



PROJECT REPORT

Operation RoboReach

A LifeLine Charity Foundation Initiative

Project Date: 25th October 2025

Location: Kumasi Children's Home

Number of Students Impacted: 25

1. Introduction

Operation RoboReach was a STEM-focused outreach organized by the LifeLine Charity Foundation to introduce robotics and programming to children at the Kumasi Children's Home. The project was designed to spark curiosity, confidence, and creativity in young learners through fun, hands-on learning experiences.

Through this initiative, our volunteers created a safe and engaging space where children could explore basic robotics concepts, understand how simple machines think and move, and even try coding their own commands.

2. Background

Access to quality STEM education remains limited for many underprivileged children in Ghana. Operation RoboReach was born out of a desire to bridge that gap — giving children a chance to see, touch, and build technology, not just hear about it.

The project aligns with LifeLine's commitment to youth empowerment through education, innovation, and opportunity. By bringing technology directly to the children, we aimed to make robotics less intimidating and more inspiring.

3. Objectives

- Introduce participants to the fundamentals of robotics and coding.
 - Encourage curiosity and creativity through interactive demonstrations.
 - Build teamwork and problem-solving skills using group robot challenges.
 - Inspire interest in science, engineering, and technology-related careers.
-

4. Target Audience

- Beneficiaries: 25 children
 - Location: Kumasi Children's Home
 - Age Range: 10–15 years
 - Facilitated by: LifeLine Volunteer Group B
-

5. Project Activities

The workshop was designed as an interactive and practical session combining learning, exploration, and play.

- **Introduction to Robotics:**
Volunteers explained what robots are, how sensors and motors work, and how robots are used in everyday life.
 - **Hands-On Coding Session:**
Students were guided through writing simple commands that controlled robot movements — teaching them logical thinking and basic programming structure.
 - **Mini Robot Challenge:**
In small teams, participants directed their robots through short obstacle courses and problem-solving tasks, encouraging teamwork and friendly competition.
 - **Closing Reflection:**
The day ended with an open discussion, where participants shared what they learned and how they might apply it in the future.
-

6. Project Impact

Operation RoboReach had a visible and positive impact on every participant. Children who had never seen a robot before were suddenly able to make one move on command — an empowering moment that turned learning into excitement.

Key Results:

- 100% participation throughout all activities.
- Noticeable boost in curiosity and engagement toward STEM.
- Increased awareness of robotics and its real-world relevance.
- Several students expressed a newfound interest in becoming engineers or programmers.

Testimony:

“I never thought I could make a robot move by myself. Now I want to build one that can help clean the house!”

— *Participant, Kumasi Children's Home*

7. Challenges

- Limited number of robotic kits restricted the number of simultaneous participants.
- Some children required extra time and guidance to understand coding logic.
- Logistics for transporting equipment were demanding due to delicate components.

Despite these minor constraints, the session remained highly successful and engaging.

8. Future Plans and Recommendations

Following the success of this workshop, LifeLine Charity Foundation plans to:

- Organize additional sessions across other children's homes and schools.
 - Partner with local tech hubs to secure more robotics kits.
 - Develop a beginner-friendly *STEM starter curriculum* to sustain student interest.
 - Train volunteers to facilitate similar sessions in more communities.
-

9. Conclusion

Operation RoboReach demonstrated the transformative power of hands-on education. What began as a simple robotics introduction became a spark of imagination for 25 young learners.

By merging creativity with technology, LifeLine continues to empower the next generation — proving that innovation can start anywhere, even in a children's home classroom.

Contact Information

Lifeline Charity Foundation

Website: lifelinecharityfoundation.com

Email: contact.lifelinecharity@gmail.com

Instagram: [@lifelinecharityorganization](https://www.instagram.com/lifelinecharityorganization)

Facebook: [Lifeline Charity Organization](https://www.facebook.com/LifelineCharityOrganization)



Signed,

Adolf Lobowicz

Co-Founder & Executive Director