Kylie Davies

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I am an Australian mainly of I guess Anglo-Celtic ethnic background. I live in Queensland on the Sunshine Coast having moved here from New South Wales 15 years ago.

I am currently undertaking my 8th, 9th and 10th subjects towards a Bachelor of Information Technology from RMIT. This will be my first completed undergraduate degree. I elected to tackle 3 subjects this study period as I have deliberately taken a break from paid work. The timing was right as I was on a Program of work that just ended.

Something a little different about me is that I have an active left and right brain, so I approach problems from both a creative and analytical perspective. I also like to explore different projects. For example, 8 years ago, I started the Sunshine Coast’s first food magazine. It was short lived (and very costly) but beautiful and a great experience. I am interested in food growing, farming and gardening. It’s a good counterpoint for the hours in front of the computer. I love orchids.

**When did your interest in IT start? Was there a particular event or person that sparked your interest?**

My interest in IT was sparked as a really young child, by my dad, who bought a Sinclair ZX81 back from Cambridge UK. He couldn’t work it. I taught myself to program in Basic and could get a few tricks out of the simple machine. I programmed a bit in the 90s, then support and disaster recovery (now called business continuity) but these days I work in business analysis and project management.

**What is your interest in IT? Outline your IT experience (if any).**

My interest in IT has been mainly career focused and centred around large corporate programs of work. I have worked in IT for over 20 years. I started on helpdesk, then Local Area Network Administration, then programming in the late 1990s and business analysis in the 2000s.

I am not adept at PC building nor am I a gamer. I am interested in the user experience and enjoyed User Centred Design here at RMIT. However, I am also keenly interested in two IT business areas: software defect/quality management; and security. I just finished a contract as Defect Manager on an EAMS Transformation Program for Urban Utilities (Brisbane Water). What I like about defect management is building a cross functional bug hunting team out of a number of disparate and usually hitherto silo-orientated development teams. There is a revelation that happens when teams from different development teams realise they will not have a working solution unless their segments of code interface effectively with another team’s segments of code. I have found that using deliberate team building techniques and a cadence of short sharp and fun daily meetings accelerates this team building.

Security is a relatively new interest for me, growing over the last two to three years. I am yet to have the opportunity to work in a focused Security role, but started searching information regarding hacking and attacks, particularly large scale and politically motivated attacks like Stuxnet and the Sony attack a couple of years ago. A great introductory source for me was the Great Courses series on Cybersecurity with Paul Rosenzweig: titled “Thinking about Cybersecurity: From Cyber Crime to Cyber Warfare”. Here is a link:

<https://www.audible.com.au/pd/Thinking-about-Cybersecurity-From-Cyber-Crime-to-Cyber-Warfare-Audiobook/B00FQC7JBU?source_code=M2MOR131091619005N&ds_rl=1252391&gclid=EAIaIQobChMIpIqo6PKK6gIVjX4rCh1KTwg1EAAYAiAAEgK_BPD_BwE&gclsrc=aw.ds>

I think the need for cyber security specialists will explode in the next few years. As I write this today, the Prime Minister is speaking about a sophisticated state actor currently attacking many state and commercial organisations in Australia.

I am also studying Security in Computing and IT at RMIT this study period concurrently with this subject, so that is quite exciting.

**Why did you choose to come to RMIT?**

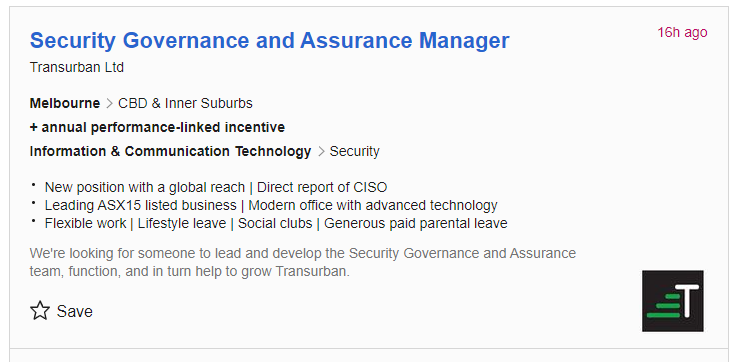
I chose RMIT to study with because I wanted a comprehensive technical degree and my research told me RMIT was one of the best universities for this. Our local university (Sunshine Coast) does not have the meaty IT content within its degrees and its reputation in IT suffers accordingly.

**What do you expect to learn during your studies?**

My aim is to build and finesse my technical skills so that I can more effectively manage teams and be able to sniff out the best path to problem resolution in my work, through having a good understanding of IT. Ideally I would like to move into Cybersecurity, possibly in a government based role, working to thwart state based malicious actors, or in a governance role in Security for a major utility.

**Ideal Job**

Job link and screenshot of ad on Seek1:



<https://www.seek.com.au/job/50112429?type=standout#searchRequestToken=d371c676-ec97-4d16-a802-825ca1352d33>

**A description (in your own words) of the position, and particularly what makes this position appealing to you.**

This Security Governance and Assurance Manager is responsible for developing, advising on and ensuring the adherence to policy for security governance and assurance, with reference to security frameworks but also bringing the expertise to advise the Chief Information Security Officer (CISO). This position appeals to me because of the opportunity to affect policy and outcomes and create the right security culture at a large organisation and create a fantastic skilled, cohesive and effective security team.

**A description (in your own words) of the skills, qualifications and experience required for the position.**

Clearly this is a senior management role, reporting directly into the CISO, probably with input and presentations to board required. The incumbent would need to be skilled and experienced at people management, while also bringing industry expertise in the area of security governance and assurance.

**A description (in your own words) of the skills, qualifications and experience you currently have.**

I have about 60% of the management experience I would need for this position. I am great at building work teams. A key strength is my background in Project Management and Governance. I have prepared reports for Board but always for more senior managers to present. I have reported directly into Program Managers but not to a CISO. I have nearly completed half my degree and have completed several industry training courses. I am very lacking in Security experience.

**A plan describing how you will obtain the skills, qualifications and experience required for the position, building on those you have now. This need not be greatly detailed, (and will probably change significantly over time anyway), but try to be as specific as you can.**

In order to move into a position like this I will complete my Bachelor’s degree and try to incorporate as many security courses as possible. Meanwhile I will move towards gaining some hands-on Security experience and look for mentorship. I will continue to grow my management profile in the IT industry through carefully chosen contracts. I will complete my PMP certification by October and will look for opportunities for future governance focused positions with even minor input to board to gain board input experience. I will continue my learning on team leadership and building great teams.

**Personal Profile Tests**

**The results of an online Myers-Briggs test.**

I completed the test at Human Metrics2

These were my results:

ENTJ

Extravert(19%) iNtuitive(12%) Thinking(12%) Judging(3%)

You have slight preference of Extraversion over Introversion (19%)

You have slight preference of Intuition over Sensing (12%)

You have slight preference of Thinking over Feeling (12%)

You have marginal or no preference of Judging over Perceiving (3%)

ENTJ

Extraverted iNtuitive Thinking Judging

"I don't care to sit by the window on an airplane. If I can't control it, why look?"

ENTJs have a natural tendency to marshall and direct. This may be expressed with the charm and finesse of a world leader or with the insensitivity of a cult leader. The ENTJ requires little encouragement to make a plan. One ENTJ put it this way... "I make these little plans that really don't have any importance to anyone else, and then feel compelled to carry them out." While "compelled" may not describe ENTJs as a group, nevertheless the bent to plan creatively and to make those plans reality is a common theme for NJ types.

ENTJs are often "larger than life" in describing their projects or proposals. This ability may be expressed as salesmanship, story-telling facility or stand-up comedy. In combination with the natural propensity for filibuster, our hero can make it very difficult for the customer to decline.

Personality Types: ENTJ

TRADEMARK: -- "I'm really sorry you have to die." (I realize this is an overstatement. However, most Fs and other gentle souls usually chuckle knowingly at this description.)

ENTJs are decisive. They see what needs to be done, and frequently assign roles to their fellows. Few other types can equal their ability to remain resolute in conflict, sending the valiant (and often leading the charge) into the mouth of hell. When challenged, the ENTJ may by reflex become argumentative. Alternatively (s)he may unleash an icy gaze that serves notice: the ENTJ is not one to be trifled with.

ENTJ Career Choices

Extravert(19%) iNtuitive(12%) Thinking(12%) Judging(3%)

ENTJs often find themselves in occupations that require good analytical and planning skills. ENTJs build successful careers in those areas that require considerable organizational skills and intellectual effort, in occupations that present a challenge and call for creativity. They are greatly represented in technological and management consulting companies among engineers and developers, and among high- and mid-rank managers. They are also able to realize their potential in start-ups where they often fulfill management positions or take responsibility for the whole project.

JCI Jung Career Indicator™ determines occupations and areas in which people of your type find themselves most fulfilled and content, are most successful, and in which they are likely most represented. The following listing includes examples of areas of occupation suitable from a personality type standpoint. Search of educational institutions\* that might be offering a relevant degree or training is also provided. The listing factors in the expressiveness of the four traits of your personality type: Extravert(19%) iNtuitive(12%) Thinking(12%) Judging(3%). Therefore, ENTJ type persons with different expressiveness scores might get a somewhat different list. Areas of occupation that are more aligned with your result appear first. Click occupation names to request information about programs.

**Online learning style test**.

I completed the test at Education Planner.org3

These are my Results:

What's Your Learning Style? The Results

Printer Friendly Version

Your Scores:

Auditory: 30%

Visual: 40%

Tactile: 30%

You are a Visual learner! Check out the information below, or view all of the learning styles.

**Visual**

If you are a visual learner, you learn by reading or seeing pictures. You understand and remember things by sight. You can picture what you are learning in your head, and you learn best by using methods that are primarily visual. You like to see what you are learning.

As a visual learner, you are usually neat and clean. You often close your eyes to visualize or remember something, and you will find something to watch if you become bored. You may have difficulty with spoken directions and may be easily distracted by sounds. You are attracted to color and to spoken language (like stories) that is rich in imagery.

Here are some things that visual learners like you can do to learn better:

Sit near the front of the classroom. (It won't mean you're the teacher's pet!)

Have your eyesight checked on a regular basis.

Use flashcards to learn new words.

Try to visualize things that you hear or things that are read to you.

Write down key words, ideas, or instructions.

Draw pictures to help explain new concepts and then explain the pictures.

Color code things.

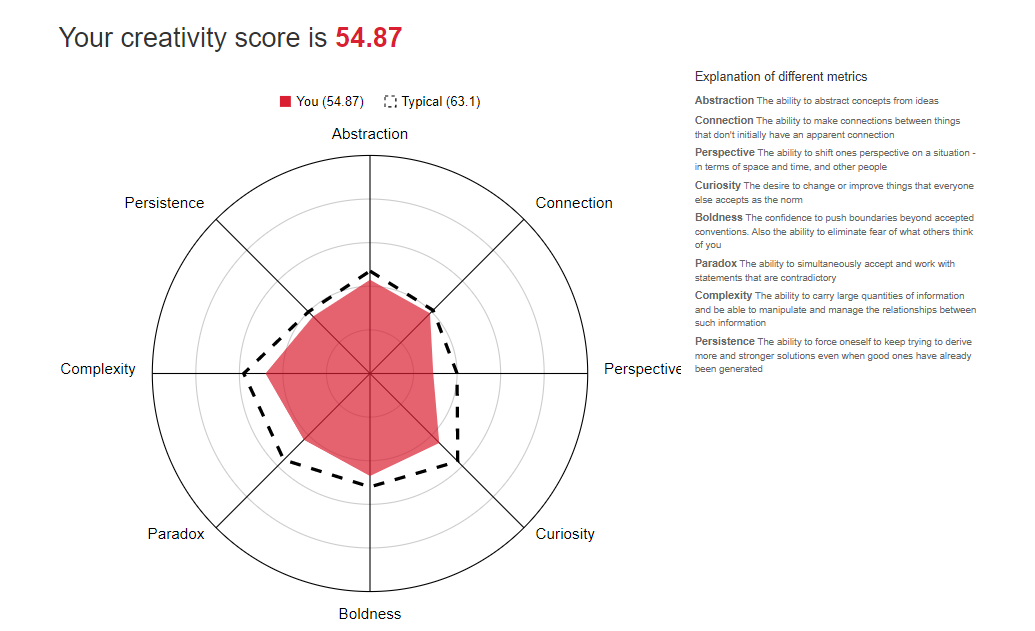
Avoid distractions during study times.

Remember that you need to see things, not just hear things, to learn well.

**The results of one further online test of your choosing.**

I completed the creativity test at Test My Creativity4

I tested as slightly less creative than average.



*Image of Radar Graph Results for Kylie Davies obtained from Test My Creativity 18/6/20204*

In addition to the results themselves, you should answer each of the questions below with one paragraph.

**What do the results of these tests mean for you?**

The Myers Briggs test results were not a surprise as I have tested as ENTJ in recent years. When I was a very young adult (20+ years ago) I tested as ENFP so it is interesting to see my personality shift a bit as I mature. I am slower to volunteer information to an audience without considering the consequences these days and have a much smaller circle of friends. However, I am also responsible for bigger budgets and teams and more to consider so I think that’s probably a natural shift. I have heard others say their type has shifted over the years. Regarding the learning style test, again not too surprising. I knew I was a visual learner too and I use this when I study, though I may try to use more colour and pictures in my study journey. The creativity test was a disappointment. I thought I was a creative problem solver, but it seems less creative than average. I may need to shake things up a bit and get some creative thinking happening.

**How do you think these results may influence your behaviour in a team?**

I tend towards taking charge of a team, however I am careful not to overstep my mandate (as perhaps my younger ENFP self would not have been). I have learned to sit and observe the dynamic then formulate an approach to get an effective team together, from within the role I have been assigned. Regarding being a visual learner, I realise that I must look directly at the speaker. I literally do not hear and understand them as well if I don’t look directly at them.

I am clearly not the most creative thinker in the team so need to ensure I have those creative contributors onboard and listen to their ideas and champion them.

**How should you take this into account when forming a team?**

I need to ensure I have a mix of personality types within a team. I need to be sure to take into account the approach and preferences of those who feel a little more (F) than think (T) and those who are more Introvert (I) than Extrovert (E). It is important to give space and time to those who are more reticent, so that their opinions are tabled and considered. I need to give space and ask open questions to elucidate their contribution and thoughts. I also need to ensure I have the endorsement of the team before taking charge; it’s not always best to be the leader. Rather the team needs the best leader.

Project Idea

You are to write a report of around 1000 words describing your IT project idea. You should describe the project itself, as well as why you think it is important or interesting, and any potential drawbacks or obstacles you anticipate.

What are you passionate about? What kind of IT innovation would you like to see? What project will help you develop the skills, experience and knowledge required to make you qualified for your ideal job?

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You need not have full answers to any of these questions, but you are required to have some ideas about an IT project that you think will address at least one of these questions. It may not be possible to find one that answers all three, but it is quite likely that something you would find interesting or useful will have a similar effect on others.

There are several possible types of projects that you may consider. Some potential ideas are below; others will be discussed in the following weeks.

Developing a game using tools such as Unity, Construct2 or Cocos2d. Developing a smartphone app, using whatever programming language in which you have expertise, or by using tools such as MIT App Inventor. Finding an innovative application for new hardware developments, such as Raspberry Pis, Arduinos, Makey Makeys, small robots or related technologies. Creating a FAQ and implementing it as a chatterbot, possibly involving speech-to-text and text-to-speech software. Building an electronic artefact such as a model for Minecraft or similar games, along the lines of the United Nations Block by Block project. For this assignment, you need to write approximately 1,000 words about your project idea.

This should not only describe what the project would be, but also why you think it is important or interesting, and what potential drawbacks or obstacles you anticipate.

The project idea that you put forward should have elements of originality and innovation, it doesn’t have to be re-inventing the wheel - but isn’t to be effectively cloning an existing product or service. There is to be a strong sense of grounding, so in terms of the feasibility of your ideas for an IT project it should be able to be produced within the next ~5 years of technology progression at most (nothing Sci-Fi).

There isn’t a set expectation of complexity to the project you select and explore, and it doesn’t necessarily have to be something commercially viable, but, perhaps aiming for such could help you settle certain questions or help form your own (and tutors/graders) perspectives towards it.

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Your description should include the following sections. The word counts below are recommendations only not absolutes but are a good guide of a minimum.

Overview (100 words) - This should be a summary of what the project will be.

Motivation (100) words) - This should be a description of why the project will be interesting or useful. This may include statistics or other evidence, such as: "There service. are 1.5 billion cat owners in Australia, and so there is a huge market for an automated cat feeder. Using Raspberry Pi technology is a cheap and easily assembled solution to this problem."

Description (500 words) - Detailed description of the features of the product or service

Tools and Technologies (100) words) - Describe the software, hardware and/or other equipment needed. Include any relevant open source tools as appropriate.

Skills Required (100 words) - List the skills are required for your project, including software that needs to be written, and special hardware (if any). How feasible will it be to find the skills, software and hardware required?

Outcome (100 words) - If the project is successful, what will be the outcome? How will the original problem be solved? What impact will this development have?

**Project Idea: Orchid Identifier App**

**Motivation**

There are 30,000 orchid species in the world and 70,000 hybrids.5 For those of us who are interested in orchids and yet a bit time poor it can be very tricky to try to identify a beautiful unlabelled or wild orchid you come across, in the hope of obtaining one to grow. It often happens that there are no identifying marks or labels and you must make a guess as to what species you are seeing. Why not ask another enthusiast? Well, some people like to join orchid clubs, but that is a time commitment I cannot and don’t want to make. I want more information and less socialisation from my orchid growing hobby. And I am not alone. With their generation’s marked interest in wellness, Millennials really love plants, with some dropping up to $200 on rare plant varieties.6 Plants are this generation’s pets, and so photogenic.

**Overview**

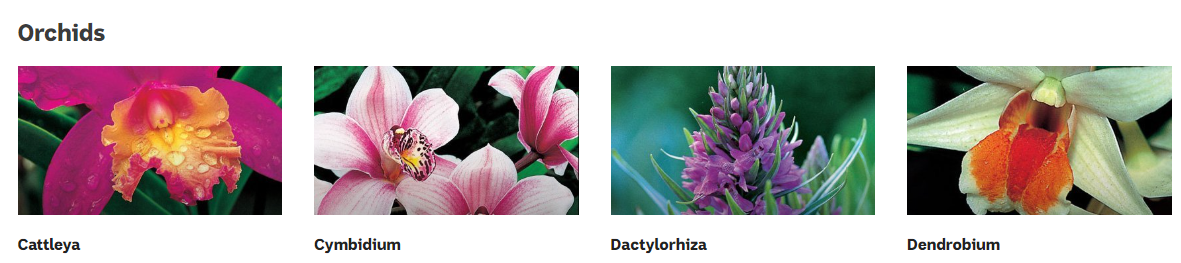
Hence, my project idea is for an orchid identifier app. This will enable the user to quickly and easily identify a beautiful orchid from a photo they snap, or featured they input, or a photo they have saved, being scanned and compared with an expansive orchid database. Using the key forms and the colours of the petals, the app will return a shortlist of likely species with associated photographs and species’ details. The app will have registered members and a simple, limited, additional social media capacity where users can upload their orchid photos, follow other users and be followed, like other users’ photos and more (detailed below). However, the main motivation for joining will be the unique capacity of the app to name the orchid you have photographed.

**App Description:**

1. **Orchid Identifier portion of the app:**

The orchid identifier portion of the app will have two methods of input:

1. **Find My Orchid – by Photo:** It will have an image recognition algorithm built into it7 so that it can read and analyse photos. The user will then take a photo or use one from their smartphone canera’s photo library and submit to the app for analysis.
2. **Find My Orchid – by Type:** The user will select an orchid subtype by selecting from a simple outline drawing and name. Example image below has been adapted from Gardening Australia’s Plant Finder8 Different orchid types have quite distinct forms and shapes. The user will then be presented with a line drawing of that form and a palette with “paint colours” they can select from and “pour into the segments of the orchid on the line drawing (like Microsoft Windows Paint). When they are satisfied that they have “coloured in” the orchid as closely as they can to their specimen, they submit to the app for analysis.



**How does the Orchid Finder analyse the image?**

The technical method for analysis will be discussed in the required software and hardware section. However, in short, the orchid identifier will compare the input with its extensive database of labelled orchid images and return a shortlist of images and species names for the user to select from. When the user selects one species, they click and further details on that species will be revealed, including links to any retailers who will pay a small fee to be listed on the site.

1. **Social Media Aspect:**

The orchid identifier app will also attempt to build an online orchid enthusiast community through several social media type features.

**My Orchid Finds:**

The Orchid Identifier App will also have a social component where users can upload orchids they grow or find. They can choose to GPS mark the location of the orchid they have photographed. They can add a description of their “orchid adventure” whether it be a wild one they have found, the country, terrain and microclimate, or the travails of their orchid growing challenges. All users should be able to mark their images private or public. They may wish to keep certain finds to themselves and use the app as their personal record. All users should be able to follow other users by choice and upvote their photos.

**Orchid Illness Forum:**

Part of the social media aspect will be an illness forum where users can submit images of pests or disease on their orchids and ask for advice. Users who contribute answers will be ranked Contributor, Expert and Guru (Guru being the highest rank) as they contribute answers which are endorsed by the community.

1. **Confidentiality:**

Content from the Orchid Identifier app will be protected and not shareable to other broadscale social media sites such as facebook or Instagram. Orchid growers and enthusiasts jealously guard their collections and their intellectual property such as photography and so users should undergo a vetting process to join the app community.

**Required software/hardware:**

The Orchid Identifier app will require the following Software components:

1. A sophisticated image recognition and analysis application component; something like CamFind as discussed in NetGuru’s article “Top Image recognition apps to Watch in 2019” by Grzegorz Mrukwa7.
2. Access to an extensive database of orchid images. Currently the most famous example of this would be Jay Phalin’s Orchid Species Photo Encyclopedia <http://www.orchidspecies.com/indexde.htm> Jay is an incredibly knowledgable and travelled orchid expert, collecting images of orchids on his adventures all over the world. The images on his very old fashioned website are all copyright to him and captured by him. His dataset is incredible but his web development skills are very archaic and so these photos are not represented in their best light. He is also incredibly (and understandably) protective of his suite of rare orchid images. Gaining his co-operation would probably be essential, and may prove very challenging (his website is full of warnings that he will prosecute parties who use his images). However, perhaps the correct bait for Jay would be to offer him part ownership of the app, and as a part of that, access to the GPS Marks users provide when they find a wild orchid. This, of course would need to be part of the terms and conditions of user signup.
3. Appropriate app development software such as AppyPie or AppSheet8. These two app development tools were ranked number one and two for small to medium businesses in April 2020 by Software Testing Help.8

Hardware:

Use of the app would of course require access to Android or iPhone hardware.

**Skills Required:**

* User Centred Design skills and consideration of the user experience so that the app is super easy to use and friendly and responsive.
* App development skills and experience (although AppyPie and AppSheet mentioned above make it a little easier than coding from scratch).
* Business development or industry partnership development skills to bring retailers on board to assist with funding through advertising or supplier network membership.
* Negotiation skills to gain the cooperation of the world’s foremost orchid expert and his collection of highly desirable photographs (see point 2 Jay Phalin in required software and hardware above).
* Authentication and security to prevent users stealing images or sharing onto more broadscale social media.

**Outcome:**

The ideal outcome of the creation and uptake of the Orchid Identifier app would be that:

* Users form an online well informed orchid appreciation community
* Industry partners gain access to the enthusiasts
* Orchids are protected and appreciated more in their natural environments and through growing them in gardens.
* Possibly some income derived from advertising or community events.

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