. I used python to interrogate the dataset and used correlation methods to understand the relationship between the features. I performed feature engineering on new dataset, aiming at calculating the number of new cafes used afterwards during deep learning. I started working on deep learning algorithms and iterated through different activation functions to return the best model. I applied visualisation to check the predicted outputs and target.
Sheng Tha (Tharusha) Cao	222079586	Successfully done all onboarding, found and started use case regarding air pollution, helped multiple students with onboarding, started working on my use case (Pre-processing of first data set was done) this included recommending features not needed, fixing null datapoints, standardization and normalization, and visuals on the scaling done. started pre-processing second dataset. Created correlation between features and created linear regression model, done evaluation and now

Name	Student ID	Contributions week 1-5
		trying to inverse scale. Tested regression model with validation set. added some visuals to see patterns, use case is almost done with the final learning models and evaluation. I also started a company use function list with useful functions to be added to use cases to make it easier for team members.
Wing Sum (Carissa) Wong	222104491	Over the past five weeks, I have been fully committed to gaining a comprehensive understanding of the company's goals, objectives, and our responsibilities for this trimester, through reviewing all handover and onboarding documents, as well as actively engaging with upskilling videos. I have concentrated on enhancing data sourcing and devising new analytical perspectives to address challenges related to data continuity. By exploring new methodologies introduced by the team, I have successfully loaded the full dataset using an API. I have also completed the data cleansing and aggregation processes which aimed at minimizing the redundancy of categories that convey similar meanings. Furthermore, I have created several visual representations of our findings, highlighting the density and distribution of cases across different categories and time periods, and elucidate the relationship between the volume of visitors in Melbourne and service requests in the 'Waste, Street Cleaning, and Litter' category.
Daljeet Kaur	222049265	In last five weeks, I have completed the onboarding process successfully, I engaged fully in the weekly meetings with the MOP groups to understand myself with the team and projects we are working on. Initially, I faced some challenges which caused a backlog, but gradually I understood and updated myself with the team's objectives and the progress of our chameleon project. I gathered information from both seniors and my project team members to catch up. Then, I focused on enhancing my skills in data science related topics to understand and work on my use case. I began by learning the basics of GitHub commands and understanding the workflow in Trello, attending sessions to improve my proficiency in both. I researched and explored into datasets from the City of Melbourne, I concentrated on analysing various datasets. My goal was to analyse these datasets to better inform stakeholders and contribute to decision making and strategies for urban management and enhancement.
Mai Chi (Jamie) Hoang	222187106	Over the past five weeks, as a senior just joining the company, I have delved into company handover documents, reviewed the company objectives, and researched published use cases to gain a general understanding. In the initial two weeks, I collaborated with other seniors to discuss the Real Estate use case. However, due to scheduling conflicts, we are unable to arrange mentoring sessions, prompting us to work individually. Subsequently, I created a new use case, Banner Poles Booking, and completed Sprint 1 tasks which included combining datasets, pre-processing data, and creating interactive maps. I thoroughly examined API documents to familiarise myself with the necessary APIs for collecting the required dataset. Additionally, I completed a Kaggle course on Geospatial Analysis, intending to apply the knowledge gained to the use case.

Name	Student ID	Contributions week 1-5
Manasa Nagaraja	222586756	For the Last Five Weeks, I have successfully completed all the onboarding process, I joined the project with a clear understanding of the mission and the Chameleon Project's commitment, I involved in with active participation in mentor and project meetings, where I gained insights about my use case and tasks and started to Engage with teammates and seniors, I attended sessions on GitHub and Trello to enhance my skills. I explored datasets from the City of Melbourne, particularly focusing to analyse the Impact of employment on housing prices by using the dataset. I engaged with team members and Seniors to understand loading the dataset using the API, I later took the initiative to demonstrate leadership qualities by sharing my knowledge and expertise with my project team members through conducting regular meetings and presentations, and by continuous learning within the project seniors and mentors, and I have tried using various visualization techniques and performed data transformation to facilitate analysis, appropriate data transformations.
Prathibha Nishadini Kandawala	222440671	Over the past 6 weeks, I encountered some challenges while setting up the environment, but through perseverance and determination, I successfully committed to the project. During this time, I took the opportunity to refresh my proficiency with Trello, actively participated in DS Team Meetings, and engaged in productive mentor meetings. These experiences allowed me to enhance my skills and knowledge in various aspects of our project. Additionally, I dedicated time to reviewing multiple use cases and ultimately selected the real estate use case to focus on. In my selected use case, I've utilized two datasets and performed thorough data pre-processing to ensure the quality and integrity of the information. This involved cleaning the data, handling missing values, and dropping unnecessary columns. Additionally, I conducted initial exploratory data analysis, including visualization techniques, to gain insights into the underlying patterns and trends within the datasets.
Yash Krupanand Daware	222482648	In the past few weeks, I completed onboarding with the Chameleon and Data Science teams, set up my local environment including GitHub and project repositories, and upskilled with tutorials on Python techniques and GIS. I also assigned myself a new use case focusing on housing prices and landmarks and began pre-processing data while defining key analysis parameters.
Arjun Jamwal	222300263	My contributions to the project were crucial in several important areas. To ensure effective handling of big datasets, I first led the building of strong data processing pipelines by streamlining the data input, transformation, and analysis procedures. I also used statistical methods and sophisticated machine learning algorithms to extract useful information from the data, facilitating predictive analytics and well-informed decision-making. In addition, I was instrumental in creating and putting into practice efficient data models that allowed project data to be stored in an orderly and productive manner. My proficiency with data visualization improved the project's deliverables as well because I was able to effectively convey results and trends to stakeholders by using eye-catching representations. All in all, I made

Name	Student ID	Contributions week 1-5
		substantial contributions to the project that improved its analytical capabilities and opened the door for data-driven decision-making, which eventually helped the project succeed.
Bao Ngo	220313209	Over the last four weeks, I encountered several challenges with the initial project steps, resulting in my absence from several team and mentor meetings. Consequently, I haven't fully grasped the project's workflow or met its requirements adequately. Moving forward, I'm committed to catching up with both my mentor and senior team members to enhance my performance and contribute effectively to the project.
Francis Albert	223045645	In the last five weeks, I have successfully navigated the onboarding process, set up our GitHub repository, selected a use case focusing on biodiversity in Melbourne's parks and done the pre-processing for the dataset. This project explores the distribution and population dynamics of butterflies and bats, aiming to understand the factors influencing their population in these urban green spaces. Additionally, I am contributing to the Chameleon team by volunteering for documenting, specifically taking minutes during our week 6 Committee of Management (CoM) meeting. My aim for the following weeks is creating a visualization and completing the use case.
Ramandeep Singh (Ghuman)	222196318	Initially unfamiliar with data science, I, as a cybersecurity expert, found myself delving into Jupyter notebooks and their environments during my first week. This led to defining the report's scope in the first week, followed by a deep dive into data science technologies and methodologies in the second week. I committed to upskilling, exploring tools like Pandas, GeoPandas, and Matplotlib for analysis and visualization. By the fourth week, I began organizing tasks, including data retrieval from Melbourne's open data portal. Applying newly acquired skills, I cleaned the data and employed spatial joins to uncover relationships, such as between canopy scarcity and water flow routes. Progressing into the fifth week, no concrete conclusions emerged, highlighting the need for further analysis and refinement of collected data. This iterative process would extend into subsequent weeks as we strive towards reaching definitive conclusions.
Ruofeng Qiu	222364873	Over the past four weeks, I began by identifying what I wanted to accomplish this semester in week one, completing the two backlogs I created last semester. However, in week two and three as I began my work, I realised that I may have used the wrong method of data analysis during the previous term, and in week four my suspicions were confirmed. This undoubtedly meant that everything I had done before had to start all over again. So, I used my holiday time to rework the project logic and start again.
Thomas Warren	223053304	My focus for this trimester has been: <ul style="list-style-type: none"> - Onboarding and mentoring: I've helped some juniors and senior ideate some use cases and provided encouragement and advice for proceeding. - Scope Refinement: Deciding the hypothesis and direction of inquiry for tree canopy changes and development activities; - Data cleaning and pre-processing: focussing on establishing the

Name	Student ID	Contributions week 1-5
		<p>geographic distribution in a uniform way;</p> <ul style="list-style-type: none"> - Data visualisation: mapping was a challenge as the tree datasets were very large. This was resolved by observing only the datasets near the relevant sites. - Data analysis: through operations on the joined datasets, I was able to quantify the tree changes near development sites from 2011 - 2021. The results from this were mixed, leading to the conclusion of a null result. - Clustering and prediction: Further analysis using K-Means and other clustering algorithms (SVM and t-SNE) did not produce any actionable insights. The full discussion is in the use case.
Vaibhavi Jayant Deo	222525978	<p>I joined the team in week 2, since then, I spent time going through the meeting onboarding documents. I familiarised myself with the expectations of this project term. I then paired up with a teammate for the project. I tried working out what my use case will be, went through a couple of iterations of using various use cases and seeing how open data sets will work with my potential use cases, then finalised my use case. I did literature review for the use case. I focused on upskilling for the project. And by week 6 worked on my use case and published my changes for the use case. In coming two weeks I shall work on improving n my use case as per the guidance given by my mentor.</p>

Web Development Team

Name	Student ID	Contributions week 1-5
Web Dev Lead Sakif Hasan	222355053	<p>In my leadership role, I got the team up to speed on the project by facilitating onboarding and meetings. I also improved project clarity by updating GitHub documents. To spark innovation, I led a team brainstorming session. I kept stakeholders informed by presenting weekly progress to the company board. Additionally, I containerized and deployed the website on Google Cloud Platform, ensuring smooth operation. I spearheaded the project's backend architecture, including testing, deployment automation through CI/CD pipelines. Furthermore, I presented the backend and roadmap to the client during a MOP meeting. Finally, to ensure a seamless user experience in the new website, I analysed the interactivity of the old site's test cases.</p>
Web Dev Lead You (Kasey) Wu	222482192	<p>In the first four weeks, I significantly contributed to our project's progress and team cohesion. I led the recruitment efforts, onboarding new students, and enhanced team coordination through organizing meetings, creating polls, and sending reminders. My responsibilities also extended to maintaining operational health by reviewing company files and taking diligent notes during meetings. On the technical side, I resolved GitHub issues, and migrated our entire website to the Next.js framework, including all pages, common parts and search bar. I played a key role in task management by hosting weekly meetings, developing an ideation list, and streamlining task allocation with a custom Excel</p>

Name	Student ID	Contributions week 1-5
		sheet for team members to indicate their interests, further facilitating project development through Trello. I have also contributed to recruitment presentation, group tasks and client meeting.
Ashok Bishowkarma	222365243	In first four weeks I have watched team meeting recordings and lectures recordings. Since the timing of team meetings was not suitable for me, I had to take separate meetings with my mentor and team leads. I did upskilling in web development specially Next.js and did some research in frontend development in Next.js. For me one the most challenging thing in these weeks was to keep up with the meetings and status of the project. Some other upskillings are newly adapted Tailwind CSS."
Kashish Bansal	222437163	I've been actively involved in mentoring and leading our design team for our web project. Over the weeks, I've guided junior members through onboarding, managed group tasks, mentored them in the submission process, researched innovative website concepts, crafted wireframes for critical pages, and organized design tasks on Trello. As I transitioned into the senior design lead role in week four, I facilitated team and leadership meetings, presented wireframes, utilized polls for decision-making, updated Trello boards, and coordinated our work on Figma for finalizing designs. Week five saw me hosting design meetings, refining Figma designs, strategizing mobile views, collaborating on prototypes, and drafting a comprehensive document detailing our project's design approach.
Abanob Mikhael	221429529	I successfully integrated into the project workflow. I attended essential meetings, contributing ideas and learning about the project's structure. To manage tasks, I joined Trello and set up my GitHub workspace for code access. I proactively began studying Next.js to prepare for upcoming development work. This self-directed learning included applying concepts to personal projects for practice. To gain even deeper understanding, I've begun reviewing the existing codebase and project documentation.
Allen Gao	222018485	In the last few weeks, I've increased my project involvement by actively joining team meetings and integrating with the web development team. I've honed my skills in Next.js and become familiar with our repository's file structure to enhance our project's development. Also, I have developed the 'Contact Us' page form by actively communicating with the design team which significantly advanced my technical and soft skills through practical experience and learning new tools.
Pema Lhagyal	219130345	I have watched recordings of lectures and team meetings to enhance my understanding. In particular, I've made significant steps in my understanding and proficiency with Tailwind CSS, Next.js, and GitHub through thorough exploration and hands-on practice. I have also taken on the responsibility of developing the 'About Us' page. Additionally, I've focused on enhancing user experience by ensuring the responsiveness and adaptability of our case study page, catering to diverse devices and screen sizes.
Simranjit Singh	222341387	Till the end of week 5, I attended all the team meetings only second-week meeting I was not able to attend, so I went through the recording along with this I attended the week 1 lecture and gone through special sessions of GitHub and Trello. Imported the complete project onto my

Name	Student ID	Contributions week 1-5
		local machine to get an idea of a previously developed website. Now coming to project contribution initially, I was member of CI/CD (unit testing) where I have to design unit test cases along with performing web-based testing by using selenium, so for that I have started upskilling in selenium using java along with unit testing. Along with this I also started upskilling in CSS so that I can implement some transition effects on the website for better UI/UX interface of the website. At present, Homepage of the website was assigned to me for development, and I have started working on it.
Mukul Singh	222296609	In the first 4 weeks. I have completed my onboarding and assumed my role. I have taken efforts in team meeting and partly hosted a team meeting. Have helped my senior leaders in documentation of team documents. My contribution in the design team are: Flow of the design. Completed Market Research for References Designs. Create a design wireframe and generating Figma mock-ups. Migrate to Figma for enhancing Designs. Finalized design flow. Have set short term goals to reach our Project Goal.
Adrian Thilina Weerasinghe	222481445	I joined the company on the 3rd week. I was able to get familiarized with the whole process of the web dev team. During this process I volunteered to lead the CI/CD team. I also joined the design team as well as the front-end development team. As part of the design team, I came up with the wireframes for the About Us page as well as the Case Studies page. I was then tasked with the final Figma design of the Homepage. For the coding contribution I am tasked with creating the front-end for the case studies page. From week 3 onwards I have taken part in every meeting (web dev, CoM leadership and design). I have taken minutes for week 5 web dev meeting, and I hosted the CoM leadership meeting for week 5 as well. Once the case studies page is completed, I will be making a pull request.
Thisu Nanayakkara	222084424	From the first week of the team meetings of the MOP web dev team, I attended the meetings and I couldn't attend last week's meeting but I was able to watch the recorded session to cover that meeting minutes. In the first weeks, I upskilled on GitHub and enrolled and watched the workshop session of Trello and GitHub sessions also upskilled my knowledge on NEXT.js which is the next technology for me to understand. Also, I was able to complete all the Ontrack tasks that are individually, and not only that I was enrolled in the web design team for making the Login Page which was going to connect after the finalization of the case studies of the data science team. Furthermore, I have been assigned to the Web development of the Licensing Page of the MOP web dev team and working on it.
Hoang Duy Vu	222461495	Over the past four weeks, I've been deeply engaged in various aspects of the project, showcasing my commitment and leadership skills. Initially, I ensured alignment within the team by actively engaging in meetings at both team and leadership levels. A significant contribution was made to the 2.1 Group Task by providing essential deliverables for the web development team. I also took charge of documenting proceedings by recording minutes for both the Team and Leadership meetings. Alongside that, I undertook design responsibilities, making

Name	Student ID	Contributions week 1-5
		wireframes and taking lead in choosing the typography and colour schemes. I developed key elements of the website design, including headers, footers, and mock-ups for case studies, licensing, and privacy pages. Additionally, I tackled design issues independently through leadership initiatives. Concurrently, I showcased technical proficiency by utilizing React to develop the website footer. Demonstrating leadership, I led the CI/CD team, orchestrating pipeline implementation via structured planning and coordination.
Suraj Kuwar	223183442	I joined the company in the second week and immediately began familiarizing myself with the team goals using recordings and actively engaging with the team. As the junior team leader of the front end, I actively participated in all team meetings and even took on the responsibility of hosting. Recognizing the importance of upskilling, I took it upon myself to enhance my skills. Over the past four weeks, I dedicated time to learning React through an online short course. Additionally, I deepened my knowledge of GitHub commands and familiarized myself with the basics of Tailwind CSS. Now, equipped with new skills, I've been assigned the task of completing the header section for our project this week. I'm excited to apply what I've learned and contribute to the team's success.
Chaya Shiv	221071557	I joined the Web Development Team in the second week. To catch up, I listened to the first meeting's recording, checked the Trello board for existing tasks and plans, and cloned the GitHub repository to understand the project better. Since joining, I've been active in all team meetings, volunteered to be a part of the design team and designed mock-ups of multiple webpages and presented them in the team meetings as well. I also shared my mock-ups with the design team and attended the design team meetings to conclude the final design of the website. Following these discussions, I was tasked with completing the Figma design for the Statistics Page. In addition, I have also been tasked with working on and contributing to the design of the website's mobile view.
Linda Li	220452853	Towards the end of the second week, I joined the MOP WD group. I actively participate in weekly team meetings, share my work progress, and understand the team's workflow and project status through Trello and GitHub. At the second meeting, I took the initiative to take the meeting minutes and received valuable suggestions from Kasey. Additionally, I joined the design team and was tasked with designing the Contact Us page, while referring to Hoang's designs for inspiration. During the fifth week's design meeting, I joined the design work of the mobile view of the website. I will continue to work hard and contribute to the team's success.
Thamasha Galahahena Mudiyanse	223043446	Over the past few weeks, I've been actively involved in various aspects of the project, contributing to both the development and testing processes. I've attended all meetings as well. In the initial stages, I diligently familiarized myself with the existing MOP website, identifying areas for improvement and proposing mock-up designs to enhance user experience. Additionally, I volunteered to undertake the CI/CD pipelines part, showcasing proactive engagement with project

Name	Student ID	Contributions week 1-5
		<p>infrastructure. As the project progressed, I focused on enhancing the testing framework, starting with the 'components' folder to ensure critical components function correctly. Despite initial challenges, I successfully wrote and implemented test cases using Jest and react testing library, laying the groundwork for comprehensive testing in subsequent phases. A pull request has been submitted to GitHub as well. These efforts reflect my dedication to project success and continuous improvement.</p>

Chameleon Website

Overview

The website serves as a dynamic platform to not only publicize the achievements and progress of Chameleon but also to engage with stakeholders, including clients, partners, investors, and the public. By providing comprehensive information about Chameleon's overarching goals, values, and accomplishments, the website aims to enhance transparency and foster trust among its diverse audience.

Goals and Objectives

The main objectives of the Chameleon company's website are multifaceted, aiming to provide a centralised hub where visitors can access comprehensive information about Chameleon and its subsidiary companies. This one-stop destination is designed to advocate for the company's mission and promote its services while ensuring the website remains visually appealing and user-friendly.

Aims This Trimester

This trimester, our main goals are to enhance the website's usability and engagement. We'll improve the contact form, add social media sharing buttons, optimise images for faster loading on mobile devices, customise the 404 error page, ensure browser compatibility, enhance accessibility, implement a newsletter signup popup, optimise performance, create interactive tutorials, and incorporate a user feedback mechanism. These efforts aim to provide a seamless and enjoyable experience for all users.

Deliverables

- Enhance the contact form with validation checks and confirmation messages.
- Integrate social media sharing buttons for increased content sharing.
- Optimise images for faster loading on mobile devices.
- Customise the 404 error page to guide users back to main content.
- Conduct browser compatibility testing.
- Make accessibility enhancements for users with disabilities.
- Implement a newsletter signup popup.
- Optimise website performance.
- Create interactive tutorials.
- Incorporate a user feedback mechanism.

Mid Semester Update:

- Fixed the project setup bugs.
- Enhanced the user interface.
- Redesigned the sign up/log in page.
- Deployed the website on a test server with SSL security.
- Modified the navbar.
- Updated the product and about us pages.
- Brainstormed new functionalities for better user experience.
- Refined and update Trello board.
- Created a new support page.

Chameleon Website Project Team Member:

Name	Student ID	Contributions week 1-5
Victor Xiao	220229302	Over the first few weeks, I actively participated in all weekly meetings with the MOP groups to familiarize myself with this new group and their ongoing projects. During this time, I designed mock-ups for several pages of the existing MOP web application, which helped in visually enhancing the project's interface. In parallel, I dedicated myself to learning more about Next.js and MongoDB, two pivotal technologies for modern web development. This upskilling enabled me to integrate Next.js with MongoDB effectively, culminating in the creation of a CRUD (Create, Read, Update, Delete) application on a local server. This endeavour not only strengthened my technical skills but also contributed significantly to the project's development infrastructure.
Akashdeep	223040483	Over the past few weeks, I've made significant contributions to our project's advancement and team cohesion. Initially, I invested time in familiarizing myself with onboarding materials and attended GitHub and Trello sessions to enhance my skills. I've assisted colleagues in setting up their projects by troubleshooting errors and offering ideas for website enhancements. I actively participated in company brainstorming sessions and proposed the development of a Support page for the Chameleon project, which was missing. I've already created and integrated this page into the main project, ensuring consistency with Chameleon's headers and footers. Moreover, I've implemented a query form for user submissions and I'm currently compiling a list of FAQs and solutions. Moving forward, I aim to enhance the page's design with dropdowns for questions, individual pages for each question, and an improved query form, ensuring overall website aesthetics remain coherent and consistent.
Minh Khoi Pham	220189994	During the first two weeks (week 3 and 4) I have been able to complete my upskilling development with git training and web technologies including JavaScript, NodeJS, ReactJS and Docker with GCP as deployment/testing to further enhance my skillset for the project. In week 5 and week 6, I am working on adding more features to the Chameleon Website with Google Sign-In API as well as Thank You Page for new users. During the time, I learned how to work as a team through collaborative weekly meeting with my team as well as stand-up meeting with our mentor. Currently, I am planning to finish my work on both features above to move on to different parts of the website regarding authentication and missing webpages.
Matheesha Palliyaguruge	222506155	First few weeks, I was constantly following up with previous leaders on how to get a jump start on the project but since there was no leaders, I was requested to become a co-leader with few of the members. We had initial team meetings to set up the project from T3 and get the project going. I have worked and followed up with my leadership team constantly on weekly updates on the team and approved pull requests from members. Weekly looked through Trello board to get an idea of the weekly updates. Looked through every missed meeting recordings to be on top of the project. Had discussion with the mentor on how I can improve myself as a leader and how I can contribute more to the

Name	Student ID	Contributions week 1-5
		project. Had discussions with the leadership team about how to allocate best practices into team Trello board. In addition to everything above, upskilled myself about the project.
Kanishk Rajvanshi	222486026	Over the past few weeks, I have been actively involved in many aspects of the project. I have worked with my team members to work on setting up their project. Apart from that I worked on upskilling myself using the materials provided. Coming to technical contribution, I removed the dependency on bootstrap and fixed some bugs hindering the building of the project. In future I plan to work on making the application responsive.
Hao Huang	223304143	Over the past few weeks, I joined the CW project team and have successfully deployed the Chameleon Website on a test environment, complete with SSL certification to ensure secure user connections. I created and implemented a systematic workflow for integrating and testing new code updates from GitHub, enhancing development efficiency and reliability. Additionally, I overhauled the design of the login and sign-up pages, improving their layout, usability, and accessibility, making the interface more user-friendly. These pages have been made fully responsive and consistent with established branding guidelines, providing a cohesive user experience. Moving forward, I will continue to contribute to this project.
Lachlan Exton	219222529	During the past few weeks, I've been going through the GitHub repository to see how the project has changed. Since I am a senior but returning after an extensive break, I've set up my developer environment on my computer and have been upskilling myself using the new materials provided for the project. I then started to work on fixing the issues with the sign-up page but have now begun enhancing other features of the website to better align with the company's values.
Project Lead Chris Hole	220118255	I have contributed by running the team meetings with Umair, and taking minutes for these meetings. I have made small contributions to the website and code for the site. It has been a challenge as the leadership team is predominantly juniors and I had no idea what I was doing in this role for the early part of the 5 weeks. After some help from other team member's I have been able to answer questions and assist team members and learn more about the project and what tasks to work on what tasks we could be looking at in the future.
Pranshul	222196274	Over the past few weeks, I have been actively involved in updating and refining key aspects of the Chameleon website project. I began by modifying the navbar to improve navigation and enhance the overall user experience. This involved reorganizing menu items and ensuring consistent design across different pages. Additionally, I focused on updating the product and about us pages to better showcase Chameleon's operations, projects, and IoT initiatives. Through these updates, I aimed to align the website more closely with our objectives of being an accessible and informative resource for potential clients and the public. Moving forward, I am committed to continuing these efforts and collaborating closely with the team to further enhance the website's functionality and appeal, ensuring it effectively communicates Chameleon's vision and projects to a wider audience.

Name	Student ID	Contributions week 1-5
Kashish Bansal	222206515	I have spent the last few weeks working to make the homepage of the Chameleon website more accessible and user-friendly. In order to accomplish this, I added CSS animations to a variety of homepage components, giving users a more engaging and dynamic experience. The user experience and speed of the website were enhanced by the thoughtful integration of these animations, which guarantee responsiveness on various screen sizes and devices. I also took an active part in team meetings to present these improvements, solicit input, and refine the design in order to better fit Chameleon's goal. I worked closely with the design team throughout this process to make sure that the overall aesthetics of the website were coherent and consistent. I can't wait to add to the project's development going forward by putting new features into place and investigating ways to improve the Chameleon website's online visibility.
Umair Feroze	218118134	I joined the CW team as a web developer and volunteered for leadership due to my full-stack web development and project management skills. I have hosted meetings with the support and assistance of Chris Hole, my co-leader, who ensured meeting minutes were taken. I initiated the brainstorming session to ensure a continuous flow of ideas to develop the existing system due to the lack of resources and limitations in understanding the precise system requirements, to ensure the project kicked off during the period of lag since the project started. This resulted in team building and contributions to the project from many of the team members. I further shared my technical contributions to project setup by clearing all bugs and errors preventing project setup to ensure the smooth running of the project for all team members. I also worked on code review and approving merge requests for my teammates. I will be continuing to work on code refactoring and optimization, and further diving into different initiatives to improve the flow of the project.
Abhishek Chiluka	223046759	Joined the company at the end of 3rd week, started to get familiarize to the team goals and the development progress of what we have developing, gather all the details from the team leader as well. Then started my learning skills which is related to the web development of the team. Started with learning basics of GitHub command and then move on toward learning the next js framework continued to learn the work and then started to involve around the tailwind css which is where we are using currently for development process. Along with gather a good amount of knowledge around the NodeJS and MongoDB. These skills help to easily understand around the project development and work structure of it. Currently in week 5 got assigned to the task and working on of the page to be build.
Seohee Lee	222127941	Upon reviewing the project's codebase, I identified several syntax and logical errors. To address these, I embarked on a self-learning journey, familiarizing myself with the relevant technologies and best practices. My current focus is on implementing responsive design for the homepage to ensure compatibility across different devices. This task involves thorough testing and refinement, along with active collaboration with team members to solicit feedback and resolve

Name	Student ID	Contributions week 1-5
		issues. I've documented all challenges and progress comprehensively. To deepen my technical skills, I explored resources like Dev.to and Medium, and examined GitHub repositories, gaining insights into using React.js, Tailwind CSS, Bootstrap 4, and Node.js for responsive design. These efforts are guiding the enhancement of the homepage's user experience as I plan the final steps of the responsive design implementation.
Varun Chaudhary	222475653	Onboarded the project at the end of week 2. Fixed compilation error during the local env setup in the front-end signup page. Presented the fixed setup environment to a team member on teams. Resolved onboarding queries of the newly boarded team members on call, showcasing team lead skills. Regularly attended leadership, one-on-one, peer, and mentor meetings, providing valuable inputs when required. Upskilled in a new domain of UI, UX and Web UED, learnt Figma tool and showcased the certificates on LinkedIn. Created website mock-ups with advanced features like components, masking, prototyping, and animation, demonstrating practical expertise. Developed detailed notes and checklists to ensure adherence to optimum design principles, showcasing dedication to quality and proficiency in user-centric design. Undergoing React refresher to implement the changes on the website.
Uttam Chandu	220507122	Joined the company chameleon as a web developer in week 1, upon joining the company i have reviewed company objectives and software requirements for the website. I have accessed the codebase of the chameleon website on week 2 and gone through the GitHub. I have joined the Trello board and got into the projects to work on. I have actively participated in group and mentor meetings of the project to know the progress of the company. In week 3 to 5 i worked on upskilling the .js and Npm using various resources on Trello and internet. Intensely working on the repository and fixing the errors in the project setup. Also been working on upskilling about bootstrap and tailwind css to work on Trello tasks of the company. Working on the homepage responsiveness to make the homepage responsive to different screen sizes and devices.
Arman Dhamani	221301447	Throughout Weeks 2 to 5, I actively contributed to the Chameleon project by enhancing my skills in JavaScript, HTML, and CSS through resources like YouTube and team-provided materials. Regular one-on-one meetings with Umair ensured I remained well-informed and aligned with project objectives, providing a platform for seeking clarification and guidance. Additionally, weekly team meetings facilitated collaboration and ensured everyone was on the same page. Taking on the task of refining the sign-in page demonstrated my initiative and commitment, despite encountering challenges due to a late start and initial difficulties. Nevertheless, I persisted, catching up on missed tasks and demonstrating a willingness to learn and adapt. Despite setbacks, I maintained a resilient attitude, continuously seeking assistance and clarification to contribute effectively to the team's success.

Name	Student ID	Contributions week 1-5
Subramanya N S	223113345	<p>Since joining Chameleon Company in Week 3, I've actively contributed to the website project, leveraging my HTML, CSS, and JavaScript skills. Initially, I focused on understanding the existing codebase through documentation review, code analysis, and other company documents. This understanding formed the foundation for enhancements I've been implementing on the resource page.</p> <p>I successfully set up my development environment using Visual Studio Code and cloned the company's website repository from GitHub. I identified and resolved an issue with the website's functionality related to improper linking between HTML and CSS files.</p> <p>My focus shifted to the resource page, where I researched effective design principles and identified areas for improvement, including content, visuals, and overall user experience. I've made progress on these improvements through code modifications.</p> <p>While implementing responsive design features for the resource page, I encountered challenges related to CSS distortion and data display errors. I'm actively troubleshooting these issues. Additionally, I've participated in team meetings, contributing ideas for project enhancement and collaborating on achieving milestones.</p>
Sinan Kilci	222356603	<p>I joined the company in the first week in the MOP Team and shifted to the Web Development Team in the third week. I attended the mentoring and team meetings to catch up with the team. I got in touch with one of the team leaders and had a meeting to get an insight into where we are in the project and what are we doing. I checked the Trello, cloned the GitHub repository, checked most of the code, ran the website locally on my computer and saw its design and how it runs, and checked the documentation in Teams files and the GitHub repository. I have created my account and studied Google Firebase. I contributed to the brainstorming sheet with an idea. I found that the use cases under the Chameleon-Documents in GitHub are lacking about advanced user profiles for website administrators and advanced user groups such as contributor/data scientists and contributor/security analysts so website administrators can't administrate the website and contributors can submit posts unrelated to their fields. I'm planning to create new use cases and user profiles along with their designs.</p>

EV Adoption Tools

Overview

The EV Adoption Tools project was initiated with the objective of promoting the widespread adoption of Electric Vehicles (EVs) in Australia. By leveraging innovative tools and strategies, the project seeks to address key barriers to EV adoption, thereby contributing to a reduction in fossil fuel dependency, mitigation of greenhouse gas emissions, and fostering a positive environmental impact on both local and global scales.

In response to the significant interest of team members in ECVFLO web development, ECVFLO Data science, and Evoleon app team for the project "EV Adoption Tools" has been formulated for this trimester. The project aims to harness the collective expertise and enthusiasm of the team to address key challenges in the adoption of Electric Vehicles (EVs), particularly focusing on forecasting demand for EV chargers and optimizing their locations for maximum effectiveness.

Overview of EV Adoption Tools

EV Adoption Tools encompasses two key projects: ECVFLO and Evoleon, both aimed at facilitating the adoption of electric vehicles (EVs) in Australia. ECVFLO is a multifaceted initiative consisting of web development and data science teams, focused on enhancing the accessibility and usability of EV charging infrastructure. On the other hand, Evoleon is dedicated to developing a new app specifically designed to streamline the process of locating EV charging stations. By synergizing the efforts of these projects, EV Adoption Tools aims to address the growing need for efficient and user-friendly EV charging solutions across the country.

Goals & Objectives

Our primary focus this trimester is to make significant strides in improving the accessibility and usability of electric vehicle (EV) charging infrastructure across Australia. To achieve this, we have outlined several key objectives. Firstly, we aim to enhance the user experience of the ECVFLO website by implementing a chatbot feature capable of addressing user inquiries and providing personalized recommendations for optimal charging locations. Additionally, we are committed to expanding our data resources by adding new datasets focusing on Australian EV charging station information, thereby enabling us to conduct further research and analysis to support the development of EV charging infrastructure. Moreover, we seek to develop additional AI/ML models to streamline EV route planning based on user preferences, thus ensuring a seamless and efficient charging experience. Collaboration between our web development and data science teams is crucial to achieving these objectives, as we work together to deploy machine learning models, improve mapping features, and enhance the overall user experience. Finally, we are dedicated to addressing any challenges encountered during the development of the Evoleon app, exploring the possibility of creating a new app if necessary, and designing a user-friendly interface tailored specifically for locating EV charging stations. By focusing on these objectives, we aim to make significant progress in advancing EV adoption in Australia this trimester.

Aims this Trimester

This trimester, our overarching aim is to propel forward in our mission to promote the widespread adoption of electric vehicles (EVs) throughout Australia. To achieve this aim, we

have set out several specific goals and milestones. Firstly, we aim to enhance the accessibility and usability of EV charging infrastructure by implementing innovative tools and technologies, such as our chatbot feature and advanced mapping capabilities. Additionally, we seek to expand and improve our existing data resources to support the development and deployment of EV charging stations across the country. Collaboration and teamwork are essential to our success, and we aim to foster strong collaboration between our web development and data science teams to maximize efficiency and effectiveness in achieving our goals. Furthermore, we are dedicated to making significant progress in the development of the Evoleon app, ensuring that it meets the needs and expectations of users by providing a user-friendly interface and efficient functionalities for locating EV charging stations. Overall, our aim is to make tangible progress in advancing EV adoption in Australia, bringing us one step closer to a sustainable and eco-friendly transportation future.

Trimester Deliverables

Web Development Team:

- Develop a chatbot capable of addressing user inquiries round the clock regarding company information and usability concerns.
- Integrate the chatbot with a database to store locations and provide tailored recommendations for optimal charging locations.
- Showcase recently discovered EV charging station (EVCS) locations on an interactive visual map.
- Incorporate new EV charging station locations seamlessly into our Google API interactive map.
- Enhance mapping functionalities, EV charging station search capabilities, and visual representations for improved user experience.
- Refine the EVCFO website to enhance its intuitiveness and responsiveness to user interactions.

Data Science Team:

- Expand the EV Charge Location database by adding new datasets focusing on Australian information.
- Develop additional EVCS-related AI/ML models to support EVCS development and promote EV adoption.
- Develop EV route planning based on user defined preferences.
- Conduct further research and exploratory data analysis (EDA) on newfound datasets.

Collaboration (Data Science & Web Development Teams):

- Fully deploy EVCS Machine Learning density clustering models for both Victoria and Queensland on the AI Models webpage.
- Collaborate to ameliorate current mapping features, EVCS search functions, and visualizations.

Evoleon Team:

- Collaborate to ameliorate current mapping features, EVCS search functions, and visualizations.
- Address challenges encountered during the setup of the app's development framework by troubleshooting and implementing solutions effectively.
- Explore the possibility of creating a new app for Evoleon if the issues persist, documenting challenges such as the lack of documentation in GitHub and absence of handover documents for reference.
- Design a new Evoleon app tailored for locating EV charging stations, ensuring user-friendly interfaces and efficient functionalities.
- Conduct thorough research to determine the most suitable technical framework for developing the Evoleon app, ensuring optimal performance and scalability.

Mid Semester Update:

Web Development Team:

- Set up EVCFO website development framework locally: We got the previous version of the website running on our own computers for building the EVCFO website.
- Documented the implementation flaws and hurdles of the backend development, focusing on locating EV charging stations: As we worked on creating the part of the website that finds EV charging stations, we kept track of all the problems we faced and wrote them down. This helps us understand what went wrong and how we can fix it later.
- Developed architectural diagram with chatbot powered by Bot Express (Open AI): We made a detailed plan that shows how different parts of the website work together. This includes the chatbot feature, which uses technology from Bot Express powered by Open AI. It's like drawing a map to understand how everything connects.
- Designed website layouts and user interfaces using Figma for every page and to make the website better: We used a tool called Figma to create the designs for how each page of the website will look and how people will interact with it. This helps us visualize the website before actually building it and allows us to make it user-friendly and attractive.

Data Science Team:

- Update existing CSV files with new and updated EV charger location data.
- Developed a process (python notebook) to source EV location and amenity data and create updated CSV files. Both Open Street Map and Open Charge Map have been tested
- Developed a use case for analysing the location of landmarks/services within Melbourne and identifying locations where an EV charger is not within 1000m of the landmark.
- Developed a PowerBI report that can visualise EV charger locations across Australia and provide filtering capability based on charger information and amenities within 100m of the charger location.

- Developed a concept mapping method to map a route via EV chargers from Origin to destination. Initial concept utilises straight line determination to identify chargers within range of origin.

Evoleon Team:

- Working on solving dependency issues that are popping up from the GitHub files from the packages.json files, it appears that conflicting package versions entered at some point and have yet to be resolved which has been the main obstacle that has been worked around thus far.
- Looking at working towards stabilising the current app build then progressing to adding more features to the app to ensure that what is there works before adding more which would make the web more difficult to untangle later down the line.

EVCFLO Project Members:

Web Development Team:

Name	Student ID	Contributions week 1-5
Varun Sai	221013876	Within the web development team, I have contributed significantly to the success of the EV Adoption Tools project during my first six weeks there. At the beginning, my main goal was to ensure smooth teamwork by establishing frameworks for collaboration using resources like GitHub and Team Trello. Meanwhile, I made time for my own learning, especially in Figma, where I refined my design abilities and created the login page interface. I redesigned the login page to make sure it was visually appealing and that the user experience was simple by fully utilising Figma. Furthermore, I'll be using my technical know-how to seamlessly integrate the frontend design as I move into the login page development phase. I contributed to conversations about project progress and strategy planning by actively participating in team meetings throughout. My dedication to establishing a strong foundation for the project's success is demonstrated by my involvement in both design and project management.
Aurobindo	221013938	Till now, I've embraced a multifaceted approach to collaboration throughout my journey with our team. Getting to know GitHub, Trello, and Figma inside and out has been crucial to optimising our process. By making sure I was present at every team meeting, I could contribute efficiently and promote alignment as well as well-informed decision-making. Engaging in group chats regularly improved team cohesion and allowed for smooth communication. I took the initiative to use Figma to redesign our team page so that our projects were presented with more clarity and style. This initiative showed my flexibility and my commitment to the success of the group as a whole.
Aashritha	222453913	Throughout the EV adoption tools project, I seamlessly transitioned from initial preferences to embracing the redesigning task with

Name	Student ID	Contributions week 1-5
		enthusiasm. By actively participating in meetings, upskilling with Figma, and overcoming technical hurdles, I ensured meticulous attention to detail in the signup page redesign. Despite facing challenges with Mac M1 compatibility, I sought help and efficiently implemented solutions, showcasing resilience and proactive problem-solving. Presenting my design and incorporating feedback showcased my commitment to excellence. My dedication led to substantial milestones in both design refinement and coding, contributing significantly to the project's success and fostering a collaborative, impactful environment.
Fangzhou	222305846	In the past weeks, I have been participated all weekly meetings and mentor meetings and actively. participated team activity aggressively which include mentor standing up excel forms, contribution forms for 6.1p and I have completed lifecycle documents. for all Ontrack tasks I have completed and submitted on time. in terms of Trello board, I checked the Trello board and see if any updated or latest information per week from week2. and I have updated the status of all card tasks on Trello board. In terms of redesign web pages, I have redesigned the UI design for assigned web pages. during the period of designing, I listened opinions from other team members and engaged into the team discussions. in week5 I have started web development based on the UI design, during the period of development I was still engaged into team discussions and asking any questions I met into discussions.
Ivy Zhao	221209335	In the past month, I have made contributions to the resign news page and the support page, ensuring they were updated with accurate and relevant information. I prioritized teamwork and successfully completed all assigned tasks on time. I actively participated in team meetings, sharing insights and collaborating with colleagues to achieve our objectives. By maintaining open communication and fostering a collaborative environment, I was able to contribute effectively to our projects and support the overall goals of the team. Moving forward, I am dedicated to continuing this level of commitment and excellence in all my endeavours, ensuring the success and growth of our projects and the team as a whole.
Leader Akshit	221071548	Until week 5, I've led our web development team's efforts to overhaul the EVCFO site, organizing meetings, updating mentors, and managing tasks on Trello. On the technical side, I designed a chatbot on Figma, now implementing it to enhance user experience. I've also supported the DS and Evoleon teams. Moving forward, I'll maintain this engagement and productivity. Additionally, I documented backend implementation flaws, mainly in locating EV charging stations, for effective issue resolution. I also developed an architectural diagram detailing website components, including the Bot Express-powered chatbot. This plan serves as a roadmap, explaining how different parts of our site interact smoothly, much like a map illustrating our website's intricate connections.
Hongkun	220427276	Over the past six weeks as a student in Deakin University's SIT374 course, I have actively engaged in our group project, acquiring foundational skills in software frameworks such as Figma and React. I

Name	Student ID	Contributions week 1-5
		attended all weekly meetings and mentor sessions, where I consistently raised pertinent questions about our EV web team project. I responded promptly to all tasks and requirements, including maintaining the mentor's standing Excel sheet, contributing to the 6.1P contribution document, and reviewing the lifecycle documentation for the EV web development plan submitted by the project leader. Although I submitted the 3.1P task late due to forgetting the deadline, I completed most other tasks on Ontrack on time. Additionally, I took initiative in redesigning the About page of our website and actively participated in group discussions, where I not only listened to suggestions from team members but also shared challenges I faced. This involvement has not only enhanced my technical skills but also strengthened my team collaboration capabilities.
Ratanak Sovann	219339559	In the first three weeks, I actively participated in weekly team meetings to align our project strategies and familiarised myself with the project's goals through detailed handover documents. I set up the EVCFLO repository for local development, aiding teammates Fangzhou and Hongkun in configuring their environments. I also led the initial EVCFLO Web Development meeting, allocating tasks and recording minutes. Outside of these meetings, I engaged with an EV owner on my own time, gaining insights into their challenges, which significantly informed our project's development strategy. Entering week four, marking the start of Sprint 1, I developed a User Story Summary and a Project Timeline Overview to clarify user needs and project scope. I also redesigned the sitemap to cater to our primary user groups—EV owners and businesses—focusing on usability. Concurrently, I enhanced my backend development skills and planned further training to support our project effectively.
Laksh Gilhotra	222437252	I joined the capstone project in its third week, where I quickly integrated myself into the team's workflow. Despite the late start, I efficiently set up GitHub for version control, ensuring smooth collaboration among team members. In week five, I seamlessly transitioned into contributing to web development efforts. Leveraging my design skills, I enhanced the Figma wireframes by establishing inter-page links for improved navigation and user experience. My proactive approach and dedication have significantly contributed to the project's progress, laying a strong foundation for future development tasks.

Data Science Team:

Name	Student ID	Contributions week 1-5
Shilpa	222315366	In the last 5 weeks I have gone through the handover documents, explored GitHub with the datasets, and read plenty of files that were available to work on. From that I have figured out 3 to 4 cases & started working on one of them, I have pulled datasets that give an insight into the nearest places for charging stations, as per the vehicle compatibility

Name	Student ID	Contributions week 1-5
		based on their speed, charging pin, etc. & started working on them to visualize or make it easier for the user to figure out the charging station as per the need. I have started working on the Trello tasks for creating a master EV dataset & attended all the team meetings and did the minutes for them.
Leader Yuvraj Singh	222184401	<p>1)Extracted usage cost and parking status data from over 140 locations in Melbourne using the OpenMap API.</p> <p>2)Merged this data seamlessly with the main dataset using Jupyter Lab.</p> <p>3)Updated data having electric vehicle information</p> <p>4(Managed a GitHub pull request to integrate these data enhancements.</p> <p>5)Documented the extraction process using Python and OpenMap API for future reference.</p> <p>6)Coordinated team meetings for project alignment.</p> <p>7)Working on Tableau visualizations to showcase available datasets effectively.</p>
Leader James Davies	218377995	I am the leader of the data science team. I have created a python notebook that use Open Street Map to extract location and associated tag information for all charging locations in Australia. Based on the returned locations (839) I requested Open Street Map to find all amenities within 100m of each charger location. This has returned another dataset with over 4000 amenities (cafes, fast food, shops) etc within 100m of each ev charger. I exported the CSV files and created a PowerBI report that can visualise all ev chargers on a map and provide a filter interface to filter the list based on available amenity type, sub-type and name. I also created a notebook that can make a request to open route service to map a route from an origin to a destination and plot it on an open street map. I have also coordinated meetings and created the Trello sprint for the data science team.
Samuel Ng	222518061	I am a member of a data science team. Before joining the team, I had limited knowledge of electric vehicles (EVs). Therefore, I dedicated time to conduct background research on how EVs have developed over the years and their popularity in Australia. I also learned how to access GitHub files using VS Code and how to use Git. I reviewed the handover report and user stories from the previous trimester to understand the project's objectives. Additionally, I consulted the README file for essential information whenever I needed to edit or add files to the folder. I completed all the exercises in the Exercise Files to prepare myself for working with the dataset. I then reviewed the existing datasets in the folder to understand the types of data already available and conducted further research on related topics to identify new datasets I could contribute to the project. Currently, I am gathering information about EV charging times and the cost per mile for different models. Soon, I will begin creating a new dataset and developing a Python notebook.
Maddy Lewis	221279862	I am a member of the data science team. Over the first 5 weeks, I have participated in frequent meetings with my team members. I joined the company Trello board and participated in our first sprint by updating the introductory README file. I fixed some of the links which were broken,

Name	Student ID	Contributions week 1-5
		as well as changed the contact information to reflect the current leaders of the project. These changed have been committed to the Evoleon GitHub and are pending approval. I also created user stories, which will help the team decide on which tasks should be completed in the following sprints. I also participated in the weekly stand-up meetings, where I gave reflections of the work I had completed and shared my goals for the weeks ahead. I have also been looking at different databases for EV charging locations in Melbourne, and hope to submit my updated locations in the coming week.
Mackenzie Gong	223065159	In the past few weeks, I've been contributing to the EVCFO project as a member of the data science team. My work has involved updating the dataset of EV charging stations and extracting insights from the data. I've been following our Sprint plans on Trello board and be able to complete tasks on time. To update the dataset, I have sourced new data points from Google MyMap service and merged them with existing data compiled by previous team members. I also conducted some analyses on the distribution of EV charging stations in Melbourne, as references for future service implementations for charging providers. Also, I attend all weekly team meetings to stay informed about other member's work and our project's direction.

Evoleon:

Name	Student ID	Contributions week 1-5
Kaelen Mackinnon	222277913	I am the leader of the EVOLEON team, which has been given the task of working on the application of the EV team. I was initially just a team member on the Data Science team but switched over during week 3. I have spent the majority of the first half of this semester upskilling myself in some of the areas that I have little experience in such as react as well as going through the documentation of the application from previous years to get an understanding of what has been happening with the product. I have had a fair amount of difficulty with both me and the rest of my team in building the application as none of us have been successful in building it properly and we hope to solve this in the coming week so we can begin working on the product itself
Auth Chanakijkam jorn	218033849	I am a member of the EVOLEON team, which is the team that has working on application of the EV team in Chameleon company. In week 3 of this unit, I decided to move from EVCFO web development team to application development team because I wanted to try something different from last year that I study in Capstone team project (A) and there are not enough member for this team, but it is more difficult than I thought so I spent a lot of the time up-skilling and reviewing what I have learnt of the past year. Many topics that I reviewed and recalled a few weeks ago but I haven't tried to use in main product yet, but I try to create my small application and test those functions. I attend a weekly meeting and I review a meeting that I missed, try to discuss with EV team

Name	Student ID	Contributions week 1-5
		leader and EVLEON team leader and also mentor about the project. I hope I can help with main product and get more contributions in future.
Sam Bonnor	221437663	I am a member of the EVOLEON team, which has the project to work on the EVOLEON App, as I already have a fair bit of experience working with NodeJS, and React, I have done some research on React Native, I have also spent most of my time trying to get the App to compile at all and have had no success.