From Neural Networks to Poisonous Plants Recognition: Western NIS Enterprise Fund Holds the Fifth IT Technovation Girls Contest

On **May 22**, Ukraine hosted international IT entrepreneurship girls contest Technovation Girls, which became the fifth in a row. Seven teams of girls aged 10-18 pitched their solutions and competed for educational programs.

The jury, comprising of WNISEF, Peace Corps of Ukraine, YEP Incubator and 1991 Open Data Incubator representatives, chose two winning teams - DeepNoesa and Malva.io. The DeepNoesa team from Zaporizhia has rolled out a mobile app, which is a neural network based on Riemann manifolds, invariant theory, differential conservation laws, chaos theory, quantum algebra and elements of phenomenological analysis. Smart IE, neural network of a new type, made it possible to create intelligent systems for modeling and quantifying various types of plasma, as well as for solving applied neurogeometry problems, neurophenomenology, neuroaesthetics, commerce and management. The team won residency at the City Boost summer incubation program.

The Malva.io team from Kyiv, Lviv and Sloviansk has developed an app that helps recognize poisonous plants and venomous animals. The app shows a short description (dangerous or safe / endangered) and tags its location. Having collected data on the location of species, the app generates smart maps with two priorities: to avoid and protect dangerous and endangered species. Data on endangered species are shared with eco-

organizations to help them map recreation areas. Moreover, users can report areas of environmental pollution, so that environmental volunteers could track them and clean. The team has won the intensive course at the 1991 Open Data Incubator.

The second prize went to the IT Ladies team from Kyiv, with an app that helps spread information and aims to solve the problem of domestic violence.

On top of that, special award was granted to the Hoomagentesses team from the city of Enerhodar, Zaporizhia region. The girls presented an application that helps solve the problem of stray animals in the city.

In Ukraine 225 schoolgirls have applied for the contest this year. Under mentors' supervision seven teams completed the mobile app prototypes. The girls had 3 months to bring their own concepts to life, making their way from an idea, designing, drawing up a business plan to creating mobile apps aimed to solve their community problems. This year, the girls addressed mental health, nature conservation, dementia, domestic violence, education, job search, and homeless animals.

"This contest may seem to be about IT, but it's about so much more! It requires patience and endurance, dedication and exploration, global thinking and understanding of local problems. Technology here is rather a means of empowering girls to make change, gain leadership and equality in improving our reality. All girls are agents of change. No matter what job they choose tomorrow, today they have learned how to build teams, find mentors, and apply tech in any area. It will certainly make a difference in the future," said **Jaroslawa Johnson, President and CEO of Western NIS Enterprise Fund.**

"We are amazed at the novelty and depth of the girls' projects, the topics they have chosen impress with complexity and significance. Once again, this program proves that it does not matter whether a child is from a big city or from a little town, it can have global thinking and come up with innovative ideas. With this program, we help them strengthen some skills and prove that only the brave ones can drive the change," said **Iryna Ozymok, Technovation Ambassador in Ukraine.**

Technovation is the world's largest IT entrepreneurship contest for girls, sponsored by Iridescent, a non-governmental organization supported by the top-rank IT companies of the world - Google, Microsoft, Adobe and others. The program is free for girls. It took just a few years for the initiative that started in the US to grow from 45 participating girls into a global network of 25,000 girls in over 100 countries. Ukraine hosts the program for the fifth year in a row.

Western NIS Enterprise Fund is the main partner of the program in Ukraine.

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Technovation is a program of US-based organization Iridescent. It is volunteer-run and free for girls aged 10 to 18 years. Participants work in teams of 3-5 for a couple of hours after school once or twice a week, during 12-20 weeks from December to April. Once they submit their project, they compete with other teams around the world for a chance to travel to San Francisco and win the funding from the technology giants who partner with the program. https://www.facebook.com/TechnovationUkr/

Western NIS Enterprise Fund (WNISEF) is a $150 million regional fund, a pioneer in Ukraine and Moldova, funded by the U.S. government via the U.S. Agency for International Development (USAID). With more than two decades of successful experience in investing in small and medium-sized companies, the fund invested $186 million in 130 companies, employing over 26,000 people and unlocking $2 billion of total capital over its tenure for Ukrainian and Moldovan companies. In

2015, WNISEF launched a $35 million legacy program focused on export promotion, local economic development, impact investing and economic leadership. WNISEF is funding innovative, high-impact, reform focused programs aimed to transform lives of the ordinary people in Ukraine and Moldova. Visit www.wnisef.org