# A WONDROUS TRIP WITH DEVLAB

### WHERE EVERYTHING STARTED

DEVLAB is a full-time, international and intergenerational program, designed for 3<sup>rd</sup> and 4<sup>th</sup> year students, which is allocated at Kotkantie Oulu University of Applied Sciences campus. The goal is training and providing a creative and fresh workplace for students to build and develop projects, models, products, as well as small startups to address the health, energy, and environmental issues.

For me, to describe clearly about everything I have been through in DEVLAB, it can be summarized as follows:

"DEVLAB will give you a ticket for a journey full of experiences and unforgettable memories."

The journey will bring you to an astonishing knowledge lands that you will be impatient to step out of your comfortable area to explore them. In fact, the knowledge you have gained through your own experience that is not from boring theory in the books or blackboards anymore. Along the way, you will also have to face with challenges that you need to do as many as brainstorms you can, utilize all gray matter in your brain as well as apply all your skills to overcome them. Scared to be lonely? You will not be alone within the journey. There will always be companion friends by your side who also would like to explore self-abilities as much as possible, moreover, every new exciting thing of this journey. At the same time, you will not worry about getting lost somewhere, because lab masters, tutors and mentors are always ready to find and help you.

### 21<sup>ST</sup> CENTURY SKILLS

In essence, 21st century skills are the skills students need to prepare for the future. According to ATC 21S project, "21st century type skill" was defined as 4 areas with 10 skills. The first is a group of thinking skills such as creativity, critical thinking, and problem solving skills, decision-making skills, and lifelong learning (Meta cognition). The second group is the ability to work as a communication and teamwork. Third are the working method skills such as understanding the general knowledge of information and communication technologies (ICTs) or information literacy. Finally, life skills in a global society, including citizenship, life and career design, personal and social responsibility, include understanding of cultural diversity.

The importance of soft skills in the success of an individual is in the ability to work well, independently and flexibly in the 21st century environment that these skills bring out. For example, nowadays, the machines with AI or high-advanced software have helped human deal with most of the tasks, and now the main part that human need to focus on is the ability to critical thinking and creativity that those machines cannot do.

In DEVLAB, I had a chance to work in an international and interdisciplinary team. I met totally new faces from different cultures and study fields. Learning and understanding other's cultures as well as ways of working were interesting. These would shape my own cultural and emotional characteristics. Besides, me and my teams solved meaningful given problems with the real-world data, tools, and experts actively. Through these figuring adventures, I was oriented as well as consultant, objectively suggested personal goals based on the skills needed in today's job market as well as the vision of how to develop them during the time working with my team and in the long future.

### MY LEARNING GOALS

My idea competences are becoming confident and active professional person. Confidence in success leads to many results, and when faith associates with thought, the subconscious use of this power turns my ideas into a spiritual force, then transforms into action. Being adaptable to the environment and flexible would help me handle many kinds of working situations. Not only know myself, but also think independently and make effective communication and judgments. In my professional field, to build up a website for example, we usually work in a team that each person has specific tasks but linking to other's. Therefore, working effectively in a team and becoming a great collaborator are necessary requirements in my forthcoming job.



Firgure: 21st Century Skills at Oamk LABs

On the way to be a confident person, collaboration - communication and presentation are the most important. Everywhere you go, there are people. Unless you work alone or develop a website for yourself, then others will affect your website development career. The fact that the whole of the web development and mobile applications or software industry are a collection of various teams. When working in any company, you will be a member of a development team, and in the team, you need to communicate and work well with the rest of the team. You will have to spend a lot of time communicating clearly, accurately and persuasively.

Collaboration and communication help me as a web developer, cooperate and express own ideas effectively as well as think from the perspective of others, including colleagues, administrators, and even customers. Otherwise, I would always have problems, no matter how good my ideas are or how great my skills are.

As an active professional person, critical thinking and creativity are the most important that I would like to achieve. Creative and critical thinking enables people to come up with innovative solutions to everyday problems. Newton, who discovered the law of gravity by looking at apples that have nothing to do with gravity, is creative. Newton would have seen a lot of things before he even came across an accidental drop of apples from an apple tree.

## Creative people do see a world different from others, they are effective observers.

Coding requires a lot of creativity and the best coders tend to be the most creative. The essence of software creation is a creative process, not a "transfer the request of the superior to the machine code" action. All the features, interfaces, UI & UX on the wireframe that want to be unique and effective require the creative contribution of the members in the group.

Access to modern technology is common and simple. Information resources are not too expensive, but information processing skills are "extremely expensive" because not everyone is thinking methodically. In my professional field, usually, there will have huge information or data to handle, many changes and news happen every day, people's brain will be engulfed in a sea of information. Big data projects are getting larger and there are no signs of slowing down in the coming years. The critical thinking is paramount to see what is important and what is not. The goal would be leaning more effectively and improving thinking skills such as recognize and frame problems. Good critical thinking is the result of thinking creatively and critically thinking about good creative outcomes.

Creativity and creative mindset, due to my lazy personality (mainly), with the help of creativity, I can do work faster and more effective and enjoyable which make my life easier. Goal is to create a creative product or design.

### REFLECTION AND EVALUATION

I have been doing some presenting recently, and it seems that it is not tough as it used to be. Through many times making presentation, both in front of my team and my class, even some new strangers group coming from Nepal, Belgium, ... I have had experiences valuable lessons from that. With the support from my awesome team, feedbacks from my classmates and lab masters, I have been cheered up and inspired to keep practicing, accepting and learning failure to move on. Last pitching is the most successful presentation to me, my body language and connection to audience was pretty good, a sweet result for my developing process. I am getting a lot better!

With the communication goal, thanks to two-way feedbacks and my team spirit, now I can freely to talk and show my sense of humor to my team. Although sometimes, I still have few problems while discussing my ideas to people. Extra goals are also slightly progressive. When my team had some visits some guesses from other countries like Nepal and Belgium, I am more interactive, and feel more confident to speak more as well as introduce about our project.

I started to learn how to observe and learn more when coding the application either communicating with people. I have had a clearer thinking about how to explain some of application/s problem and limitation in a way that will be relevant, persuasive and of value to other people. As a developer, I have enhanced the ability to separate what should be done from what could be done when there are an infinite number of problems I could try to solve or new features I could add. I know now sometimes a solution for one problem creates two recent problems, so having an idea is not enough to warrant building it. I also understand how to set priorities what things should be done and what things should be cut.

I am proud of my application design. It might not be so perfect, but it can show that my creative thinking has grown up a new level. It is the first time to experience those platforms and tools to build the application, till now I believe I can play around with the codes and design.

### **BONUS POINTS ON THE WAY**

I have gained much experience of making an interview and giving feedback. Before, as a student, I just watched and recorded the answers to the interview questions. Action interviewing other people, which to me, is something new. And I think this is also new for many students as me. Learning how to dissolve the initial embarrassment in the conversation, letting the interview take place naturally as well as preparing the list of questions in order to have more accurate information to determine the correct target and desired results require the flexibility and equanimity in every situation. The power to move people is an effective feedback. Balancing the positives and negatives when giving feedback is not easy. Feedback should be based on observations based on clear criteria. provided in specific and clear language, especially, not intended to criticize other people, on the contrary, tended to encourage and help other people to know what are their good and missing points.

At first, I was freaked out and afraid to make the interview as well as being interview. After learning from DEVLAB and experiencing myself, I can feel fine if someone ask me to do the interview. I still have some barriers and issues while interviewing such as I have a little contact and connection to my opposite people, I may have confused and not know what to say when people give me back some questions or unexpected situation happens. I still need to practice more about that. I am glad that I can overcome the shy and afraid to be embarrassing and failure to reach to the more confident goal now. Moreover, I can feel calmer while being interview. From the last time with the Health Match team, I could give them detail answers freely and observe everything calmly.

At this time, I could give the clear and details feedback to another person now. Feedback for me is not scared anymore. I must give special thanks to logbook, coaching class and evaluation lessons with Lab Masters. They have helped me a lot. I know how to balance the positive and negative feedback to give the listener better experiences and comments. However, my comments are told to be so polite and they are not pointing out the things that people need to improve. I feel hard to point out the not-good of people. It should be the things I need to try more.

### COMPARISION

According to my traditional curriculum courses that were replaced by DEVLAB concept creation, includes Planning of Internet-based Business Project, Introduction to Project Working, Work Community Skills, and Designing and Implementing Graphical Application. Taking references from Peppi website, the results of those courses are: able to design elements needed in graphic applications, learn how to work in a team within a project, apply and practice communication skill cleverly, evaluate a given training project using business concepts learned earlier, and is able to adapt the chosen business concepts in a given business planning training project.

Until now, my team has been established and worked together for more than 5 months and still continues. We built our team spirit base on willing-to listen( this has helped me and my team members understand each other better, knowing other's weaknesses to make suggestions for correction),, trust, support and respect. I am pretty proud of that all members can adhere to the rules while working in a very active and optimistic manner. Through working in Asankari team, I learn how to support other people and how to receive the support from other, which are new for a solo leaner and worker as me. My career goal is towards a full-stack developer, ready to do many front-end and back-end positions. The flexible versatility of my position gradually made me a dictator, with a naïve thought that I simply want to handle as much as tasks in the project. But this did inadvertently overwhelm me and took away the role of the others in the previous team. Assuming the role of each member, this positive change I got from Asankari team, really helped me a lot in the coding work later. I become a better listener and supporter, I am willing to help other members as well as share my own knowledge and experience so they can do it themselves. Fighting against with my shyness and anti-social, now, I am brave to ask questions, discuss positively and ready to change my original idea if reasonable. Help and respect among the team members is the greatest motivation for me to work together and toward the ultimate goal.

Likewise, learning the balance between what to do and how to accomplish is one of the most useful ability during working in DEVLAB. A team needs both the planner and the implementer, and my team has that. Team members seek to plan, manage work, manage time, organize and attend meetings. We were strongly advised by the lab teachers to ensure that the objectives of a meeting are met, the main content of the meeting is planned in advance and fully discussed, and everyone had to be involved. With the enthusiasm of my teammates and me, our project has achieved certain achievements. such as City of Oulu's invitation and their support for the testing process. Application and apply in future educational settings. I have had a chance to learn from my leader, a professional businessman, his analyzing the marketability as well as the ability of eloquence, persuasion, powerful deliberation, I could participate in the business and marketing plan process in every stage of the product. I was explained in detail and friendly, no more boring paragraphs or definition in textbooks. This is such a great experience that I shall be hard to come by in the near future. Moreover, I have experienced and learned more than I expected, and with the advantage of working in a group of newcomers from different fields, as in DEVLAB, would be more effective than the original course at school, for instance, Work community skill and project working. In the process of conceptualizing, sketching, prototyping, UI and UX design, graphic design teammates and graphic mentors conveyed not just inspiration but also the tools and ways of visualizing and coordinating color, highlight the special content as well as satisfy the vision of ordinary users. I began to know how to get out of the visual view of a coder, gradually understanding and fitting the interface application under normal user eyes. In addition, the interviewing skill also helps me a lot in collecting people's opinions and feedbacks about their experience on utilizing the application. In the coding process, I also learned new frameworks and knowledge in mobile application design by myself, my IT classmates in DEVLAB also supported me and suggested some personal ideas, which contribute to my coding style enhancement and the final demo achievement.

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