Software engineers win $250 for developing phone app to promote sanitation

CHIEF INTELLIGENCE

A group of five software engineers has developed an application, Tag It, that is meant to ensure easy and quick collection of garbage in Kampala by facilitating reporting about broken sewage pipes to authorities, among other pro-health practices.

This was during a Hackathon event themed ‘HacktheCity’ that was held on July 28 at Koboko-based Makerere University school of Public Health offices.

The engineers are Alfred Kirama (web designer), Patrick Kahungu (mapping expert), Mary Nakajako (project manager), Ali Kibirige (Android developer) and Emmanuel Semutenga (Web developer).

The five were awarded $250 by Resilient African Network (RAN), the organisers of the event who partnered Makerere University; AidData, a research and innovation lab; and Kampala Capital City Authority (KCCA).

ABOUT THE APP

The second and third teams were awarded $150 and $100 respectively.

Kirama explained that the app also has a web version. He added that with it, community members can be able to “tag” locations that are in urgent need of services like garbage collection, fallen electric poles, damaged water pipes, sewage spills, and manholes.

“The responsible authorities will follow up these location tags when implementing cleaning strategies for such areas,” Kirama said on behalf of the team.

To use the service, one will simply need a smartphone with Tag It installed from Google Play Store or access the service from a web version that is still being designed.

“Once you see a broken sewage pipe, heaps of garbage and such things, you go to the Google map, tap there and a drop down menu will appear. Then, you will select an icon [like a dustbin for garbage] of what you have seen and type the necessary location details and tap on send,” Kirama added.

Once the issue gets reported, Kirama explained, responsible companies and institutions that they are going to partner like Unizeme, KCCA, National Water and Sewerage Corporation (NWSC) will be immediately notified by the app’s system to take prompt action.

He also said the app will be available for use by the end of September this year and it will be free, adding that they will start with Kampala and later extend the service to other districts.

CHALLENGE

According to RAN, more than half of the world’s population now lives in urban areas, with Kampala having a population of 1.5 million.

As more and more people move to Kampala and other cities in Uganda, resources, infrastructure, and services are stretched beyond capacity.

So, it is on this basis that RAN considered a Hackathon where different groups of youths with knowledge in software engineering can come together and compete in development of applications that could ensure urban places are safe and sustainable.

Participants were asked to form teams of five individuals who com
petitioned to create web and mobile applications, web maps, GIS (Geographic Information System) apps or static apps to address a specific challenge with a concentration on the use of spatial visualization and analysis.

Harriet Adong, the RAN communications officer, said they are going to work with this group by providing the necessary technical support to see the prototype realizes its intended purpose.
A million people move to other cities in search of jobs every year. Infrastructure is stretched beyond capacity on this basis that RAN engineers and planners must work with to provide the necessary technical support to see the prototype realize its intended purpose.

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