Name: James Wall

Student number: s3908836

GitHub Public Repository URL: https://github.com/JWallCreations/assignment1

GitHub Pages URL: https://jwallcreations.github.io/assignment1/ProjectIdea.html

Personal Information

Name: James Wall

Student number: S3908836

Student email: S3908836@student.rmit.edu.au

Nationality: Australian

Language: English

Education: Cert IV in fitness

Interesting fact: I Previously served in the army reserves as a rifleman for 2 years. I served almost 10 years ago, so I was quite young. During this period, I was not deployed so most of the time was spent training. I found it to be one of the most formative periods of my earlier life.

Interest in IT

My interest in Information Technology comes from the constant reminders of daily life that Information Technology is a benefit. Many daily activities can be made easier with applications on a mobile phone such as online banking, GPS navigation, checking movie cinema times, and much more. It is easy to appreciate the benefits of these types of technologies, and inspiring to imagine future technologies that could impact our lives'.

Choosing a suitable environment to learn about technology, develop technical skills, and broadening my knowledge was an important choice. After investigating study options, I found that RMIT was my first choice due to the flexibility of the course through Open Universities Australia. I needed a course that allowed me to continue working whilst studying, and the course structure of four study periods meets this criterion.

During my studies at RMIT, I hope to gain a strong foundation about information technology and programming. Already, with RMIT's Introduction to Information Technology and Introduction to Programming courses I am undertaking, I know I have taken the correct first steps to learning more about the broad industry of Information Technology.

Ideal job

Technology is increasingly becoming a part of the financial industry and innovation is highly desired. There are many start-ups and established organisations who are utilising technology to the benefit of the finance sector. The application of programming and the desire for innovation in this industry makes striving to participate in it very exciting.

Due to the highly technical nature of financial technology jobs, there is a requirement of a bachelor, or master's degree, in Computer science or engineering. With my current path of a degree in Information Technology it would be more appropriate to transfer to a Computer Science degree or equivalent if I expect to meet the requirements.

A minimum of five years of relevant experience is required to apply for this job. For this specific role, the requirement includes competency in a range of technologies and skills relevant to the financial technology industry that deal with the security, application building, website, data, and teamwork.

Comparing my current skills to the required skills and experience shows a long path ahead of completing a tertiary degree in Computer Science or Engineering. In addition to the completion of a degree, I will need to prove my value by completing programming projects with the relevant technical skills that showcase my ability to first start in a junior or graduate java developer position.

Personal profile

There are a range of methods to assess potential suitability for an employee or employer which commonly pertain to personality and aptitude. These tests can be used to indicate whether an applicant has the necessary requirements to fulfil a role.

For personality there are tests such as the Myers-Briggs type indicator test [1] which aims to provide a range of information about the personality type and its expected interactions in life. My results for this test were INTJ-A of sixty percent in each category. These results show a reflection of my personality that values rationalising, competence, and has a tendency of forgoing pleasantries in social situations.

If I were to take these results as fact then in group situations I imagine needing to express patience and tact in the face of incompetence and social norms, when in a less compatible group. The ideal team for this personality type would be small and task driven with less worry for socialising.

In addition to personality types, it is important to know about learning styles. A learning style, such as visual, auditory, or tactile can help you become more efficient when learning new topics. Upon completing a learning style test [2], I received the result of a visual learner which indicates that information is more easily learnt using a visual format such as pictures, diagrams, or writing.

When putting these insights into practise within a team environment it is important to request that information be presented in a visual format, rather than a tactile or auditory form which is usually how group discussions may be conducted in an online course. Methods such as screensharing will be immensely beneficial to the visual learning style.

Although personality and learning style tests can be very informative, an aptitude test is used indicate if someone has the capacity to perform within a role. An example of an aptitude test relevant to information technology is the computing aptitude test offered the Unity of Kent [3]. This specific test assesses aptitudes related to programming such as problem solving and numerical reasoning.

With an above average score of 22, this test implies that I have the capacity to learn programming. A lower score might encourage less technical career. Although psychometric tests are often used as a predictor of success, it is important to note that it is one of many indicators. In a group setting it is vital not to label people by a number, but instead by their contributions and effort.

Project idea

An application that gives medical and health advice to the user based upon the users provided health details. The inputted medical conditions and health profile that is provided by the user will output health management information based on the latest medical science. This will reduce the mental labour required to search for information about their health conditions. The project will be built by a team of software developers with the consultation of medical professionals. The application is intended as a guide and appropriate healthcare professionals should be consulted about the information provided by the application.

With health being a foundation for happiness and productivity, as well as a major economic concern, it shows a strong reason for developing tools that assist with the promotion of individual health. The industry for health is growing every year, and with the increased growth and availability of information, it is becoming more difficult to make an optimal choice to improve and manage our health. This lack of certainty and increased complexity creates a need for the simplification and streamlining of medical information to the individual.

The proposed solution for this health issue is an application that can sort through the latest medical science data whilst tailoring it to the user to promote the best health outcome. This will allow the user to make more informed decisions about preventative health measures such as exercise, medication, and lifestyle; or treatments related to their diseases that could have complex interactions their other health conditions.

To assist the users in achieving an understanding of ideal health, the application will allow users to create a profile and input data relating to their physical health. This data will be tracked and compared to ideal health data which can relate to their weight, blood pressure, heart rate, diet, and nutrition in blood test results. The data provided could cause the application to give warnings about

any health issues that may arise from the user's current health data, such as their weight contributing to the likelihood of diabetes, or their blood pressure being higher or lower than normal.

This data can also provide additional specificity in relation to any other health conditions that the user might be suffering from. For example, if the user inputs the data of being overweight and having diabetes, the application will provide a message detailing the health interaction between the user's weight and how it may affect diabetes. In addition to the information provided about the interaction it will also give preventative treatments.

Preventative treatments can slow the progression of a disease and in some cases prevent it from occurring. Due to the sedentary lifestyle of modern society, lack of physical activity plays a major role in disease. Although there are many preventative treatments that will be provided by the application to the user which are unrelated to fitness, the role of fitness and daily activity are heavily promoted by the application. Daily goals of physical exercise will be tracked and compared to the inputted weight, blood pressure, and other data. To add incentive to complete the daily goals there will be a social element of comparing physical exercise for the day to other users. This can be in the form of calories consumed or steps travelled.

Not all health conditions are preventable, and some interfere with preventative treatments. It is also the aim of the application to give the best information possible for the user to enable them to manage their health in a non-fitness related capacity. The latest medical science data will allow the user to see a range of specific treatments related to their condition in addition to contraindications. An example of a contraindications is a harmful combination of medications that will cause the application to display warning messages to alert the user to potential harm. Treatments can be complex and worrying even with the assistance of this application, so the application encourages users to discuss the content with others through a discussion forum.

The discussion forum is of great benefit to the application's community and encourages further learning, sharing of health concerns, and participation. It will have dedicated and general forums to discuss all issues relating to health and links will be provided to the appropriate forum under each of the user's health conditions.

This project will require a workspace for the employees to create the application. This involves the purchasing of all office and developer related equipment such as the computers, laptops and office supplies for a small group of software developers required to develop the application. For the current intended iteration, the program will be written entirely in Java.

To develop this project, it will be necessary to employ a range of skilled developers responsible for the expectedly large database and the social interaction elements required of the application. An additional preferred skill for the developers would be a proficiency in academic research to sort through the large amount of data, and previous professional medical experience. To add to this, it is expected that regular consultations with medical professions will occur to ensure the validity of the application's health advice.

The development of the application is ambitious and requires the analysing of a seemingly insurmountable amount of information. With the completion of the application, it is expected that the user's individual health management goals will become more achievable and comprehensible. The application will promote a community of health-minded users through which its growth is ensured. If all of this is achieved, then this project can be expected to have a beneficial impact on the health care system and the individual's life.

References

[1]"Career Paths | Architect (INTJ) Personality | 16Personalities", *16Personalities*, 2021. [Online]. Available: https://www.16personalities.com/intj-careers. [Accessed: 22- Mar- 2021]

[2] I. How-To-Study.com and SOAR Learning, "Determine My Learning Style", *How-to-study.com*, 2021. [Online]. Available: https://www.how-to-study.com/learning-style-assessment/. [Accessed: 22- Mar- 2021].

[3]"Computer Programming Aptitude Test", *Kent.ac.uk*, 2021. [Online]. Available: https://www.kent.ac.uk/ces/tests/computer-test.html. [Accessed: 22- Mar- 2021].