Coding for Peace and Prosperity, Kenya
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Background Information
  Kakuma Refugee Camp was established in 1992 in Northwestern Kenya to temporarily host a group of 10,000 Lost Boys of Sudan. Since then, the camp's population has grown to about 190k+ refugees from 13 countries comprised of 250+ ethnicities speaking 250+ languages. The residency of refugees is almost solely determined by nationality/ethnicity hence limiting interactions among refugees. This limitation is a contributing factor towards the numerous conflicts among ethnicities such as the conflict pitting the Congolese against South Sudanese, Nuer against Dinka tribes, and the isolation of the Oromo within the Ethiopian community.

  In addition, despite UNHCR's efforts to provide for the refugees, the increasing population of the camp has overstretched its available resources. Resources for education have been especially affected - the teacher to student ratio stands at 1:103 and the textbook to student ratio is 1:7. The lack of opportunity and resources most directly affects high school graduates, as most of them face numerous challenges in accessing post-high school education to further their dreams and careers. Less than 16% of high school graduates have access to tertiary education, including technical and vocational education and training. Furthermore, refugees are not permitted to work or travel outside the camp. In addition, these students graduate from high school without ever having used a computer or accessed the internet, which severely limits their access to opportunities outside the camp beyond UNHCR sponsorship. Without real access to postgraduate opportunities, they resort to detrimental activities such as drug abuse, joining gangs and engaging in violence, and unplanned pregnancies leading to young families.

  My aim is to change this trajectory, instill skills in youth that will deter them from engaging in illicit activities after graduation, and hence foster peace and unlock opportunities through technology. This project will create a program for high achieving 9th and 10th grade students from diverse backgrounds that will expose them to existing opportunities outside the camp and provide the skills it takes to acquire them. This will be achieved by holding workshops about applying to external programs such as United World Colleges and African Leadership Academy and teaching them basic computer programming skills. This exposure will open doors for them outside the camp. My hope is that this project will help forge friendships between youths of different ethnicities and give students technology and tools to further their education, preventing the loss of a generation that might otherwise turn to peace-disrupting behaviors.

Project plan
Phase I – Establishing Partnership with UNHCR and Acquisition of Computers. May 20 - June 5
  In this phase, I will leverage my existing relationship with the UNHCR departments in charge of high school education (an office I worked with as a high school teacher for 2.5 years) and child protection in the implementation of the project. The departments will provide the site of the bootcamp and security of the program. We will also purchase and ship the refurbished computers for the program to the camp.

Phase II – Applications, Interviews, and Selection of Students. May 25 - June 15
  In this phase we will invite and select 25-35 students to be in the program, depending on the number of laptops acquired. Our selection process will focus on bringing together a group of committed students that is representative of the camp's diversity. Through activities like collective goal-setting, team building activities, and group projects undertaken in a small classroom setting, we believe the program's participants will forge long-lasting friendships that will debunk the myths and misconceptions about other ethnic groups. Furthermore, after graduation from high school, these students will be occupied with getting into a good college or starting careers as self-taught programmers, hence lowering the number of graduates waiting to get opportunities or wounding up in unlawful activities such as drugs and crimes. We hope the harmony of these students will set an example for others in the camp, thereby serving as an important step towards fostering peaceful coexistence within Kakuma.

Phase III – Preparatory Course. June 20 - July 18
  Since most of the students will have very limited experience with computers, this preparatory course will help students gain the computer literacy needed to learn how to code. This will be a five-week course, taught on the weekends (since school is in session) through lessons, hands-on exercises to be worked through in groups, and practical assignments. Our curriculum will cover the following three concepts, drawing influence from Microsoft's free digital literacy course and other such resources.

1. **Introduction to Computers.** Understanding the basics of operating a computer, like basic hardware definition, understanding applications, typing, and connecting to the internet.
2. **File Management and Documents.** Creating word documents, spreadsheets, and PowerPoint presentations and learning to organize them within folders.
3. **Online Communication.** Creating accounts for and learning professional norms for email, Skype, and other online communication methods.

Phase IV – Coding Bootcamp and College Counselling Courses. August 10th - August 28th

Since the students will be out of school by this time, the Coding Bootcamp will take place from 9am-4pm every day for three weeks. The three-week coding curriculum will follow the structure outlined below. Furthermore, there will be college counselling workshops interspersed throughout the two weeks. The college counselling workshops are aimed to create awareness of the existence of opportunities outside the camp during and after high school and how to pursue them. For instance, we will conduct workshops about high school programs like UWC and ALA, or post high school gap year programs like Bridge2Rwanda, that serve as a gateway to college. We also plan to give advice on applying directly to colleges in Europe, USA, Asia and across Africa, and professional guidance like building a strong resume. We hope students will become the program's objectives ambassadors to peers.

1. **Learning the Skills:** For the first two and a half weeks, students will be taught Introduction to programming in Python and Web Development with HTML, CSS, JavaScript, and more advanced tools used in industry.
2. **Final Project:** During the third week, students will work in teams of three to four to implement a project of their choice. By the end of the program, students will be able to creatively express their ideas through building websites.
3. **Future Opportunities in Tech:** We will also cover the numerous options they have after the boot camp, including online programming classes, careers in computer science and engineering, and the possibility of earning a living as a freelance web developer. My hope is that some of them will discover a passion for computer science and we will provide the necessary guidance for them to pursue their newfound passions.

Sustainability and Future Impact

Formation of a Club and Continued Mentorship. September 2020 onwards

After the Bootcamp, we will form a club so that students of the program can remain in touch, continue to grow and develop their technical skills, challenge each other, share their accomplishments, and enlighten other peers about these opportunities. The club will function under the stewardship of the Education office. Furthermore, we will pair the program participants with academic mentors who study in American colleges to mentor them via Skype on matters like technical help, college applications, personal goal-setting, and professional development.

About Me

I am a sophomore at Harvard University currently studying computer science. Prior to admission and matriculation into Harvard, I was a refugee in Kakuma refugee camp, Kenya. I was very fortunate as things turned out in my favor for which I am thankful. Every time I reflect back on my life in the camp, I cannot help but sympathize with the brave kids who are studying there. These kids do exceptionally well but cannot pursue higher education despite their determination and courage to fulfill their dreams.

I still vividly remember the frustration of knowing that even after all the hard work my classmates and I put into our studies, we may graduate with excellent grades but end up unable to pursue higher education. The thoughts of us ending up in the dealing drugs or joining gangs brought us nightmares. My dreams for further education were almost crushed, when I graduated with good grades but had no opportunity to go to college. I was forced to postpone my studies for 3 years. This was partly because I had no idea of any other existing opportunities outside the camp. While things worked out for me, it does not work out for the majority of the graduates.

I want to change that narrative. I want kids to realize there is a world beyond the camp which accepts them, a world that recognizes their agonies and rewards their talents. I want the narrative of the next generation of refugees to be of hope and faith in themselves free from ethnic tensions and other crimes. I want them to dream big and know that it's possible to achieve their wildest dreams, I want them to learn how to use modern technology to their advantage. I want them to dream of getting into Harvard, MIT, Stanford, Yale, Oxford, U-Chicago, or other post high school programs just like I and others before them have instead of taking the regular path (crime, drugs, or young families) and be lifelong advocates for peace and reconciliation through technology.