

Name: Shampee Barua

Student ID: S3961462

Email: s3961462@student.rmit.edu.au

LinkedIn: <https://www.linkedin.com/in/shampee-barua-06016235/>

GitHub Public Repository URL: https://github.com/Shampee22/IIT_Assignment_1

GitHub Pages URL: <https://shampee22.github.io/>



Personal Information

I am Shampee and my roots are from Bangladesh, a land of rivers, and now living in the Greater Sydney area of NSW for more than 10 years. From my childhood, I had an interest in technology as well as in the arts. My favorite hobbies are dancing, graphic arts and watching art films including anime and lots of Korean Dramas!

At Dhaka University, I studied the Bachelor and the Master of Arts in English Literature to pursue my love for arts and cultural diversity. At TAFE (technical and further education) Hornsby, I completed a Diploma in Website Development. While doing the course, I found it quite remarkable and interesting how we were able to employ creativity in technology with the help of some codes and weird languages.

Interest in IT

After moving to Australia, I was amazed to see the use of technology in every aspect of life unlike in Bangladesh. At that time, my pastime was watching animated movies and that urged my passion to create characters done by Studio Ghibli or develop a game or an application for various platforms.

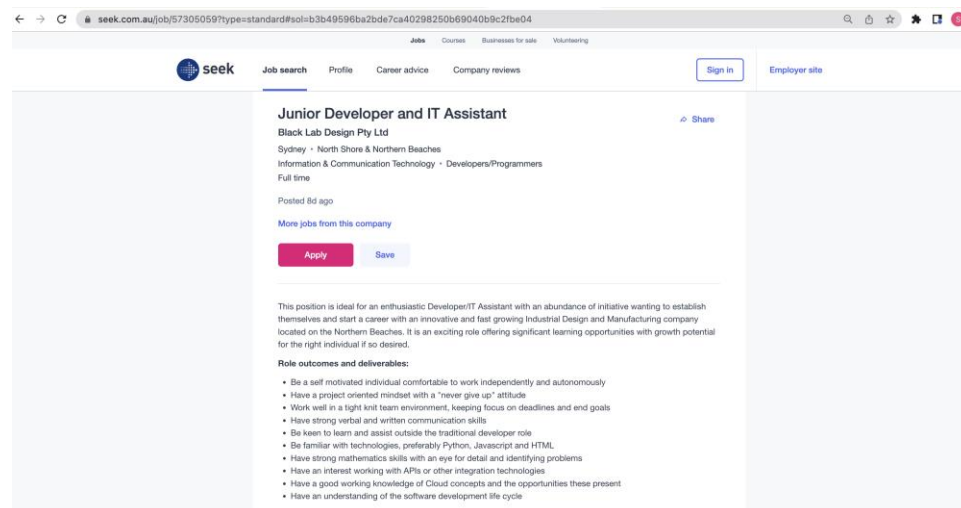
Based on my passion for Arts and Technology, I did a short course in Digital Media at TAFE without having any experience in the IT sector. At that time, I realized that there was more to explore in this field. Soon after, I pursued a Diploma in Website Development and completed the course with distinction which led to an increase in my interest in IT.

Working as a novice developer for a small company, Berry WebDesign, I gained some practical knowledge but realized I needed to be equipped with more skills in this area, especially the backhand.

For the past few years, I worked as a freelancer but needed to look for pathways to get into the workforce full-time. At present, I need to develop my skills while at the same time managing the household activities and the little one. RMIT (Royal Melbourne Institute of Technology) has given me the opportunity by offering an online platform to complete a program that will equip me with the desired attributes.

I am planning to complete the Bachelor of Information Technology program at RMIT to hone my skills and further explore the industry as a full-stack Web Developer.

Ideal Job:



The screenshot shows a web browser displaying a job listing on the Seek.com.au website. The URL in the address bar is <https://www.seek.com.au/job/57305059?type=standard#sol=b3b49596ba2bde7ca40298250b69040b9c2f8e04>. The job title is "Junior Developer and IT Assistant" at "Black Lab Design Pty Ltd". The location is "Sydney - North Shore & Northern Beaches" and the category is "Information & Communication Technology - Developers/Programmers". It is a "Full time" position, posted "8d ago". There are "Apply" and "Save" buttons. The description states: "This position is ideal for an enthusiastic Developer/IT Assistant with an abundance of initiative wanting to establish themselves and start a career with an innovative and fast growing Industrial Design and Manufacturing company located on the Northern Beaches. It is an exciting role offering significant learning opportunities with growth potential for the right individual if so desired." Under "Role outcomes and deliverables", it lists: "Be a self motivated individual comfortable to work independently and autonomously", "Have a project oriented mindset with a 'never give up' attitude", "Work well in a tight knit team environment, keeping focus on deadlines and end goals", "Have strong verbal and written communication skills", "Be keen to learn and assist outside the traditional developer role", "Be familiar with technologies, preferably Python, Javascript and HTML", "Have strong mathematics skills with an eye for detail and identifying problems", "Have an interest working with APIs or other integration technologies", "Have a good working knowledge of Cloud concepts and the opportunities these present", and "Have an understanding of the software development life cycle".

SEEK. 2022. [online] Available at: [Accessed 18 June 2022].

Full job description:

<https://www.seek.com.au/job/57305059?type=standard#sol=b3b49596ba2bde7ca40298250b69040b9c2f8e04>

The Job Description is seeking a Junior Developer and IT Assistant for Black Lab Design Pty Ltd in the North Shore & Northern Beaches as a Full Time.

I am interested in this position as it is ideal for an enthusiastic developer like me to establish and start a career, especially with a design company. The required skills match my skillset and furthermore, it is an exciting offer with significant learning opportunities and growth.

This position requires a self-motivated individual to be comfortable working independently and autonomously and have a project-oriented mindset with a "never give up" attitude while keeping the focus on deadlines and end goals.

Apart from strong verbal and written communication skills, the role requires strong mathematics skills and an eye for detail and identifying problems. Knowledge of technologies is preferably Python, Javascript, and HTML and there is a need to have an interest in working with APIs (application program interfaces) or other integration technologies. A good working knowledge of cloud concepts and understanding of the software development life cycle would be a plus in the position.

In the Diploma of Website Development, I learned various programming languages and frameworks including C#, Visual Basic, MSSQL, HTML (Hyper Text Markup Language), CSS (Cascading Style Sheets), Javascript, JQuery and ASP.NET.

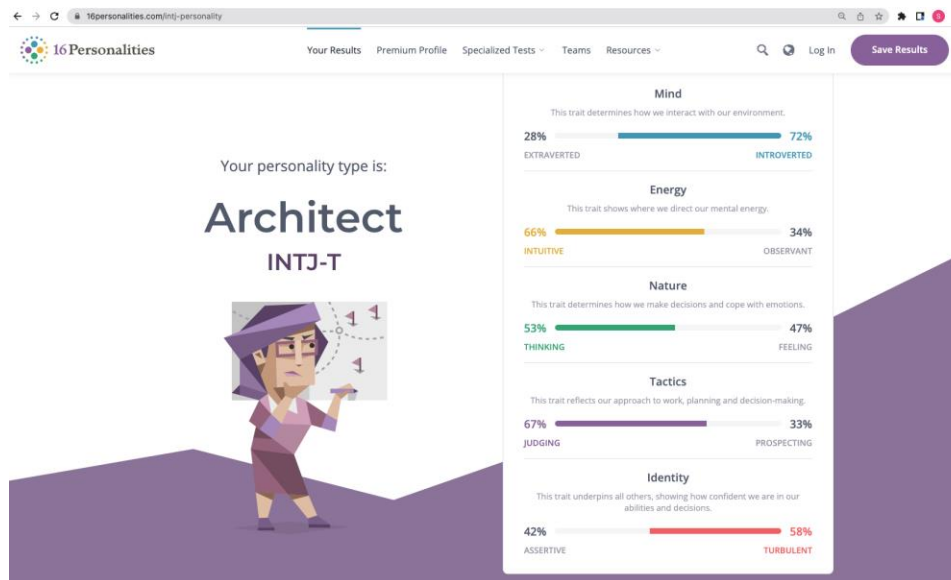
While working for Berry WebDesign, I learned to use Wordpress.

Though I have some basic skills to apply for this job, I still lack proper knowledge in Python and other project management and source control tools, like Atlassian, Sourcetree, Bitbucket, Microsoft Team foundation server, GitHub and Git.

I believe after completing this course I will gain the required knowledge in programming like python and learn to work in a team environment as well as to further enhance my verbal and communication skills whilst producing the project deliverables.

Personal Profile:

Myers-Briggs test:



16personalities.com. 2022. Welcome! | 16Personalities. [online] Available at: [Accessed 18 June 2022].

My personality type is Architect (INTJ-T)

Results link: <https://www.16personalities.com/profile/reports/personality-traits>

Online learning style test (Personality Max Report):

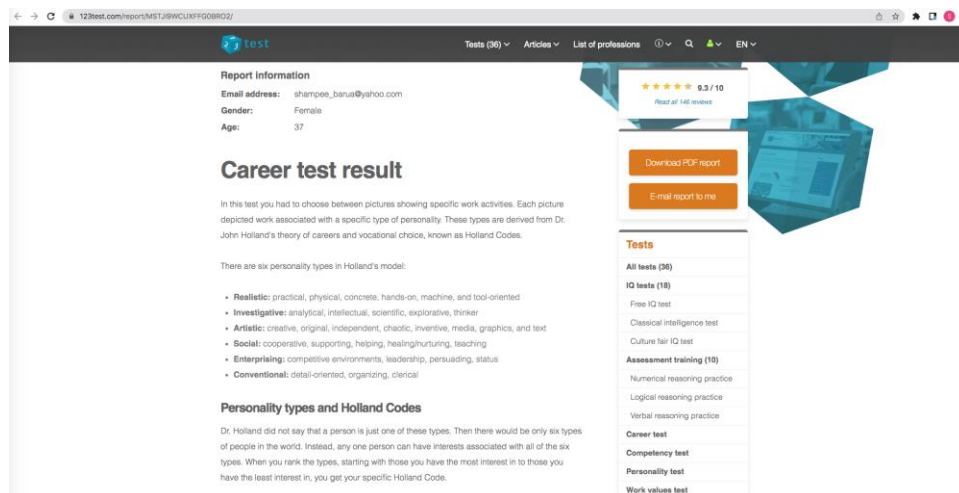


Personality Max. 2022. Shampee's Learning Styles at Personality Max. [online] Available at: [Accessed 18 June 2022].

In terms of learning style, I am primarily a Kinesthetic learner (36%), followed by a Visual learner (34%) and then Auditory (30%).

Results link: https://personalitymax.com/report/?ls=74-64-77&name_key=8e62259303

Personality test (Holland's model):



123test.com. 2022. [online] Available at: [Accessed 18 June 2022].

There are 6 personality types in Holland's model and my code is CARISE. My most favored personality type is Conventional followed by Artistic and Realistic. According to the results, a Web Developer role would be a 75% match with this personality code.

Results link: <https://www.123test.com/report/MSTJI9WCUXFFG0BRO2/>

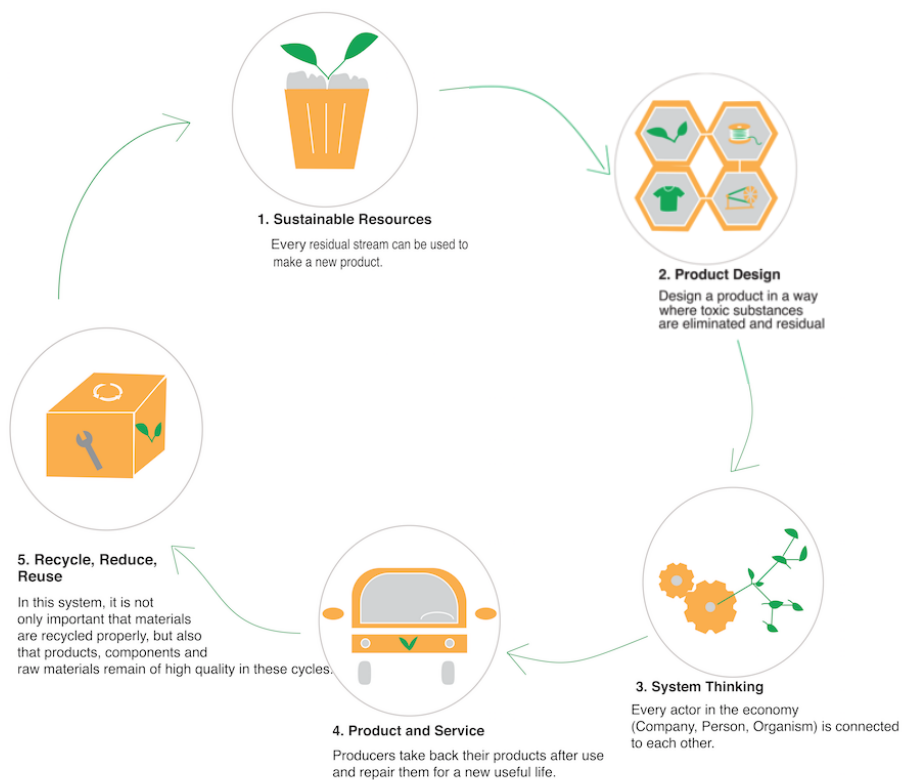
Personality tests can have a range of benefits for professional development. It helps to prepare for the job interview and provides the necessary insights to make the right career choice. In addition, this can assist in identifying gaps or weaknesses and to seek training courses and programs to be able to operate and function better as required for the roles or position.

Certain roles allow individuals to express their personality traits more than others. For example, my personality shows me as an introvert and is suitable for a job like a Web developer.

However, with this role, some teamwork is required and some conversations with clients are necessary. Being a shy and introverted person, most of the time I do not speak up. I fear I might not be able to explain things properly. I struggle to solve problems solely by myself without asking for help from others.

With this personality, I can recognize my weaknesses and discover where I need to improve. For example, I can engage in courses or training programs that can boost my social interaction and teamwork skills. To be better at meeting task deadlines, I could attend time management courses.

Project Idea



Overview

I want to create a free-of-charge smartphone application that can be used to search for circular economy products, services, and events around the world. It will work as a platform to promote a zero-waste policy by reducing, recycling, and reusing products. It will include articles about the circular economy. How and where to find products to recycle and reuse. Without being aware of food wastage, people throw away food every day — from uneaten leftovers to spoiled

produce. By simply putting the product's name, this app will sort household waste, helping to reduce the fraction of unsorted waste. It will create cooking recipes by adding the ingredients you have. To make food waste prevention fun and easy, users need to open the menu page on the app and choose a recipe. It will help us to use what we have, so nothing goes to waste!

Motivation

After joining an online seminar on the circular economy, I was motivated and determined to reduce waste and help the earth to go green in every way possible. For a long time, I was thinking of a way to create awareness of waste, especially food and products, and how to reduce it. Creating an application with some information and sorting bins and food recipes will give me a chance to contribute to making the earth clean and green. I was thinking of a way to show the products of all environmental choices, drastically reduce the use of natural resources and cut or eliminate emissions and waste. Creating an application will increase the awareness of the people while sitting in their comfort zone!

Description

My app will help the user to understand how a circular economy works, how important it is to save our environment, and how we can reduce our waste by reusing products and creating new recipes. My app will have a simple quiz section where users will answer questions about waste and the circular economy and will get some points. With that extra point, they will be able to swap a product. There will be a reward system where users will be able to see how green they are. Also, they will get notifications about software updates as well as events and products of the circular economy.

Mobile application development is a step-by-step process for creating apps for mobile devices, like phones and tablets. In addition to collecting valuable user data, ramping up marketing activities with push notifications — personalizing customer approach — and the ability to work offline, mobile apps provide businesses and users with more functionality than a website, like creating an easy-to-use loyalty program right in the app itself.

My app will feature:

- Push notifications
- Community wall
- Surveys and questionnaires
- Video, image, and audio hubs
- Calendar integrations
- Ecommerce carts
- Menu system

- Event page
- Selecting products and Bins
- Bin Quiz
- User directory
- User Feedback

After building the app, I will develop an MVP—minimum viable product. The app idea behind an MVP is that it will force me to think about the app's most essential features. This is an important aspect of the app project on the path to creating a successful app.

Once my MVP is finished, and I have a working app, then I need to test it before deployment.

The app must be tested on actual mobile platforms. Between iPhones, iPads, Android devices, PWA, smartphones, tablets, and more. I need to check if the app works online, offline, and so on. Devices with different software versions or screen sizes might have issues needing to be fixed before it goes live.

Will go through usability testing with actual test users such as friends, family, and colleagues as well.

After manual testing, it is necessary to conduct advanced testing using written scripts to test the app. If there is an omission in terms of workflow and logic, it is necessary to react in a timely manner and fix the problems.

Tools and Technologies

First, I need to create a wireframe, a rough layout of a mobile app. Anyone can create a wireframe on a piece of paper, a whiteboard, napkin, or use a digital wireframing tool. The purpose of the wireframe is to simply illustrate the app's features and layout the schemes.

Also need to create the overall style of the app, including things like the color scheme, font selection, and buttons and widgets. Design encompasses both the user interface (UI) and the user experience (UX).

I will use Hybrid App development. Most hybrid builds rely on Javascript, which is a web technology. This coding language will help to create an app once and deploy it on multiple platforms like iOS and Android. The flexibility of a hybrid app is still high in terms of what the app can accomplish. While we will not need a developer who specializes in low-level coding to build it, they still need to have web development skills.

Skills Required

The most important aspect of mobile app development is building a high-quality user interface (UI). The UI of an application is responsible for interaction between the user and the software. When it comes to developing mobile applications, it is not enough for them to simply have adequate backend functionality. With a plethora of apps available to download, the most attractive are the apps that are easy to use, have a superior design, and run smoothly.

As a developer, I need to have a knowledge of multiple operation platforms in the current industry. As far as market penetration, there are three major mobile platforms: Android, iPhone, and Windows Phones.

Need to have the skill and knowledge of backend computing like security, database management, hardware interaction, implementation of memory allocation

Another important skill required is using modern programming languages like C# and Java, HTML 5, and CSS. Knowledge of mobile platform Application Programming Interfaces (API) such as Apple iOS, Android, and Windows Mobile. Able to implement the use of cross-platform mobile suites like Antenna and AMP (Accounting-Management-Promotion).

Outcome

Every year, a third of the food produced worldwide is tossed in the trash. By reusing the foods and ingredients that we already have at home, we can save our money, and time, and on top of everything food waste! Terrific way of using technology to conserve the environment in the process.

Many of us need to join forces to live sustainably. Whether that is saving water or energy, recycling waste, choosing renewable energy, or moving around without generating emissions. Thankfully, technology is travelling in the same direction - we can now count upon many applications to improve our daily effort in caring for the environment.