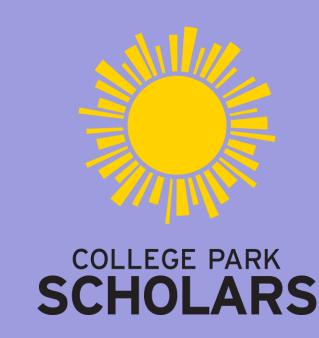


Volunteering to teach basic coding to next generation

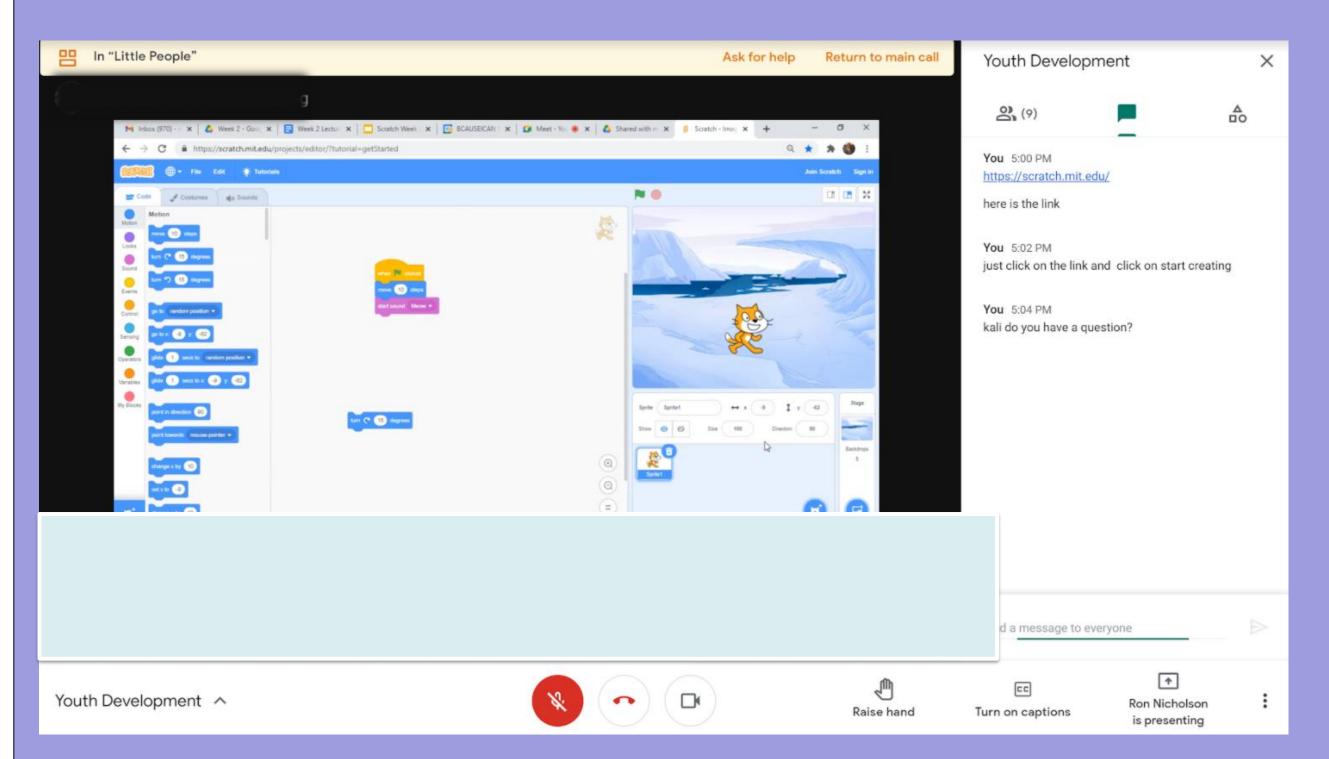


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Introduction

Computers now have been used in everywhere every day. However, there are a lot of people form the underserved communities that lack of computer literacy. I volunteered to teach children basic coding skills.



One day in class screenshot. The main instructor is showing functions in Scratch

Site Information:

Name of Site: Beauseican. Inc

Address: 7600 Ora Glen Dr. #1003 Greenbelt, MD 20770

Your supervisor: Ron Nicholson and Sarah Steele

The site mission: To equip youth in underserved communities with the knowledge and skills today to prevent socioeconomic disparities in the next generation

The particular goals: To help to develop 4 critical skills: technology awareness, financial and business awareness, health and fitness awareness, and social and behavioral comportment.

Issues Confronting Site:

Many students do not have access to STEM education or STEM learning opportunities in school because they are raised in the underserved communities.

We hoped to give an equal playing field for youth growing up in every community.

Activities:

I started this volunteer since the beginning of August of 2020. Since it was in the middle of pandemic. All the classes and meetings have been online. I developed Java intro course so the organization has more language to offer. In addition, I learned scratch and went through the lesson plans and PowerPoints. I assisted a main instructor to teach Scratch. to an elementary school.

Impact:

Throughout my volunteer, I realized the different education levels from different communities and how unfortunate this inequality still exists now in America. I was able to learn Java in high school and this has helped me in some computer science classes in college. In contrast, many children are unable to have that during their primary education. This is important because computers are the future, and the next generation should have some proficiency in computers to stay up to date with the new technology.

Print messages with Java

Hello World

The output would look like this.

■ Try it yourself!!

Congratulations! You just coded a program in Java and now you are a Java programmer:)

One slide from my Java intro PowerPoint.

Discussion:

I had a very good time at the site, and it is fun to talk about coding and making fun projects. The children are very nice and lovely. However, it is very sad for me not being able to meet the children in person due to the pandemic. What I liked the most throughout this volunteer was that I heard some children in the class said they liked how fun coding was and they could make different programs with it. This really made me think whatever I was doing was useful and helpful to them/the society.

Future Work:

I am still volunteering at the site and I hope to keep it for long term. I think my experience is very valuable for my future career. It makes me to realize that whenever I design a product, I need to think about if the product can be used by people who lack of computer literacy.



Acknowledgments:

I would like to thank Ron Nicholson and Sarah Steele from Bcauseican. Inc for being my teacher and supervisor. They gave me a lot of advice and a lot of freedom with what I wanted put in the teaching materials. I would also like to thank Dr. Holtz and Dr. Merck for all the time and support they have given me over the past two years in scholars. In addition, I would thank Bcauseican. Inc for giving me this opportunity to be involved in their excellent program. Finally, I would like to thank Science global change and college park scholars as a whole for the wonderful opportunities they have provided to me.

