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https://github.com/s3876704/Intro-to-IT-

Hello everyone my name is Mason, today I'll be talking about myself about what I have interest in IT. Initially I was interested playing video games on the desktop which led me to undertake a certificate 3 in IT and completed it in 2019. I am over fascinated with building, upgrading/modification and servicing computers so they can work. I am furthering my studies to upgrade my skills and knowledge on computers as I would like to be able to work in the IT industry and make new friends. When I was younger, I wasn't quite sure what I wanted to do, I had no Idea what I was doing but at the time I was interested in building projects at my school and playing video games on the ps4. I have chosen to study with RMIT because when I started doing diploma at Tafe it was very hard and confusing,

One of the people that I know who had studied at RMIT suggested that I should go there because they are way better at understanding and can also help, so I then got myself enrolled into the IT course at RMIT. What are the things I'll be learning during my studies at RMIT, at the start of the course I had a feeling that it would all just be about coding and not working in a group for assignments in the future, so far all I know is a little bit of java that I am learning currently now. https://www.seek.com.au/job/50554685?type=standout#searchRequestToken=191ac86c-a454-43
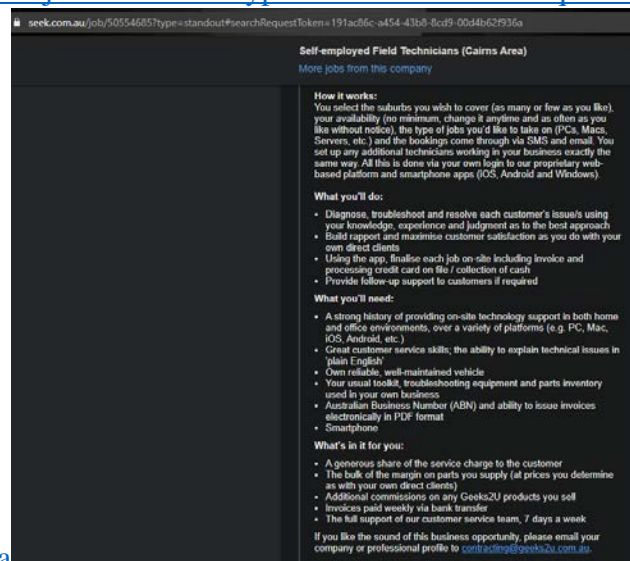
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The position of this job is self-employment, working for a self-employment is really good because you have a lot of responsibility. This job appeals to me because you can work from home and do troubleshooting. The skill set you need to be able to do is work with mac + IOS, Android, etc. be able to diagnose, troubleshoot, great customer support. The skills that I currently have are, building desktops, very little knowledge on java and troubleshooting. How will I get the skills and qualification that I would need are, learning how to use voltage as I don't have a clue to use it.

The results from the tests means to me doesn't really mean anything because over years people change so my answer might never be the same but it might. I think that the results may influence my behavior in a group team might be good because I will always keep asking questions that are more like 'what if it doesn't work?' or 'will it work', 'how does it work?', etc. I can that this knowledge from the creativity test and work on getting better with interacting with people more often and more get involved with other people.
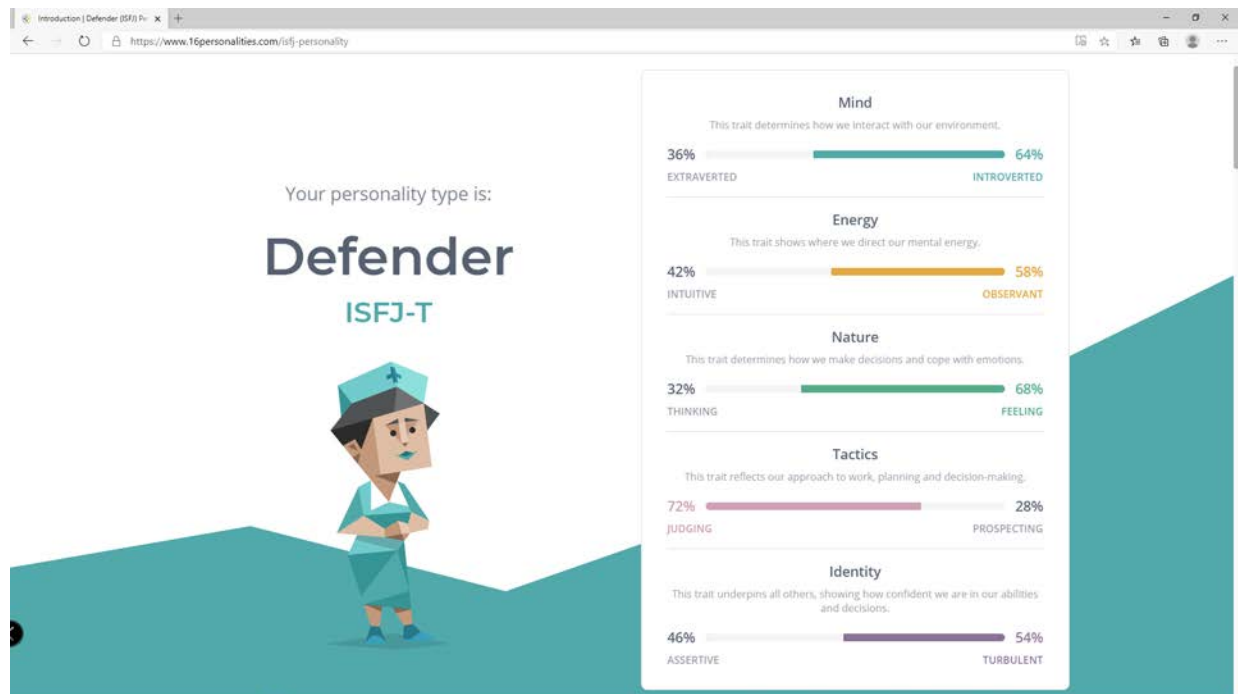
OVERVIEW

Global warming is changing weather patterns at an alarming rate, causing unpredictable changes in the weather. These changes are leading to people not being prepared for the weather they are being confronted with (NASA, 2020). This is combining with an increase in both the information people are processing every day and an increase in how busy people's lives are becoming (Kowalski, 2020). This project is designed to provide its users with a quick and easy way to be alerted that it is going to rain and they need to take protection from it, whether that be to take an umbrella or put up the roof on their convertible.

Motivation

Climate change is changing the weather due to different temperatures causing unpredictability in the weather (NASA, 2020). This is causing it to rain more as it is a cycle of an endless weather pattern that keeps changing. This is combining with people's lives becoming busier causing people to experience information overload on a daily bases, with the more they try to become originated only adding to the problem. In the today's modern world people have a lot more information because of the use of the internet world wide. This is a good thing to keep people up to date but can have bad result in memory loss (Studyfinds, 2020). The combination of these factors brough fourth the idea of the weather watch 2020 to inform information burned users about the unpredictable weather in their world.

Description

A Raspberry Pi will be used to run code that will monitor a weather website such as Weather Zone or the Bureau of Meteorology to monitor for changes in the weather that may lead to rain. Bom is the preferred website as their weather data at available in comma separated values, this format will be used to put into the algorithm that will be used to work out if it will rain. Once the algorithm has calculated the chances of rain it will then display on screen if it will rain or the chance of rain, with a recommendation of placing it by the door or where they leave the house from the most. A PIR motion sensor will be used to detect when users are close by and about to leave the house and can cover up to 6.1 meters away this can be fine-tuned to the individual house it is placed in. The raspberry pi will be used to connect to a motion sensor using cables and code to detect the human body and after it has detected a human body it lets raspberry pi somethings there. The PIR motion sensor will detect a human and the PIR motion sensor will signal the raspberry pi to grab information from the weather website so it's all up to date and then sends I icon of rain droplets to a screen. As the users reach to the door, they will see the icon of rain droplets which will tell the users to take an umbrella with them. Sound will also be used to ensure the users are aware they need to look at the screen as there is information they need to see, i.e. thunderstorm sounds or the sound of rain on a tin roof will be played depending on the weather forecast. If there is time and money in the scope of this program it could also be extended and programed to tell the users any other weather-related information, traffic problems on there way to work or warnings they should be aware of before they leave the house.

Tools and technologies

A raspberry Pi 3 or 4 will be used as the core of this project, it has been chosen not only for its low cost but the ability to add on other components to the PI. The PI also provides not only an internet connection via WIFI but also does not need a lot of power to operate. The PI has PIR sensors that can plug and play into it. A flat panel monitor will be used for the display, there are many available that will run off the PI at lower power consumption (Raspberry Pi Foundation, N.D.).

Skills required

The skills that would be required are the knowledge of how to use coding with python and you will need python application to write in python, you will also need software called Linux to run the raspberry pi. Raspberry OS will be needed for the PI and a computer that is running a version of Linux such as Ubuntu will be required to connect with the PI in order to program it. An understanding of the weather and what makes it rain will also be required in order to program the calculation to work out if it will rain.

Outcome

If this project is successful it has the ability to be an early warning system and reminder system that can be deployed into users' homes at a low cost. This will allow for the users to be warned just before they leave their house that they may want to grab that umbrella by the door or put the roof up on their car. This at the very least could save them from getting wet but at the most could save something important or valuable such as important document from becoming ruined by the rain.

References

Kowalski, K. (2020) Busyness 101: Why are we so busy in modern life? (7 Hypotheses). Available at: https://www.sloww.co/busyness-101/.

NASA (2020) The effects of climate change. Available at: https://climate.nasa.gov/effects/.

Raspberry Pi, Foundation. (N.D.) Raspberry Pi 4 Tech Specs. Available at: https://www.raspberrypi.org/products/raspberry-pi-4-model-b/specifications/.

Studyfinds (2020) Information overload: Multitasking, technology causing more Americans to become forgetful - Study Finds. Available at: https://www.studyfinds.org/information-overload-multitasking-technology-americans-forgetful/.