HACK 4 W🌐RLD

Sustainable Development Goals Hackathon
SMART CITIES
04-26/28 / Tiltų str. 16, Klaipėda 91246 (iamus office)

WHY HACK FOR WORLD?

In 2015 the UN adopted 2030 Agenda for Sustainable Development, meant to tackle the world's most pressing problems such as poverty, inequality, and climate change. Given the impressive information and communications technologies (ICT) sector advancement in Lithuania, and the ICT student body being largely comprised of talented young minds, AfriKo organises Hackathons for Sustainable Development Goals (SDGs), the first of its kind in Lithuania. With ICT4D (ICT for Development) as a starting point, the Hackathon – under the banner "Hack for World" – brings together ICT and sustainable development, where one works for the other for the betterment of both.

Some ideas on ICT links to SDGs can be found here:

https://solutionscenter.nethope.org/assets/collaterals/NetHope_SDG_ICT_Playbook_Final.pdf

WHY SMART CITIES?

This hackathon will be looking for tech-driven solutions to advance the SDGs with a particular focus on **SDG 11: make cities and human settlements inclusive, safe, resilient and sustainable.** Specifically, we will be looking for new ideas to enhance basic service delivery, sustainable transport, waste management and citizen engagement in cities globally (teams will be allowed to choose on which context they want to work on – African or European).

CHALLENGES FOR THE TEAMS

African context (to be updated) – led by MANDU | architecture & urbanism

WASTE MANEGEMENT

SDG 11 Targets: 11.6 by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management.

Problem: Each year, the electronics industry generates up to 41 million tonnes of e-waste. Of all these tonnes of noxious waste, a staggering 60-90 per cent of e-waste -worth nearly 19 billion dollars- is illegally traded or dumped, often with the involvement of transnational criminal gangs, a UN Environment Programme (UNEP) research had warned. West Africa has been reported by the UN Office on Drugs and Crime (UNODC) to be a major destination for electronic waste.

Old computers and mobile phones, electric cables, televisions, coffee machines, fridges, old analogue radios are piling up in landfills across the world, UNEP explains. According to the research, e-waste often contains hazardous materials, which pose risks to human health and the environment, especially in developing countries.

https://ejatlas.org/conflict/agbogbloshie-e-waste-landfill-ghana

Challenge: Develop sustainable solutions for the E- waste recycling

European context (to be updated) – led by iamus, formulated with Global Shapers Community – Vilnius Hub and Kurk Lietuvai

MOBILITY/CONNECTIVITY

SDG 11 Targets: 11.2 by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons; 11.6 by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management

Problem: With more and more people moving into urban areas, cities are growing tremendously, with especially suburban areas are growing without proper management and control. Therefore, traffic congestion is becoming a growing pain for many parts of the world. An average driver nowadays spends 32hours a year in traffic jams and that costs billions of dollars globally in lost productivity time, health care expenditures and not to mention the strong environmental impact with dangerously high air pollution. With today's advanced information technologies, a massive amount of transportation-related data is readily available that could be used for better smarter city planning, lowering congestion and thus leading to better life quality in cities.

Challenge: How can cities lower their environmental impact by creating smarter mobility solutions?

Key criteria: innovation, infrastructure, mobility, health, IoT

Inspiration:

Amsterdam's Smart traffic management - https://amsterdamsmartcity.com/projects/smart-traffic-management

Alibaba's AI traffic Management System Solution - https://eandt.theiet.org/content/articles/2018/01/alibaba-s-ai-traffic-management-system-to-be-rolled-out-in-malaysia/

Jakarta's HOV (high-occupancy vehicle) regulations - https://www.smartcitiesworld.net/special-reports/special-reports/cities-in-a-jam-reducing-urban-traffic-congestion

AGENDA

NOTE: Those parts of the agenda where the mentors will be needed are marked in turquois.

04-27 Friday

09:30 Opening of the hackathon with remarks by the head of iamus – Oliver Goh Opening of the day

09:45 Kick-off of the Hackathon (principles of work, "help package")

10:00 Introduction to SDGs, smart cities and specific challenges – delivered by 1) Ngozi Stewart, 2) Oliver Goh, 3) Mandu dos Santos Pinto, 4) Rocío Armillas Tiseyra and 5) Augustinas Kuzminskas (10 min each)

11:00 Team work with short team building exercise

12:30 Lunch time

13:30 Social business model CANVAS workshop (part one) – delivered by Eugenijus Kaminskis

16:30 Team work / **NOTE: during this time, short sightseeing for the mentors will be organized**

18:30 Consultations with mentors / Team work / NOTE: all the mentors will be grouped in two teams and will provide feedback for the teams based on the schedule. Each team will have 20-30 minutes in total, for both presenting their ideas and getting feedback from the mentors.

21:00 Wrapping-up of the day and "Closing the Loop" movie time

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04-28 Saturday

09:30 Opening of the day

9:45 Business model CANVAS workshop (part two) – delivered by **Renata Urbone**

11:45 Team work / consultations with mentors / <u>NOTE: on Friday evening we will make a schedule for tailored mentoring sessions based on preferences of the teams, meaning we will ask teams with whom would they like to discuss their ideas further and will plan accordingly. Each team will have 10-20 minutes in total for the mentoring sessions.</u>

12:45 Lunch time

14:15 "How to PITCH" – short training – delivered by **Oliver Goh**

14:45 Team work (preparing the final presentation)

16:30 Final PITCH presentation (3 min. for each team)

18:00 Jury deliberate

18:30 Awards and Networking evening

EVALUATION CRITERIA:

After the final pitches, the jury will evaluate solutions based on the following criteria:

- How original idea is?
- How feasible the business model is?
- How much potential for impact do they have?
- How well Pitch presentation has been delivered?