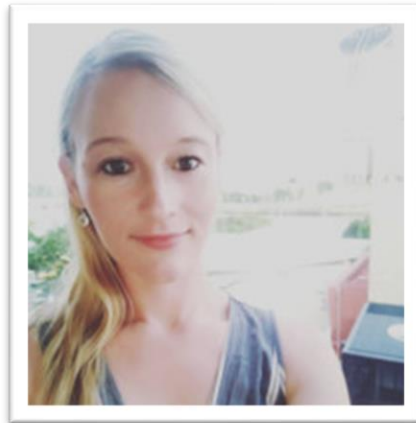


ASSESSMENT 1: MY PROFILE



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<https://gsmsands.github.io/Assessment-1/>

<https://github.com/GSMSands/Assessment-1>

PERSONAL INFORMATION

A thirst for knowledge and a desire to make a meaningful change in my life led me to choose this degree. I believe IT to be a field in which there are endless opportunities for learning, development and growth. Finding myself drawn to the mixture of technical, theoretical and creative problem-solving skills that is required to be successful in IT, I finally decided to pursue study in the Bachelor of Information Technology.

I am originally from a small town in the semi-desert region of South Africa called Calvinia. The town itself garnered its name from French religious reformer Jean Calvin (Frandsen, D 2013) and the Dutch Reformed Church is still one of the integral characteristics of the town's life in way of religious instruction, social gatherings, and general meeting place.

When I was about seven years old my parents decided to move to New Zealand for better work and educational opportunities for my sister and I. Though I was removed from my country of birth, my parents ensured that we still understood the Afrikaans language, written and spoken as well as the customs, food, and music of our culture. Afrikaans was my first language and when I moved to New Zealand, I learnt how to speak English. Though it was a difficult transition moving to a foreign country, unable to communicate with anyone, the skills in attaining a new language allowed me the ability to see that with hard work you can overcome major obstacles in life.

At the age of twelve I decided to take up piano, and at that point, becoming a pianist became my sole desire. I eventually got accepted into the Queensland Conservatorium Griffith University in South Bank Brisbane which is when I moved to Australia to undertake tertiary studies. After spending so much of my life focused on one single goal of becoming a pianist, I realised I had not explored other avenues of interest which led me to take up martial arts and subsequently that has become a favourite hobby of mine. In particular I have been drawn to the grappling martial arts such as Brazilian Jiu Jitsu and Freestyle Wrestling.



Pictured here in the black Gi is me in a Queensland State competition in Brisbane. (Some people say Brazilian Jiu Jitsu is akin to involuntary yoga...I would tend to agree)



INTEREST IN IT

I have two main interests in IT, building and designing intuitive and well-designed websites and applications for businesses as a Front-End Developer. My other interest is in data science as I love the idea of making sense of large quantities of data that I am then able to present in useful and meaningful ways.

Though these are my interests currently, I am very much looking forward to the journey of discovery that happens when studying to see what other areas of IT interest me as I am keen to not limit myself as I did in my prior degree.

My interest in IT arose from the enjoyment I find in being handed a new piece of technology and figuring out through trial and error how it works. Whether that be a new phone, a new game, music recording software or Bluetooth to connect to a car, I always felt as though it was a fun challenge. My desire to work in this field has been pushed further with the arrival of my daughter and having already accomplished my career goals as pianist. I want to work in an area which is not static and where I can be challenged mentally and creatively. Moreover, it is important for me to set an example for my daughter. I believe it is important for young children to see their parents working towards their goals so that they can learn to set and achieve their own. I hope that as my daughter grows and she sees me studying in the evenings that it will instil a love of learning in her as it did me when I was growing up and seeing my parents' study.

RMIT was my university of choice because of its attitude towards adult learners, and the flexibility of the course. The fact that I am able to start the course doing one subject at a time means that I can spend valuable time with my daughter during the day but also continue to better myself and develop my skills in the evenings to have a better and more secure financial future as well as having a job I am passionate about and that can challenge me on many levels. On online forums that I have read over the years in relation to the best tech universities in Australia, RMIT has always come up as a university that teaches practical skills and prepares you well for the real world in IT.

My IT experience is limited to none. Apart from building a few websites for family and friends with tools such as XAMPP, MySQL, WordPress and completing a few courses on Code Academy, I would say my IT experience is very little.

During this degree I expect to learn practical skills and theoretical knowledge to prepare myself for a future in IT. Learning how to work well as a team member and being taught the most up to date technologies for things such as team work, collaboration, cloud computing, libraries etc. With an overarching goal of becoming a Front-End Developer I expect the course to effectively prepare me to 'learn how to learn'. IT is such a large industry and there are so many avenues to explore that it would be impossible to cover it all in one life time let alone in one degree, however, I believe that if a person is equipped with the right skills and knows where to find the right tools, they will be able to build upon what they have learnt in a degree and be successful in the workplace and in life.

SENIOR FRONT END DEVELOPER JOB

The Role:

A Senior Front End Developer in the Digital Experience Platforms Community will work closely with our clients and other engineers to develop intuitive digital products and services that meet the needs of humans. We're looking for a passionate front end developer with strong communication skills to co-create next generation digital products and services with clients and colleagues.

The successful candidate will look like;

- A minimum of 4-6 years of concurrent commercial experience developing and designing functional user interfaces for large, secure, enterprise applications
- Demonstrated strong understanding of at least one modern JS framework/library, e.g. React, Vue, Angular
- Understanding of state management (Redux)
- Experience working with APIs (REST and GraphQL)
- An understanding and passion for best practices in front-end engineering and passion for engineering fundamentals
- Excellent understanding of Agile development methodology and development practices such as BDD, TDD, Kanban, Lean, etc
- Experience writing scalable, reusable code for UI components, with tests
- Working experience, demonstrating an ability to build CI/CD pipelines plus other DevOps related concepts.

Please note that the salary range for this position is \$120K-\$170K base, dependent on experience.

[Ideal Job Advertisement\Cognizant Senior Front End Developer Job Ad.pdf](#)

This position appeals to me because as a Senior Front-End developer you can have a lot of input into building an intuitive website using the latest UI and UX principles and software delivery processes. In this position you are able to work alongside a variety of people including working closely with other developers, business analysts, project managers and business clients to deliver a product that meets their needs. Working as a Senior Front-End Developer would be a varied and creative role that utilises not only programming skills but also creative problem solving, design elements, management and planning methodologies as well as people skills.

For this role I would need a Bachelor of IT, Computer Science or similar. Specifically, as a Senior Developer I will have to have a minimum of four years' experience as a Front-End or Full Stack Developer. I would need the ability to manage and teach Junior Developers. I would need leadership and motivational skills as well as being able to convey ideas of a project in such a way that a non-

technical person can understand it. I would need to have been working in a larger corporation and be comfortable building secure and large-scale projects. Ideally, I would be familiar with all of the modern JS frameworks and have a stronger preference for one (e.g., React or Vue), however each project may need a different approach and a different framework that would better suit the business requirements. Familiarity with modern software application development technologies including in-browser state management, web APIs, DevOps, CI/CD integration and unit testing as well as Agile e.g. (Scrum) methodology.

I currently hold a Bachelor of Music in classical piano and a Cert IV in TESOL. I have over ten years' experience as a music educator and as a choral accompanist and chapel organist. Though vastly different subjects to IT, I believe that there exists a crossover of skills such as organisation, discipline, problem solving, where one is able to operate in the intersect of industries.

This idea is summed up well in a blog post by, Clements, B & Bhagwan, K (2015, para. 1) 'Music is both an art and a science, and music and science are closely related. Both use mathematical principles and logic, blended with creative thinking and inspiration to arrive at conclusions that are both enlightening and inspirational. It could be said that *SCIENCE IS THE MUSIC OF THE INTELLECT, AND MUSIC IS THE SCIENCE OF THE HEART*'.

My plan will be to complete a Bachelor of Information Technology while at the same time doing small websites for friends and family's businesses that I can use to build up a portfolio of work on my personal GitHub. Once I have gained more confidence and learnt more skills, I plan to move onto creating small applications, widgets and templates that I could then launch on platforms such as Themeforest, Envato, Google Play store etc. I would also contribute to open-source projects of interest, such as Big Blue Button which is an open-source educational tool that I have used as a music teacher in 2020. Once I have graduated, I would then use the tertiary qualification backed up by my GitHub profile as well as my work experience as a musician to find a role as a Graduate or Junior Software Developer. Initially, I would try to find work as a Full-Stack Developer so that I have thorough understanding of both Back-End and Front-End development. In my experience, a lot of learning comes from skills acquired on the job so I would be keeping up with learning from Senior Developers in the team, reading articles relevant to the IT industry as well as tech blogs. I would avail myself of any opportunities within the company I find myself in as well as pursuing professional certificates that I may find useful or necessary along the way.

PERSONAL PROFILE

Leadership Style • <https://eml.usc.edu/leadership-style-quiz>

Postmodern Leader






You understand that leadership is both an art and a science. More than most, you recognize the joy available in the role of a leader. The pleasure of leadership is realized through the transformation of society and the realization of human potential. Leadership is an action that brings you greater self-awareness. Your keen awareness helps others see their own life in a new light. You help others realize the empowerment that comes from creating the future with others. Learn more about the postmodern leader from the article, [The Art of Leadership](#).

Your leadership style is a valuable asset for improving your career prospects. A leadership program can help you bring evidence-based practices to your work, adding value for your employer. Consider pre-qualifying for USC's EML program.

Big 5 Factors • <https://openpsychometrics.org/tests/IPIPBBFM>

RESULTS SUMMARY

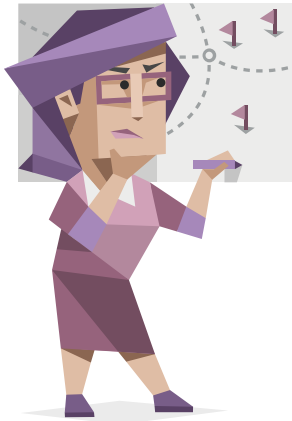
Your results from the IPIP Big Five Factor Markers are in the table below. The table contains a raw score and also a percentile, what percent of other people who have taken this test that you score higher than.

Factor	Factor label	Raw score	Score percentile
I	Extroversion		33
II	Emotional stability		89
III	Agreeableness		51
IV	Conscientiousness		52
V	Intellect/Imagination		76

Big five personality trait scores calculated by openpsychometrics.org

Myers-Brigs Type Indicator • <https://www.16personalities.com/intj-personality>

Architect



INTJ-A

Personality type: Architect (INTJ-A)

Traits: Introverted – 78%, Intuitive – 69%, Thinking – 76%, Judging – 61%, Assertive – 63%

Role: Analyst

Strategy: Confident Individualism

It can be lonely at the top. As one of the rarest personality types – and one of the most capable – Architects (INTJs) know this all too well. Rational and quick-witted, Architects may struggle to find people who can keep up with their nonstop analysis of everything around them.

Scoring fairly low in extroversion in the Big 5 factors and in the Myers-Briggs Type I think that a challenge will be making sure that I make the effort to engage with other team members. Asking simple questions like how they are going and asking questions about themselves can be a good way to break the ice and to help myself and others feel more comfortable.

In the Big 5 personality traits quiz I have scored higher in areas such as emotional stability and for my leadership style it is written “Your keen awareness helps others see their own life in a new light.” As a teacher I am definitely passionate about seeing other people succeed as well. In a group setting this would be advantageous because if anyone is confused or unsure about what to do, I would definitely jump in and help. Explaining something to others is also a great way to learn and deepen our understanding of a subject. (Effectivology 2021).

As an INTJ-A according to Myers-Briggs I often think my way of approaching a task is the most logical choice and, in my previous degree when doing group assignments, I had a tendency to want to take over what was happening. When forming a team, I think it would be wise if I could team up with other people who I see regularly contributing and posting in the discussion forums as it might indicate their overall interest and dedication to the subject.

PROJECT IDEA

OVERVIEW

My project idea is an online application to facilitate participation in class action lawsuits. Users will register and enter the details of their claim and have it assessed by a professional to determine if there are grounds for a class action lawsuit. If grounds exist, the user will be connected with other users who have a similar claim. The group of plaintiffs will raise money in a crowdfunding style and will be introduced to lawyers (also registered users) who specialise in this type of lawsuit e.g., claims against pharmaceutical companies. The crowdfunding model would also be used on the lawyers' side if they need other lawyers and legal professionals to help with research and legal discovery.

MOTIVATION

An app to facilitate participation in class action lawsuits using a crowdfunding model could make the process of litigation easier. This is of importance because according to a 2017 study undertaken by Heidi Shierholz the president of the Economic Policy Institute "Consumers fare better under class actions than arbitration." (Shierholz, 2017) this would make the project idea meaningful in this context as it would help to empower people and give the consumer more advantages.

Throughout the world class action lawsuits are filed each year, in Australia alone "it was found that between 4 March 1992 and 30 June 2019, a total of 634 class action lawsuits were filed in Australia. This equates to an average of 23.4 class actions per year" (Newbold et al., 2020). When we look to the United States, we find that, "more than 10,000 new class actions are filed each year in the federal and state courts." (Polkes and Lender, 2020). Based on these statistics and the number of users a class action law suit would generate, I believe there is a need for an application that can streamline the process of class action lawsuits using a crowdfunding model.

DESCRIPTION

The application will be web-based and be accessible via any web-enabled device. All users of the system will have to register and will be part of one or more of the following groups.

There will be site administrators who would be responsible for the administration side of the site including users and security of users' data. Content managers would be responsible for the site's contents and there would be professional users including lawyers, scientists, experts etc. Finally, you would have the users who are the potential plaintiffs.

Further features of the site include, a public facing page explaining the purpose and mission statement of the site and services. There will be secured pages accessible only by those who are members with secure logins. There will be a registration process whereby people set up a username and password to create their profile. This process will also securely capture their email address. Web forms will be used for the registration of each user and each user's registration process will be

different and determine what privileges the user will have on the site. As well as having a profile page that they can set up, users can also view the status of their lawsuit as well as any other pending lawsuits on the site. There would be details of “in flight” and past class action lawsuits as well. Details of professionals (lawyers and other legal professionals) and their track records will also be included so users can get to know their lawyers better.

During registration users would also need to accept a privacy policy for things such as accepting that personal data may be shared with other users.

Security features will include things such as Multi Factor Authentication tools such as QR codes, Google Authenticator or similar technology. There would be a validation process for lawyers to verify their credentials as a lawyer. A one-time link and token to verify accounts can also be used for security purposes.

Users that are not directly linked with a case and are just visiting the website without creating a profile will be able to make donations towards cases that they are passionate about and want to support. This would be somewhat similar to the GoFundMe model.

Payment gateways would be used to enable users to make online payment with payment methods such as credit cards, Paypal and Stripe.

For official users there will be IM, video conferencing and file sharing features, and for all users there will be an open forum or discussion boards where users can communicate securely with each other. This discussion board may need moderators.

There will also be a contact form on the website.

Issues we may run into developing this as a project for the semester would be learning how to deploy the needed infrastructure. Lacking sufficient coding knowledge to actually make the entire application, though aspects of it could be built such as the basic website layout, registration forms and the listing of cases. There could also be a lack of UI/UX knowledge in how to make a really good-looking product.

TECHNOLOGIES

- Software development tools, including a Git repository (Desktop, 2018), IDE or code editor (Veracode n.d.), web development tools, a local installation of Docker (Solanki, 2018) to host local development services.
- A web application framework suitable for use with desktop browsers, mobile devices and possibly deployment as a mobile app (via tools such as React, Vue, Angular, Vue.js) for support and integration across a range of devices (Vyas n.d.).
- A server-side language & framework for communicating with the frontend, implement business logic and communicating with the database.
- A choice of infrastructure to host the service, for example AWS Lambdas, Microsoft Azure, Oracle (Turner, 2021), VPS hosting (Wood, 2020) or self-hosted.
- A database solution such as MySQL (Enfroy, 2021) to collect all of the data.

- A web application server & caching solution depending on the infrastructure chosen such as Apache or Nginx (Thakur, 2020).
- Kanban boards or WBS tools (Naydenov, 2019) for project management to keep the project on track and meeting all the deadlines.

SKILLS REQUIRED

The skills required for this project will be HTML, CSS, JavaScript and Bootstrap. It would need a mixture of Senior and Junior to Mid-Level Developers to implement all of the features. You would need a Front-End Developer who is quite experienced with UI/UX and web design and a Back-End Developer who is skilled in a language such as Node.js or similar. You would need a server admin and software such as Docker, AWS Lambda for hosting services. You would also need project planning tools and perhaps a Project Manager or a Developer familiar with project planning methodologies.

OUTCOME

If the project is successful, people will be empowered to hold companies, governments, or corporations accountable for their products and services. If successful people will not be deterred by cost, or poor litigation but will be granted the opportunity to have the best possible lawyer for their case at a cost that they can afford. Lawyers will be connected with other legal professions thus saving them time and money in sourcing help and information independently. It will streamline the process of launching class action lawsuits.

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