

**Lecturer**: Dr. Long Nguyen Minh

**Group:** 26

**Team members**:

Pham Vo Dong – s3891968

Bui Quang Thanh Dat – s3927551

Mai Chi Nghi – s3864219

Le Anh Quan – s3877457

**Date**:

**COSC2083 – Intro to IT**

**OUR IT PROJECT**

**OUR IT PROJECT**

# **Team Profile:**

## **Team name: DDQN**

This name represents the team's spirit, which shows all the expectations and the interest in the IT World. These letters take from the first letter of an individual member's name that shows each person is a piece of the puzzle indispensable in the team.

## **Personal information:**

### **Pham Vo Dong - s3891968:**

My name is Pham Vo Dong, and my student number is s3891968. You may reach me at phamvodong0811@gmail.com or s3891968@rmit.edu.vn, which is my primary email. I am a dedicated Vietnamese student who uses logical thinking to study and comprehend new things. I received a 4.0 GPA in high school in Vietnam, and my strongest subjects were mathematics and physics. I started learning English when I was in sixth grade and am now bilingual (Vietnamese and English). I've been studying information technology and competing in robots contests since I was in eighth school.

I am now doing a Bachelor of Information Technology at RMIT, and I like playing basketball and shooting photography in my leisure time. And the main reason I chose to spend my time in IT is that in today's world, information technology plays such an important role in our lives, affecting our daily activities in such a way that no one can ignore it. Information technology advancements, in my opinion, make a person's life better and more convenient. IT, for example, makes it simpler for individuals to weather the COVID-19 storm since they can do things online that doesn't require face-to-face interaction, such as shopping, learning, and working from home. I've had a great interest in technology since I was a youngster. When my family received their first computer, it opened up a whole new world for me, and I was able to enhance my technological expertise. It aroused my curiosity as a consequence. I competed in various tournaments and built some minor projects, such as autonomous watering systems, light bulbs, and balancing vehicles, through my high school robotics club. In addition, I've worked as a graphic designer since high school and am proficient in Python and HTML. As a result, I anticipate learning the skills required to manage an IT project and bringing my brilliant concept to life after completing my studies.

### **Bui Quang Thanh Dat - s3927551:**

I am originally from Vietnam, and Hue is my hometown. A fun fact about me is that, despite the fact that my father is from the Central – area, I still have a Southern accent. I believe this is because he spent a long time settling in the South, and my mother is from the South. I'm addressing this since a handful of my friends or new acquaintances often mistook my accent for something different, such as a mixed accent. I am bilingual (Vietnamese and English).

I'm fascinated by technology in general, which is why I selected this subject in the first place. I have to say that games are my main passion in IT. I've known about it since I was in elementary school and first engaged with it. The game was started by my brother. I recall watching him perform and feeling that it was a mind-opening experience. I thought it was intriguing at the time, and everything about the game was so thrilling and addicting; the game is called StarCraft, and after playing it, I dreamed of becoming a game producer. However, I did not find designing games to be as entertaining as playing them throughout my studies. I prefer to play games than create them, so I changed my major to RMIT. I anticipate gaining a great deal of information and a broad understanding of IT.

### **Mai Chi Nghi - s3864219:**

I was born and raised in Binh Duong, Vietnam, and graduated from high school two years ago with the ability to speak in two languages: Vietnamese and English. In 2019, I began my studies at RMIT University. I'm pursuing a bachelor’s in information technology by taking an English course. Aside from that, I am a member of the Flag Football Club (FFC) at university, and in my spare time, I enjoy playing video games and going to coffee shops with my friends. The globe is expanding at a breakneck speed these days. In many ways, technology has infiltrated and affected our everyday lives, thus it's reasonable to claim that IT has made our lives easier. We may now buy, learn, and work all from the comfort of our own homes. Smartphones, PCs, and laptops can be used to carry out these tasks. Because of COVID-19, my friends and I have been studying IT online since 2020, but we have to return to school face-to-face in less weeks, which helps us improve teamwork skills more and more. As a result, I made the decision to expand my education in order to benefit myself in the future.

### **Le Anh Quan - s3877457:**

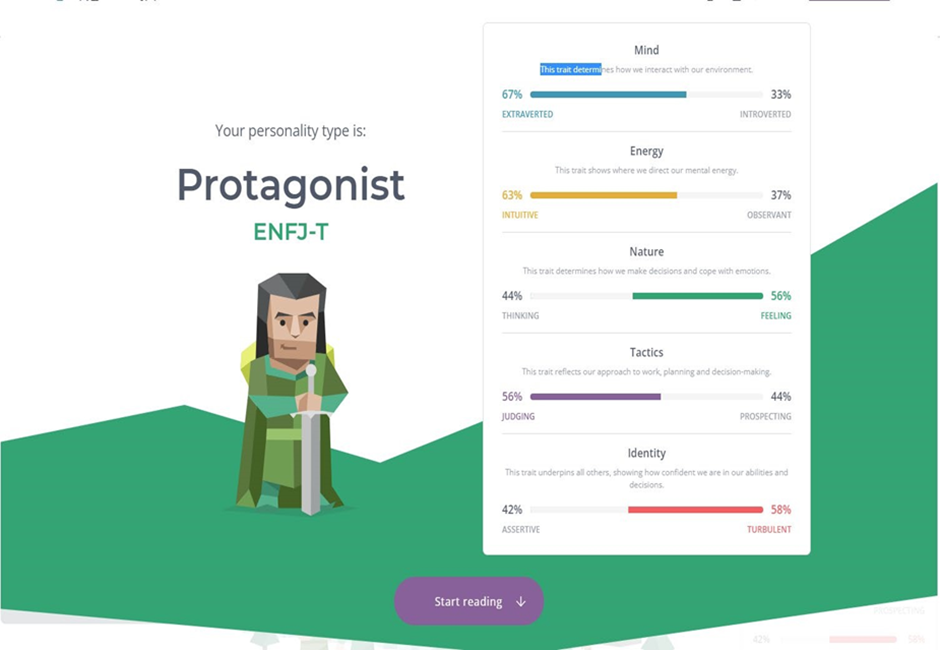
Ninh Hoa, a little hamlet near Nha Trang, is where I was born. My parents were very accepting of me and let me choose my own route. They wanted me to be a doctor at first, but after learning about my programming passion, they decided to let me study for programming positions instead. I picked software engineering as my RMIT major because I believe it will allow me to further enhance my programming skills while also allowing me to practice my English. I'm an introvert, but I'm working on improving myself so that I can work better with my co-workers.

My ambition is to find a well-paying career so that I can assist support my aging parents. In my spare time, I enjoy playing video games, and one of my favorite things to do with them is to tamper with the code or the game's value in order to disrupt the game's balance; this is what first drew me to software engineering. When I was older and had more time to explore, I decided on IT as my major because it was just getting started in Vietnam. When I graduate, I believe IT will explode, and I believe I possess attributes that are appropriate for IT, such as attention, devotion, and a readiness to learn and adapt. Because to its worldwide presence, internal climate, outstanding facilities, and expertise in IT, I picked RMIT to study. It also helped that my sister was an RMIT graduate at the time, and she was able to get work owing to the RMIT job placement program. Despite the fact that she studied business, she was able to persuade my parents of the benefits RMIT will provide me in the future.

## **Team Profile:**

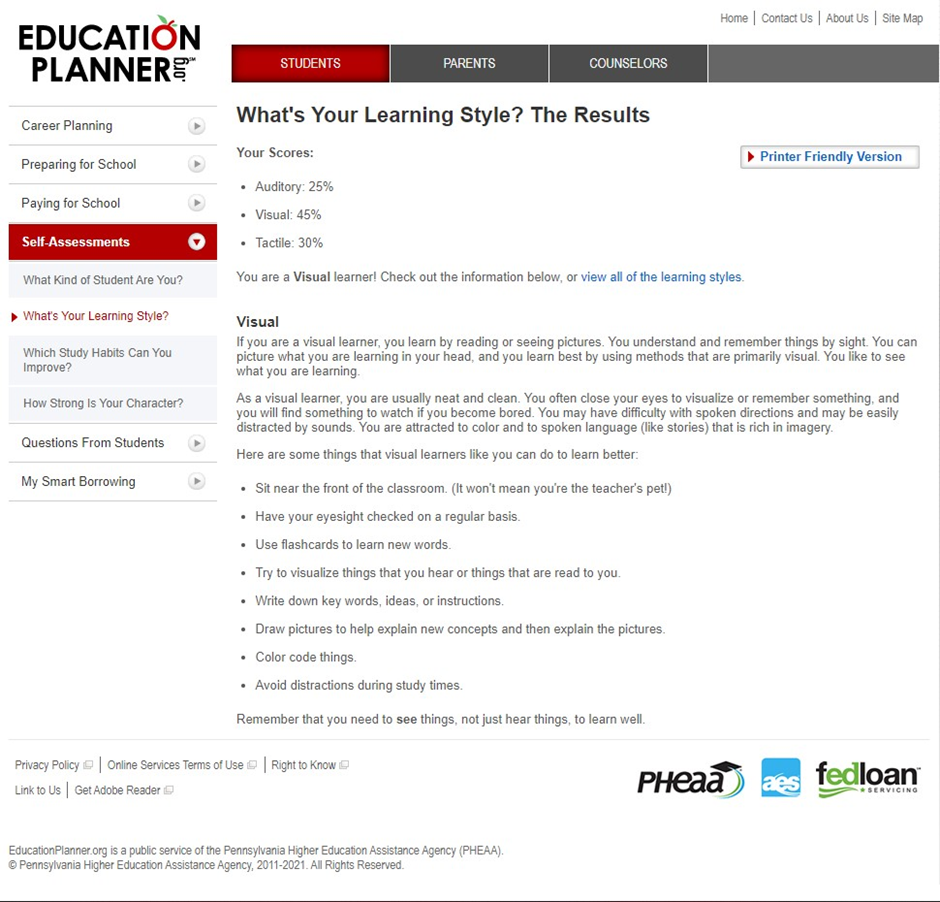
### **Pham Vo Dong**

#### **Myers-Briggs test:**

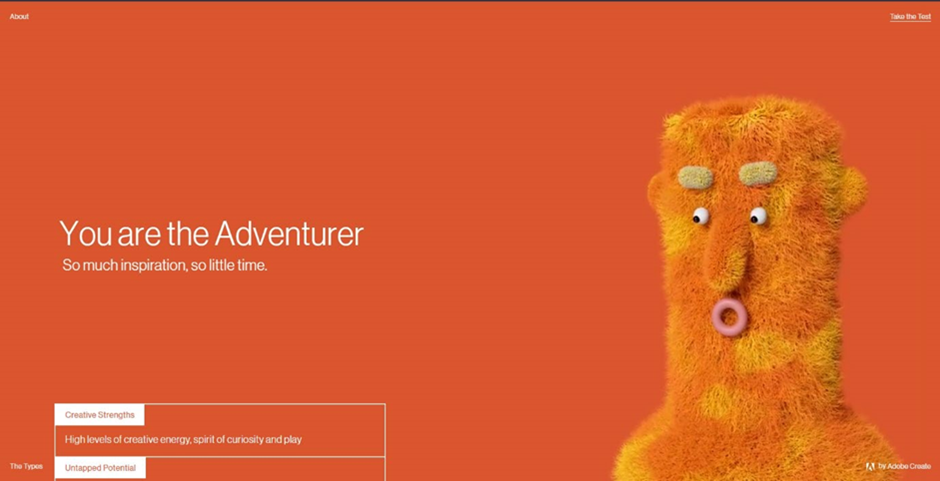
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[**https://www.16personalities.com/enfj-personality**](https://www.16personalities.com/enfj-personality) **(16personalities, 2021)**

#### **Learning style test:**

****[http://www.educationplanner.org/students/self-assessments/learning-stylesquiz.shtml?event=results&A=5&V=9&T=6](http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml?event=results&A=5&V=9&T=6) (Education Planner.org, 2021)

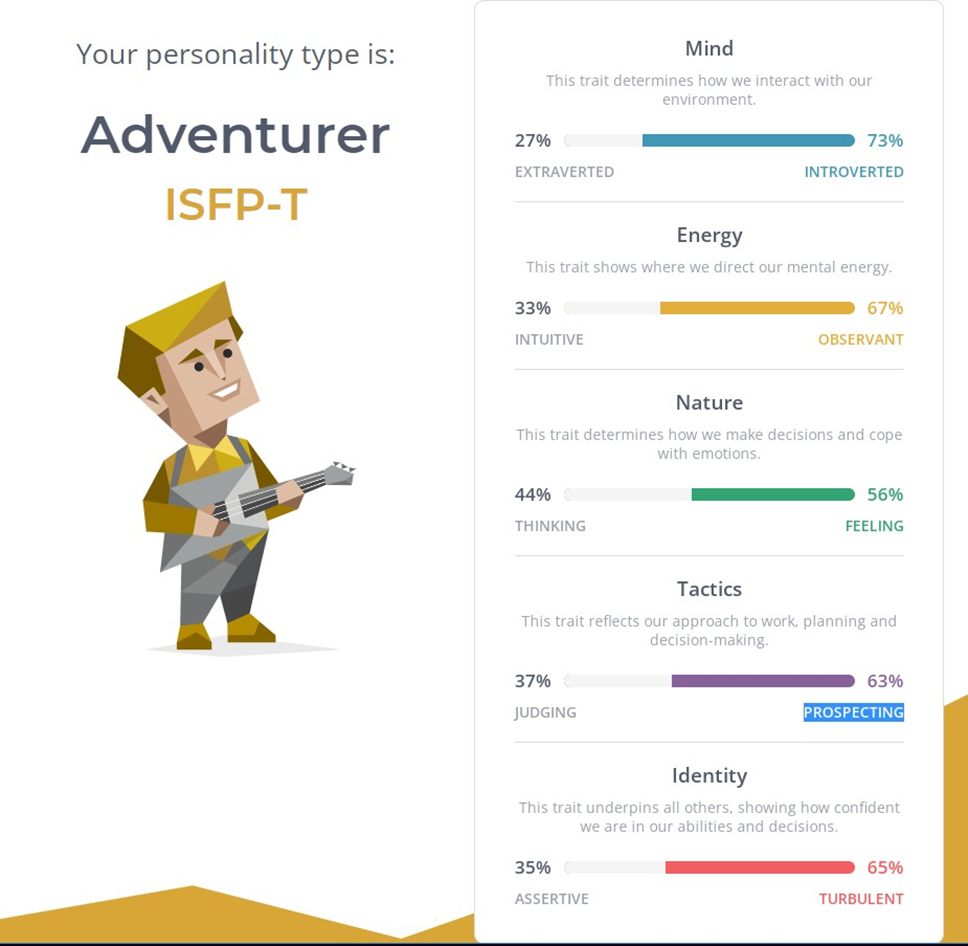
#### **Creative style:**

****<https://mycreativetype.com/share/adventurer/> [(](https://mycreativetype.com/)Creative Types by Adobe Create[,](https://mycreativetype.com/) 2021)

* These tests show that I am an extrovert, and I could become a potential leader. I will take on my position as a team leader with valuable skills such as idealistic, charismatic, creative, and social, which leads my teammate and me to success. Moreover, I create a better environment that is the most comfortable, making them feel motivated and inspired. Every person in my team will have an excellent chance to perform their most vital skill to join and complete the project successful

### **Bui Quang Thanh Dat**

#### **The results of an online Myers-Briggs test:**

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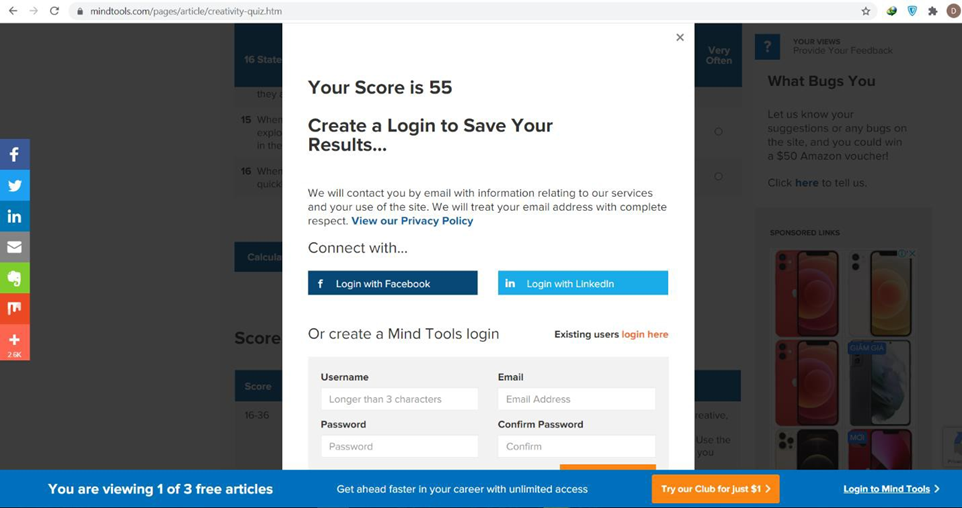
[**https://www.16personalities.com/articles/tactics-judging-vs-prospecting**](https://www.16personalities.com/articles/tactics-judging-vs-prospecting)

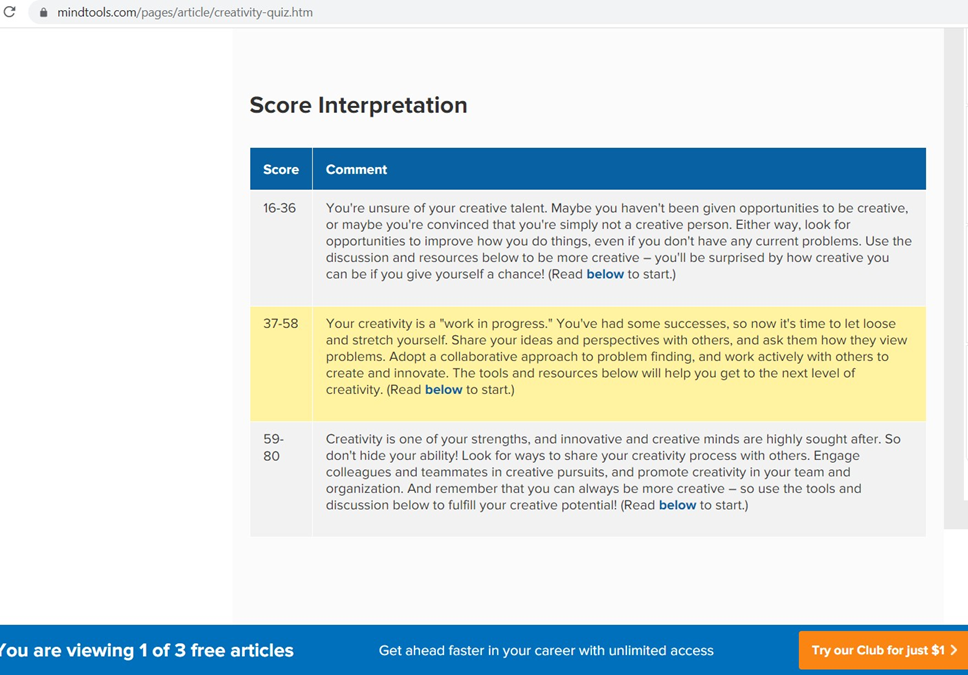
The results of an online learning style test:

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[**http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml**](http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml)

#### **The results of one further online test of your choosing:**

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[**https://www.mindtools.com/pages/article/creativity-quiz.htm**](https://www.mindtools.com/pages/article/creativity-quiz.htm)

* I believe the outcome met the test's objectives. According to the 16personalities test, I am an adventurer, who revealed qualities such as open minds, a desire for new experiences, and a grounded, warm personality. In terms of the test result's impact on my behaviour, I believe it advises what I should do with my character, such as how I should behave and engage with other team members. When you're in a group, everyone has an opinion, therefore it's not a huge deal because the team is working on a common problem. and the personalities may make sharing the concept and solution difficult.

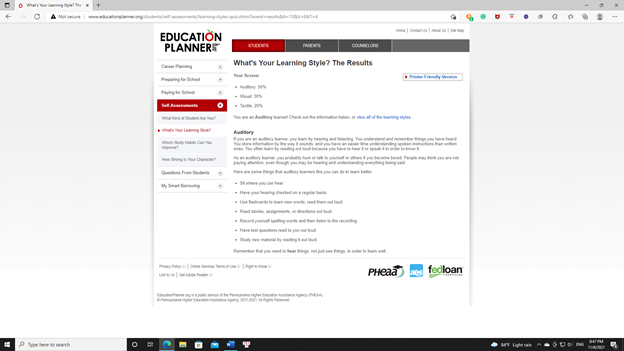
### **Mai Chi Nghi**

#### **Humanmetrics Jung Typology Test:**



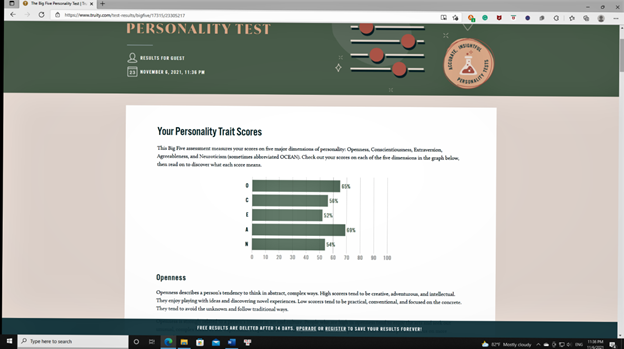
<http://www.humanmetrics.com/personality> (Humanmetrics Jung Typology Test, 2021)

#### **Learning style test:**



<http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml> (Education Planner.org, 2021)

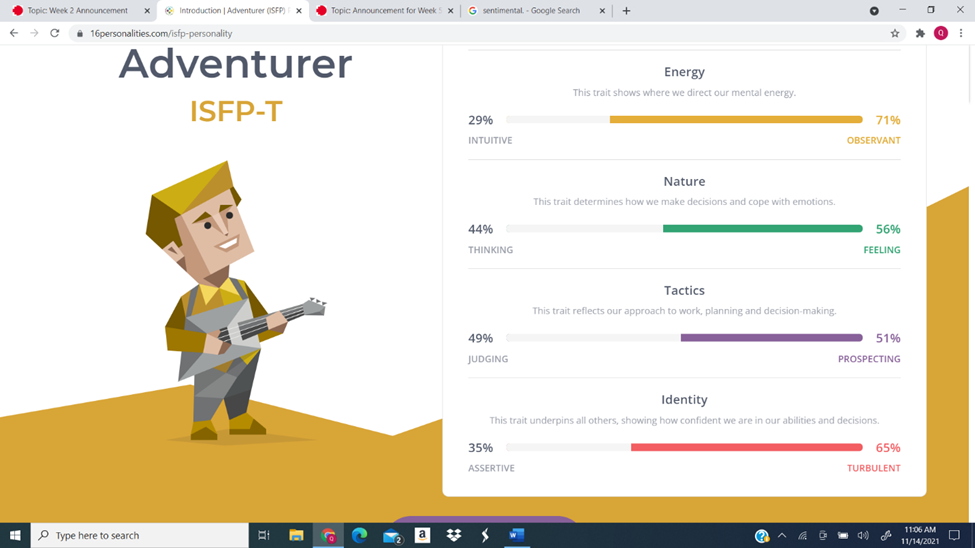
#### **Personality Test:**

  
<https://www.truity.com/test/type-finder-personality-test-new> (Personality Test, 2021)

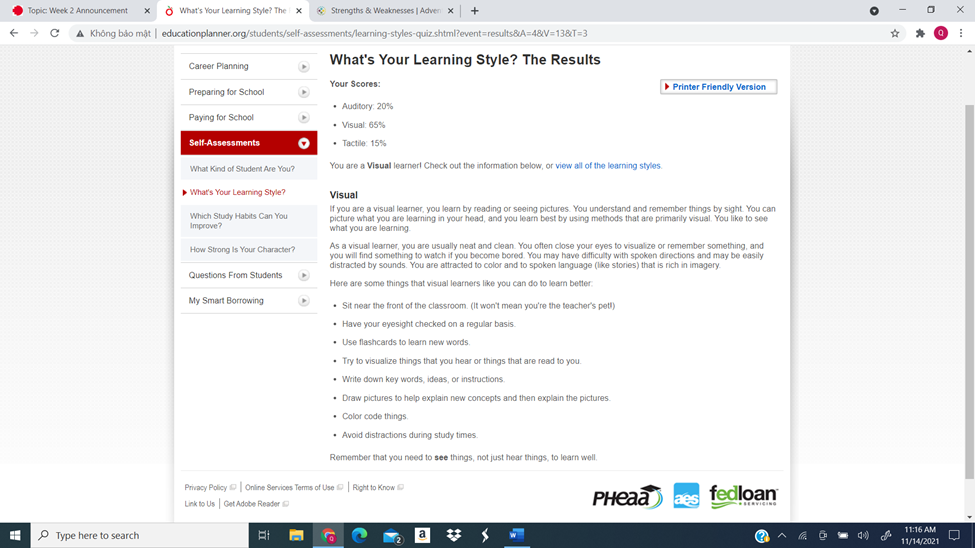
* Based on those findings, I'll introduce myself and assist those who wish to work on a team with me, allowing everyone to connect and learn about one another and encouraging me to work well together in the future.

### **Le Anh Quan**

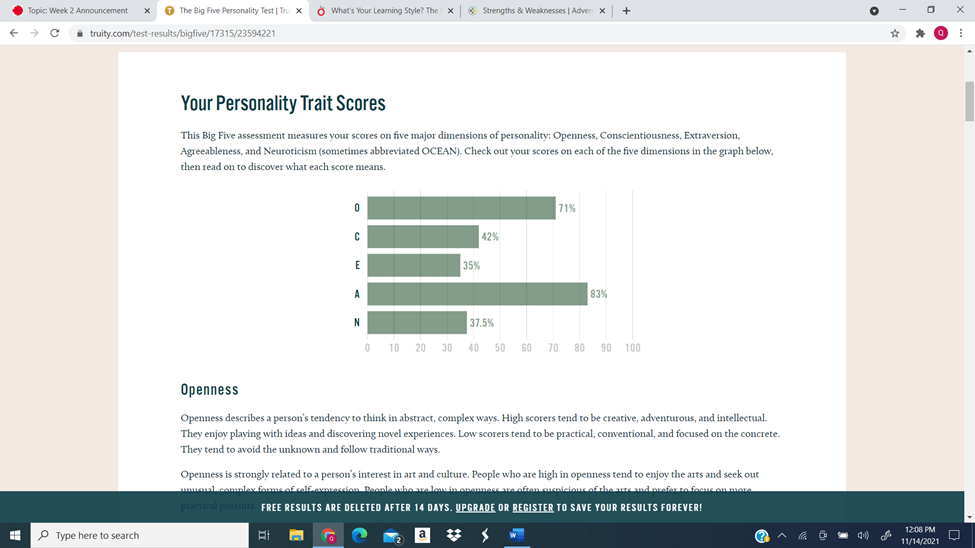
#### **Myers-Briggs test:**

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#### **Learning style test:**

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#### **5 big personalities test:**

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* These exams provide me with information about my personality, strengths and limitations, and learning style preferences. After answering the questions, I saw that several of my attributes match those listed. While these tests may not be completely accurate, and the results may alter over time as I grow, they provide me with a great starting point for improving myself. These exams reveal that I am creative and perceptive, indicating that I am qualified to help the team create ideas. The exam also revealed that I am a highly introverted individual, indicating that I should not be the first pick if the organization need a spokesman and that I need to improve my presenting and communication abilities. When establishing a team, I should look for people who can compensate for my limitations in order to cover more ground, but I also shouldn't let my flaws prevent me from trying a new position or filling a gap in the team.

## **Group processes:**

* Our team had a better connection than the previous assignment due to working together for long periods from assignment two to now. We are more flexible and professional in business; for example, all team members are familiar with working speed, so we are keeping up on the track, which smoothly operates the project. Moreover, we can use the git hub easier than before, making it easy to control the project. Consequently, we improved almost all our mistakes in the previous work, developing teamwork skills and connections. Therefore, we are becoming a better team.

## **Career Plans:**

* Our team members' dream occupations are all quite diverse and have nothing in common except that they all include programming. Nghi aspires to be a security engineer, Dong to be an AI engineer, Dat to be a front-end developer, and Quan to be a back-end developer (in the form of a java programmer). With our team's different aims, there are both advantages and disadvantages. The disadvantages are that we will have a more difficult time discussing more specialized topics since our specialities are so dissimilar, and it will be more challenging to provide comments or assistance on a member's job because of this disparity. On the other hand, the advantages outweigh the disadvantages; our differences in experience allow us to provide feedback from different perspectives to advance our project. We can also cover various aspects of our project because other elements may require different specializations. Furthermore, working with people with varied backgrounds allows you to understand their occupations better and collaborate with others who do similar tasks in the future. We see this as an excellent chance to learn about the various disciplines of programming and how people with diverse backgrounds can collaborate to build a cohesive product.
* In addition, this project is an opportunity for each member to try a new role different from the dream job for having a unique experience that makes them improve themselves in the future. In the project, Dong becomes a head manager, letting Dong have an affair with appropriate with his test. After this project, he can learn how to become a good manager in the future. And with Quan, he is an AI developer who is familiar with his dream jobs which helps him more experience in the career path. Dat is a technical designer who works like a front-end developer and hardware engineer. Finally, Nghi is a tester which helps him practice his senses finding the problems and bugs in the product serving for his career working as a security engineer.

# **Tools:**

* **Group website:**
* **Project website:**
* **Git repository (GitHub):**
* **Interview video:**

# **Project Description:**

## **Overview:**

### **Topic:**

### **Motivation:**

### **Landscape:**

## **Detailed Description:**

### **Aims:**

### **Plans and Progress:**

In this project, my teammates and I have planned and developed an AIErgonomic Chair, which we want to help people's spines do not have any bone issues when they are old and minimize the risk of scoliosis. My team started this project because it has been famous for people in the 4.0 era, mainly because the COVID-19 pandemic makes them work and study at home. That is the reason people choose to use AI Ergonomic chairs. They will demonstrate how we approach this project and how far we've progressed in AI Ergonomic Chair features and outcomes.

In the Covid-19 age, people must work from home. That implies that some companies are shifting from traditional office work to online labour and using seats that look to be trusted co-workers increases the efficiency of online employees. Many young people have confronted the spine because they often sit in the wrong posture, especially this problem that happens in children aged 10 to 15 years old, both genders are affected equally. Scoliosis has impacted individuals at the Covid-19, according to figures from the American Academy of Neurological Surgeons (AANS). This causes people to work and study online from home. If this amount is maintained, it will be hazardous to people's physical health in the future, particularly for youngsters, who require the highest degree of protection possible for their growth and development. The AI Ergonomic Chair project, on the other hand, was created to address this issue and protect people's spines.

According to those problems, our project has improved the product to avoid bone issues such as scoliosis, which have increased significantly, and current ergonomic chairs are lacking. That means our project needs the bending design of the chair to provide complete back support and adjust to maintain a slight backward tilt. Along with adding or removing additional elements, they may customize their chairs to suit each body form so that the chair is made of net, which absorbs sweat better than canvas, commonly used in chairs. That means our project wants to help people feel more comfortable and reduce the likelihood of getting it from the spine or skin, which helps us increase productivity. The AI Ergonomic Chair is popular with two types of users: office workers and people who have a computer setup such as PewDiePie and employees who use the chair to design their room for work or study online. Besides that, we have chosen two stores to sell our products, which have a delivery that helps people do online shopping, such as GEARVN and Phong Vu. Hence, we need and want development, and we choose technology stores to serve people's lives.

The AI Ergonomic Chair has several built-in features that help people feel more comfortable by detecting the back of their bodies and automatically adjusting to fix the proper posture and adapt as their bodies move. These factors indicate that the AI will use the sensor to scan the user's body form and determine the ideal chair design for everyone. First, the AI will utilize the sensor to track the user's body type and determine which chair design is optimal for everyone. If a person has a long back and a broad waist, artificial intelligence will adjust a chair to have a long back and a huge seat. Artificial intelligence will also learn the user's sitting form and alter the chair's look automatically. Consider a person sitting on a seat cushion with their legs crossed; artificial intelligence will expand or develop a little flat in the middle of the leg chair for people to rest their feet.

Furthermore, due to the flexible connection with the chair, the chair adapts its shape to the activity being done, such as typing, which needs a strange chair, reading, which necessitates a soft, sofa-like chair, and gaming, among other things. Those may control the AI chair by giving it complete directions, such as moving the seat cushion up and down or playing music, because we'll equip it with small speakers on both sides to help people who want to relax while listening to music. People may use their phones to operate the chair and do more intricate actions and utilize the command by chair app on their phones. As a result of the integration of artificial intelligence (AI) with ergonomic chairs, the chair becomes wiser. It's also more suited to respond to each customer's posture, offering superior illness prevention. Therefore, innovation and solutions for our project can develop our products to serve people who want to have a better life.

We believe that many ordinary folding chairs are utilized in the office and school, which have vertical forms and cause individuals to sit for long periods, creating back discomfort. Furthermore, some seats are of lower quality than the AI Ergonomic Chair, causing backaches and causing people to sit with their faces down, leading to scoliosis twisting. Many schools in Vietnam, for example, have employed these ordinary folding chairs for kids who do not sit properly. That is why we must investigate the various sorts of chairs available, ranging from business chairs to gaming chairs. However, everything always has many negative things. The office seats, for example, are tiny and rough, while the gaming and manager's chairs are made of leather, which does not absorb sweat properly.

As a result, we've opted to employ the ergonomic chair, which has both pros and downsides. When individuals use an ergonomic chair, they get a large of benefits for themselves, such as a healthy workplace, which means that ergonomic chairs have a variety of health benefits, such as enhanced blood circulation and reduced mental and physical exhaustion. Along with the greater productivity that I have mentioned above, the ergonomic chair helps people have a heightened comfort level, supporting them to concentrate and do high-quality work. Besides that, this chair has some disadvantages that raise the likelihood of developing health problems related to a sedentary lifestyle. Users who are too short or tall and weigh more than the chairs are designed to hold may not use ergonomic chairs to their full potential. When using ill-fitting seats, such folks are bound to feel uncomfortable. According to those advantages and disadvantages, that is the reason my team has improved this chair by adding AI technology for people to avoid any issues. Hence, there are all things we have developed our product for people can use a better chair.

Currently, we are making the start-up investment to call for capital for the project. Because, in the estimate, this project will spend much money on improving AI technology, and our partnership has a discomposure in this term. However, we believe in our project, which will bring vastly outcomes based on their benefits effect on society. To attract investors, we are progressing an AI that can automatically be scanning the customers back, showing our ability to make this project coming reality.

If we handed this project to other teams at the end of the semester, they would want to know how much the project spent, what technologies are used, and its purpose.

### **Roles:**

### **Scop and Limits**

### **Tools and Technologies:**

### **Testing:**

### **Timeframe:**

### **Risks:**

### **Group processes and communications:**

# **Skills and Jobs:**

# **Group Reflection:**