

# ACTIVITY 2

Name: Trung Kien Nguyen

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Project Idea:

## Energy supply using solar panels for Sahara desert community.

In fact, the Sahara desert is the sunniest place in the world, according to [www.chicagotribune.com](http://www.chicagotribune.com). On average, it receives 4,300 hours of sunshine per year, or 11 hours 46 minutes per day. However, due to the lower technology level, this huge amount of energy is almost untapped, whereas most of the people in North Africa live with a lack of electricity every day, hence the socio-economic development of the region will be significantly improved. I think what I can do here, is to search for any potential volunteers, or investors, that can be affordable to support money, and infrastructure for the project (solar panels, devices). Also, it is essential to find a technical unit with expertise in the power and energy industry, so that they can carry out the design and construction of the project. Last, but not least, there are a lot of opinions on the environmental impact of a giant solar project in the Sahara Desert that has been discussed recently, which makes it extremely necessary to consult with scientists who have expertise in the local climate and environment before starting the construction of the project.

References:

[1] <https://www.chicagotribune.com/news/ct-xpm-2002-08-21-0208210308-story.html>

[2] [https://www.youtube.com/watch?v=RHbXE6FaIU&ab\\_channel=TheNewAfricaChannel](https://www.youtube.com/watch?v=RHbXE6FaIU&ab_channel=TheNewAfricaChannel)

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**Name: Pham Tuan Nguyen Truong**

**Student ID: 104213417**

**Project Idea:**

## **Traffic jams, public transportation and parking lot. IoT System (in Vietnam)**

The Internet of Things, also known as IoT, is a group of intelligent devices and technologies that enable contact among them or between them and the cloud. The development of IoT technology has made data use more effective and improved lives. Devices like electronics, sensors, platform centres, actuators, etc. are used to gather important data. The analytics system then uses these data to determine what is occurring right now and what is most likely to occur in the future.

- Sensors are going to be installed in every parking spot. This sensor detects and gathers data when the vehicle enters and leaves. The information will be sent to the main computer. The system will then analyse the information and retransmit it to electronic message boards placed on neighbouring roads. These notifications or a mobile app are used by drivers to locate appropriate parking spaces.

- Additionally, these sensors are placed along public transportation lines, allowing anyone with access to the internet to view traffic congestion levels and locate buses and trams.

In my point of view, this solution is suitable for the Vietnamese community. At the moment, it partly sorts out the problems and creates a safe traffic environment.

**References:**

[https://vinfastauto.com/vn\\_vi/cong-nghe-cai-thien-giao-thong-thanh-pho](https://vinfastauto.com/vn_vi/cong-nghe-cai-thien-giao-thong-thanh-pho)

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Name: Nuyang Rai

Student ID: 10384360

Project Idea:

## **ABA Homelands Project**

Residents of Lingara had no access to phone and internet reception till now and the only way the people of Lingara could get in contact with their friends, family or necessary services that were living outside of the community was through “the community’s one Wi-Fi public phone.” Moreover, Lingara gets “completely isolated” due to flooding during the Autumn season. This project helped the community by installing a “satellite small cell” and this will allow the residents to have access to the internet which will help them not only to connect to people outside their community but also get educated by having access to digital books they can read and educational videos they can watch. In addition, it provides financial opportunities as the people of Lingara can sell their services and products online so they no longer have to worry about not getting customers. Furthermore, the residents do not have to be concerned about their culture and languages ceasing to exist as it can be prevented by documenting everything digitally so that the future generations will not be left out without cultural identity.

reference:

<https://www.indigenous.gov.au/news-and-media/announcements/lingara-flicks-switch-mobile-and-internet-coverage>

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**Name: Promit Prosun Barua**

**Student ID: 104183675**

**Project Idea:**

## **Use of Biometrics to store documents of identification of a particular community**

The Rohingyas are a community of refugees in Bangladesh known to have escaped from Myanmar. The government of Bangladesh provides many facilities like free health service, education, food and shelter to the poor and helpless Rohingyas. To receive such essential assistance, the Rohingyas have been given documents that identify them as refugees and eligible for the support from the government. However, unexpected events can cause loss of these documents and deprive a person from the Rohingya community from getting the promised assistance from the government of Bangladesh. Such an event once happened in Cox's Bazar, Bangladesh where a blaze occurred in one of the Rohingya camps and many of them lost their homes and belongings including identification documents. But the World Food Programme(WFP) was able to respond rapidly to this situation because they used biometrics to provide new identity documents to families who lost them and aid them in receiving immediate access to emergency supplies. Also by the help of blockchain technology they are able to shop for fresh and staple foods at e-voucher stores. So the use of technology to store identities of a particular community has proved to be beneficial for the Rohingyas.

### **REFERENCE:**

***<https://asia.nikkei.com/Life-Arts/Life/Technology-gives-hope-amid-embers-of-Rohingya-camps?fbclid=IwAR0OpUQLVyRbJEss1DrFwgTpQON1UDtd17EQFed aB3alfjxZ2PF1AgxjtE0>***