ISOC Gambia Chapter Chapterton 2021

Introduction

This year Chapterton Internet Society Gambia Chapter in partnership with Kids-In-Technology a non-profit-making foundation that aims to groom a community of computational thinkers, problem solvers, and digital creators. We bring together 30 kids from different schools and Grade between 7 to 15 trained them on essential digital skills, learning the art of problem-solving skills using Scratch visual programing, Blocky and creative designing using Microsoft Paint, microcontroller, and a sensor to learn and play around with them. This also prepared for their Invention and Innovation Day.

Proposed Objectives

The objective of the Boot Camp was to impart knowledge and skills to children in understanding basic programming and electronic concepts using the Scratch program, Microcontrollers, and Sensors. Children as young as 7 learned programming concepts such as Variables, Conditional Statements, Iteration, Arrays, and Functions. They were also trained to apply their programming concept in building simple prototyping tools that could solve societal hospitals. The sample project was built based on Biotech Sector using https://thestempedia.com/shop/diy-learning-kits/bio-tech-kit/, evive with Arduino for small IoT projects https://thestempedia.com/shop/evive-kits/evive/ and smart gardening tools for small automatic irrigation system https://thestempedia.com/shop/diy-learning-kits/gardening-kit/. The camp prepared kids for essential fundamental skills such as Critical thinking, Creativity, Collaboration, and Communication.

Results

A final session was the exhibition an Innovation and invention Day where, parents, stakeholders, such as the private sector, civil society organizations, and individuals witness kids showcase their work built. People, especially from the IT sector, were invited to give a speech about Technology innovation in order to raise awareness. As part of the kids' presentations, they talked about online safety and safe browsing which aim to educate their fellow kids and parents.

Among the projects built are:

- Traffic light control
- Game Controller
- Motion detector
- Smart Trash Can
- Smart stick for the visually impaired.

TRAINING GUIDE

#	Date	Events	Duration
	Start	**10am - 12:30am**	
1	9/9/21	**Introduction to the program:** a. Welcoming remark by Kids In Tech b. Internet safety by Internet Society (ISOC) c. Internet Security by Kids In Tech (KIT) d. Introduction of the program by (KIT) e. Group picture, videos and snacks	**a - 5 min** **b- 15 min** **c- 10 min** **d - 10 min** **e- 20 min**
2	10/9/21	**Pictoblox & Micro-controllers:** ● *Programing with pictoblox and Arduino*	**2hours**
3	11/9/21	**Project 1:** ● *Smart Stick for visiually impaired*	**2hours**
4	12/9/21	**Project 2:** ● *Traffic light system* ● *Game development*	**2hours**
5	13/9/21	**project 3:**	**2hours**

		● *Motion detection*	
6	**18/9/21**	**Final day:** ● *Exhibition days*	**2h - 30min**