Personal Information

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Hobbies: Electronics, IT, 4wd, Camping

Interest in IT

IT for me started at a very young age as I was brought up with it all around me because my father was deep in the electronic field, so naturally I followed suit and it all I have really ever know is IT and Electronics. As soon as I was out of year 10 I fell into a position where was running a Service dept for a local company fixing everything from PC's to Printers and photocopies all the way up to enterprise level server hardware for a contract the business held.

The reason I chose RMIT is that I have dealt with RMIT before a few years ago and they were the only one that offered the Degree I want to do with the Entry Requirements that fitted my current situation, I am hoping RMIT can fill in the gaps I am missing when it comes to IT for me to further my career in a more successful way that what I am currently doing.

Ideal Job

Position: IT Hardware Technician – POS – Gold Coast

This position I could fulfill straight away as I already have 8+ yrs experience with point of sales systems

Skills Required:

- Understanding of Field servicing and hardware knowledge
- Previous experience with POS Installations/Repairs/Maintenance is preferable
- Experience with Touch screens/ thermal printers/ cash drawers/ eftpos terminals not essential by preferable
- Good Mechanical skills and customers service
- Reliable and confident to work independent ly
- Own Vehicle and license
- And final flexible on work hours

I have done all of the above plus hold a Certificate 3 in Business equipment plus Test and Tag, the Business equipment course was a full 4 yr apprenticeship to complete which cover all business related items electronic and not electronic range from printers and photocopiers and point of sale also item like laminators and typewriters and sewing machines, anything that you would find in any sort of business.

Personal Profile

• The results of an online Myers-Briggs test. www.16personalities.com

Adventurer – Adventurers are flexible and charming, always ready to explore and experience something new

Mind – 62% Introverted - Introverted individuals tend to prefer fewer, yet deep and meaningful, social interactions and often feel drawn to calmer environments.

Energy – 66% observant 34% Intuitive - Observant individuals are pragmatic and down-to-earth. They tend to have a strong focus on what is happening or very likely to happen.

Nature – 75% Feeling 25% Thinking - Feeling individuals value emotional expression and sensitivity. They place a lot of importance on empathy, social harmony, and cooperation.

Tactics – 61% Prospecting 39% Judging - Prospecting individuals are very good at improvising and adapting to opportunities. They tend to be flexible nonconformists who value novelty above stability.

Identity – 81% Assertive 19$ Turbulent - Assertive individuals are self-assured, even-tempered, and resistant to stress. They refuse to worry too much and tend to be self-confident when striving to achieve goals.

• The results of an online learning style test.

Your primary learning style. Match: 43%

Pragmatist style

Pragmatists need to be able to see how to put the learning into practice in the real world. Abstract concepts and games are of limited use unless they can see a way to put the ideas into action. Pragmatists are likely to be experimenters, trying out new ideas, theories and techniques to see if they work. They may act quickly and confidently on ideas, getting straight to the point, and may lose patience with lengthy discussions.

Learning methods especially suited to pragmatists include:

- Practicals
- Case studies
- Problem setting
- Discussions

You might want to think about incorporating methods that are thought to be effective for other learning styles.

Your secondary learning style. Match: 33.7%

Reflector style

Reflectors prefer to stand back and observe. They tend to be cautious, preferring to take a back seat. They like to collect and analyse information to help them reach their conclusions, which they may take considerable time and effort to develop. Reflectors see the big picture by using information gathered from previous experience as well as the here and now.

Learning methods especially suited to reflectors include:

- Paired discussions
- Self analysis questionnaires
- Time out *[simply build in sufficient breaks to make space for the reflectors]*
- Showcase / Demonstrations
- Feedback from others
- Coaching

You might want to think about incorporating methods that are thought to be effective for other learning styles.

Your tertiary learning style. Match: 18%

Theorist style

Theorists like to think through problems in a logical manner. They value rationality and objectivity, and like to assimilate disparate facts into coherent theories. They are disciplined, aiming to fit things into a rational order. They are often keen on basic assumptions, principles, theories, models and systems thinking.

Learning methods especially suited to theorists include:

- Models
- Classroom response systems *(get one of the theorists in the classroom to be responsible for the stats!)*
- Story-telling
- Quotes
- Tutorials *(these may then be coupled to practicals for applying the theory learned in the tutorials)*

You might want to think about incorporating methods that are thought to be effective for other learning styles.

Your quaternary learning style. Match: 5.4%

Activist style

Activists like to immerse themselves fully in new experiences. They enjoy the 'here and now', and tend to be open minded, enthusiastic and flexible. They have a tendency to act first and consider the consequences later, and they often seek to centre activities around themselves.

Learning methods especially suited to activists include:

- Brainstorming
- Problem setting
- Group discussions
- Roleplaying

You might want to think about incorporating methods that are thought to be effective for other learning styles.

• The results of one further online test of your choosing. Big 5

Factor	Factor label	Raw score	Score percentile
I	**Extroversion**		29
II	**Emotional stability**		81
III	**Agreeableness**		35
IV	**Conscientiousness**		89
V	**Intellect/Imagination**		23

Big five personality trait scores calculated by openpsychometrics.org

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

The information from these quizzes tells me what I am already aware of and that I can basically slot into any team and adapt and work within the team as required as long I

can see the big "big picture" to help work on all aspects and be "fluid" to move and adapt mid stream to accomplish the project also to help keep the project on track.

Project Idea

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

My idea is to create a device that displays a speed limit number on the dash of a truck to remind a driver on what his speed limit is when he attaches different trailers as the trucks speed limit restriction will change depending on length and weights of the trailers. The device will work out the new speed limit to display based on the length and weight of the truck and trailer combination.

Motivation (100) words) - This should be a description of why the project will be interesting or useful.

My motivation behind this is to help improve road safety even if its only by a small amount. The project wont be without its challenges and trials as it will be a device created from scratch with no baseline or references as there is no other devices like it. And that will be for me what will be interesting as I like challenges that are put be fore me.

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

There are 2 parts to this, first part is the main unit for the prime mover that does all the calculations and displays the new speed limit, the main unit will have error codes programmed in for fail safes like whether a trailer is overweight, or a secondary/trailer unit loses communications. The main unit will also have an override button to ignore errors

The second part is the trailer unit that sends all the trailer information to the main unit that takes information from the trailer scales and the programmed data like lengths and maximum weights of the trailer to remind the driver that a trailer is overweight.

There a close to 500,000 Heavy vehicles registered in Australia and a little over 360,000 are capable of towing in this speeds change bracket for example if they add an extra trailer to make 3 trailers or have 2 "full length" trailers with a dolly in the

middle automatically their speed changes from the state limit of 100km/h to 90km/h because of their length or even down to 80km/h or lower because of their length and weight restrictions and the factory fitted speed limiters don't take into account with these changes, many driver often forget they should be sitting on a slower limit however by having a display up on the dash reminds them the speed that they should be doing.

The devices will have a UI(User interface) that can easy program the units incase the units are moved from one vehicle or trailer to another, the units will have the ability to retrieve constantly changing information like the weights from scales on the prime mover or trailers. The HUD(Heads up Display) will have all the instant information for the driver to visibly see like current trailer weights, a diagram of the vehicle/trailer combination, new speed limit of the vehicle and last but not least a section to display errors if they occur.

Physically the units will be encased in their own waterproof boxes as they will be out in all the weather especially the trailer units as they would be mounted on the external of the trailer, the main unit in the cab will also be weather resistant and will have the HUD connected and run up to the dash for the driver to easily and be able adjust wat is required as needed, it will also give the appropriate authorities a quick and easy reference for their random inspections.

Tools and Technologies (100) words)

The tools required to make this work will be:

- Arduino
- Custom circuit boards
- Interface capabilities
- Casing for the device
- Custom Firmware

Arduino will be used for prototyping and test as there isn't an already made device to be able to be used, past prototyping circuit boards would need to be outsourced to a company for final production. As this would need to be made by specialised equipment. The software would need to custom software created from the ground up just containing simple information about the trailer it would be mounted to like max weight and length, it would need the ability to talk to the main unit, later it would need the ability to retrieve information from the scales on the trailer. The main unit would need to be able to retrieve information from the trailer units and onboard scales and then

be able combine those values and calculate the corrected speed limit from a table on to a display mounted up on the dash of the vehicle

Skills Required (100 words) - List the skills are required for your project, including software that needs to be

Skills required range from circuit board manufacturing to programming of the actual units and then basic auto electrical to mount and connect the units. The circuit boards would have the outsourced to a company that specializes in circuit boards but could be prototypes on Arduino boards first, software/firmware would be created in java and be programmed on Arduino to test.

Outcome (100 words)

Upon completion the devices would lower the infringements incurred by drivers as the device is "in their face" reminding them, also by implementing this it would also make the roads safer as it is another thing the drivers don't need to remember while loading/hooking up which means they can shift there thinking to more important things.

References

https://www.nhvr.gov.au/files/201707-0577-common-heavy-freight-vehicles-combinations.pdf

Truck sizes / Configurations for Australian Roads

https://www.seek.com.au/job/59402398?type=standout#sol=4a6beaacde36221337158f68d535a80875a2c881

IT Hardware Technician Job