



WSIS FORUM

12-16
JUNE 2017
Geneva | Switzerland



OVERVIEW

A photograph of three individuals, two women wearing hijabs and one man with glasses, gathered around a laptop. They appear to be in a collaborative work environment, possibly a hackathon or workshop. The woman on the right is pointing at the laptop screen, while the others look on attentively. The background is slightly blurred, showing what might be a classroom or meeting room.

The Hack for Health hackaton at the WSIS Forum was organized in association with ITU and IEEE in collaboration with Be He@lthy, Be Mobile (ITU-WHO). The hackathon resulted in the development of innovative digital solutions addressing four challenges relevant to middle-and lower-income population in cities.

PARTICIPANTS

42 total hackers
17 women, 25 men

16 nations represented including USA, Poland, Gambia, Nigeria, Tunisia, New Zealand, Bangladesh, Algeria, Switzerland, Nepal, Norway, Russia, Pakistan, Zambia, UAE, Sudan

30 + 5 + 7

30 current undergrad students
5 current grad students
7 current grad students who are also working professionals

The most common areas of study: computer science, mathematics, business, biological engineering, software engineering, chemistry, epidemiology, electrical engineering, informatics

10 + 16 + 16

10 expert developer
16 fairly proficient
16 learning to code or other types of expertise

BY REGION

A few interesting facts about who is participating

3

Region A | The Americas

5

Region B | Western Europe

7

Region C | Eastern Europe
and Northern Asia

19

Region D | The Africa

12

Region E | Asia and Australasia

CHALLENGES

A woman with short brown hair in a ponytail is writing on a whiteboard with a blue marker. The whiteboard has handwritten text in blue ink, including '- community story day (collection)' and '- d...'. The background is blurred, showing other people in a meeting setting.

Four challenges were addressed to develop an innovative digital solution to reduce exposure to common risk factors for non-communicable diseases in smart, healthy cities in middle-and lower-income cities.



CLEAN WATER ACCESS



URBAN ENVIRONMENTAL QUALITY




MANAGING NON-COMMUNICABLE DISEASES FOR HEALTHY LIVING



PROMOTING HEALTHY BEHAVIORS

SOLUTIONS

Innovation can take many forms. It might be a mobile application, web application, computer game, game for mobile devices, tools, libraries, or visualizations that address one of the four challenges. All solutions included both concept and a working prototype.





POLAND

HACK FOR HEALTH

TEAM POLAND

NCD Management for Healthy Living

Challenge

Allow for self-diagnosis, treatment, and greater disease awareness in those individuals with non-communicable illnesses, such as diabetes and heart disease.

Solution

A two-sided application to analyze eating patterns for better health. The mobile patient app acquires basic medical data, physical activities, allergies, environmental conditions, and more, which gives context to the user's eating behaviors and includes a product scanner for supermarket use to evaluate purchases. The doctor side web service monitors the patient data and makes recommendations for food intake and physical activity for best health. The data will allow for the use machine learning and a classification algorithm to improve the system with less human input.



**Paulina
Wojtyczcka**
POLAND



**Robert
Kuna**
POLAND



**Fabian
Kapaścik**
POLAND



**Jakub
Król**
POLAND



**Aleksander
Surman**
POLAND



**Jakub
Gawlas**
POLAND



**Adam
Merk**
POLAND



TUNISIA

HACK FOR HEALTH

TEAM TUNISIA

Urban Environmental Quality

Challenge

Air pollution is increasing exponentially and serves as a major contributing factor to a wide-variety of global health issues.

Solution

An application that gathers air pollution data using sensors and feeds it into an algorithm that provides relevant information for government and citizens to incite healthy practices. Citizens participate in change by installing sensors at their homes to provide more accurate data. This allows them to draw benefits in return.



Meher Bnoui
TUNISIA



Khalil Ben Sassi
TUNISIA



Ichrak Mars
TUNISIA



Seif El Hajjem
TUNISIA



NYOUTRITION

HACK FOR HEALTH

TEAM NYOUTRITION

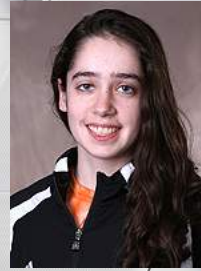
Promoting Healthy Behavior

Challenge

Addressing issues in maintaining healthy nutrition habits and a good diet are of immense importance worldwide.

Solution

A platform that invites informed users to take responsibility of their own health and nutrition in the context of a moderated collaborative, community platform. With nYOUtrition, individuals are empowered to transform their health with people just like them and with support from experts.



Nicole Kogan
USA



Kaveh Bazargan
Iran



Shantam Maheshwari
India



UAE

HACK FOR HEALTH

TEAM UAE

Non-Communicable Disease

Challenge

Non-communicable disease (NCD) is responsible for 68% of deaths. Targeting it has a high potential to decrease health problems.

Solution

An application that mines data from social networks, APIs and Google trends, then visualizes the data for governments and decision makers. Availability of the information is limited and the solution pinpoints the affected areas so efforts can be focused on those areas, and hence the efficiency of campaigns (and health outcomes) are maximized.



Anfal Attai
UAE



Khalid AlAwar
UAE



Najla AlAnsari
UAE



NORWAY

HACK FOR HEALTH

TEAM NORWAY

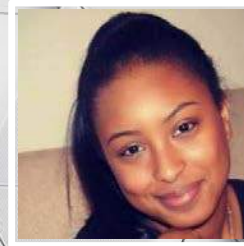
SAGA: Bridging the Gap Between Folklore and Fact

Challenge

Improve citizen awareness of healthy behaviors and promote healthy habits, such as increased physical exercise, proper nutrition and stress management.

Solution

An interactive kid-friendly media (ebooks, games, cartoons) presented on a website which incorporates local folklore with a factual twist to help teach children healthier eating habits.



Dendembo Diallo



Anne Ingeltjorn



Daria Krivonos



AWARDS

First Place: ITU Acceleration Awards

Team Norway | dSAGA: Bridging the Gap Between Folklore and Fact

Second Place: ITU Acceleration Awards

Team Poland | NCD Management for Healthy Living

Third Place: IEEE “Excellence in Ethics Award

Team Tunisia | NCD Management for Healthy Living





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