



TANZANIA STUDENT CODERS HACKATHON

Hackathon HandBook





About the Hackathon Handbook.

This is a document that contains all important information that you will need during this Hackathon to make sure that everyone fully participates in the hackathon. The contents of this handbook include:-

- What is a Hackathon?
- Objectives of the Tanzania Youth Coding Hackathon
- Format of the Hackathon
- Hackathon Tracks and their challenges
- Team Formulation
- Form of Communication
- Mentorship
- Submission Guide
- Judging Criteria
- Prize and Awards
- Post Hackathon



What is a Hackathon?

A portmanteau of “hacking” and “marathon”, Hackathons are a competitive sprint event that enable people to collaborate from different disciplines to solve a particular problem by developing a new technology, software, service, process, or institutional arrangement.

Hackathons are often organized around a particular theme or topic, and participants may have access to resources such as mentors, software tools, and data sets to aid them in their work. At the end of the event, participants may present their projects to a panel of judges, and prizes may be awarded for the best projects.

Objectives of this Hackathon

We are excited to bring together a community of student programmers who are passionate about using computer technology to solve real-world problems. Our objectives for this hackathon are:

- **To bring together a community of student programmers:** We believe that collaboration is essential to success. By bringing together a diverse group of student programmers, we hope to create an environment that fosters collaboration and encourages the sharing of ideas.
- **To promote real-world problem solving using computer technology:** We believe that technology can be a powerful tool for solving real-world problems. During this hackathon, we want you to use your technical skills to come up with innovative solutions to real-world problems.
- **To inspire technical skills:** We believe that technical skills are essential for success in today's world. We hope that this hackathon will inspire you to continue learning and developing your technical skills.



Format of the Hackathon

This hackathon will be done in a hybrid format where participants can participate virtually through zoom/discord or physically at Youth For Children (Y4C) Innovation Hub. The First day of the Hackathon will be **fully virtual** but on the Second day to the last day, participants can use the **Y4C space** for discussions and product development. The final Day of the Hackathon will be both Virtual and Onsite (at Y4C).

Hackathon Tracks and challenges

Tracks refer to specific concentrations within a particular theme (as detailed in a subsequent section) to which participants are allocated. Each team will be allocated a track by the organizing committee and they will work on that challenge until the end of the hackathon. This hackathon will be in three Tracks which are **Health, Agriculture and Education**.

a. Health

Tanzania faces a range of health challenges, including a high incidence of infectious diseases such as malaria, HIV/AIDS, and tuberculosis. In addition, there are shortages of healthcare workers, particularly in rural areas, and limited access to essential medicines and medical supplies.

Requirement: Come up with a software solution that can address the health challenges facing Tanzania.

b. Agriculture

Despite being a predominantly agricultural country, Tanzania faces challenges in achieving food security and reducing poverty for smallholder farmers. Many farmers lack access to modern agricultural technologies and practices, as well as markets to sell their crops. Climate change is also having an impact on agriculture, with more frequent and severe droughts and floods affecting crop yields.

Requirement: Come up with a software solution that can improve productivity and resilience in Tanzania's agricultural sector.



c. Education

Tanzania has made progress in improving access to education, but the quality of education remains a challenge. There are shortages of qualified teachers, particularly in rural areas, and many schools lack basic infrastructure and resources such as textbooks, classrooms, and equipment.

Requirement: Come up with a software solution that can improve the quality of education in Tanzania.

Team Formation

Participants are allowed to find team members from the hackathon participants. The maximum number of people in a team is Five (5) and the Minimum is (4). For the participants who registered as a team, they can proceed with their teams but for the individual participants, they should look for teams through the tools that will be used in this Hackathon i.e WhatsApp and Discord. The deadline for teams formulation is 19th April 2023.

Forms of Communication

Form of communication: communication channels are crucial to ensure that all participants in the Hackathon are updated throughout the hackathon.

All stakeholders (organizers, participants, judges, and mentors) must communicate with each other to share ideas and resources, clarify what is required at each stage of the hackathon, and review important announcements. Particularly for virtual and hybrid hackathons, communication channels allow team members to communicate as they develop solutions across different regions and time zones, when they are not physically together. The tools that will be used include **WhatsApp, Zoom, Google workspace and Discord.**

Link to WhatsApp Group: <https://chat.whatsapp.com/IvGtC6J1khh8MXWJ6EPjAq>

Link to Discord: <https://discord.gg/mjbK6MJ2>

Mentorship

Throughout the Hackathon, participants receive structured mentorship from leaders and experts in the field. Hackathon mentorship is coordinated by the organizing team, as participants are



oriented to the process, and mentors work closely with participants as they iteratively develop their solutions. No mentor will be allocated to a particular team but teams that will need mentorship can request for assistance in the Mentors channel that is found in Discord.

Submission Guide

The deadline for product submission is on 28th April 2023 at 16:30 hrs where each team will be required to submit the following.

1. Project source code (To be uploaded in Github)
2. Pitch deck (Introduction, Problem statement, Persona, Stakeholders map, Proposed solution, Impact, sustainability) to be uploaded in a google drive (the link will be shared)
3. A maximum of 3-Minutes video that demonstrates how the system works. The video should be uploaded on youtube (upload it as “unlisted”) and the link will be shared to the judges.

Judging Criterias

There are two (2) rounds of Judging. The first round of Judging will be done soon after submitting the project source codes, pitch deck and a video. Two(2) teams will be selected from each track (i.e Agriculture, Education & Health) and these teams will be given an opportunity to do the final pitch to the judges. After the Second round of judging one team will be selected from each track making a total of 3 winning teams.

The judging criterias will include:

- Innovation and Creativity
- Teamwork and collaboration
- Quality of the work (How well has the team executed the work, Has the team met the project requirements and expectations)
- Adaptability and flexibility
- Progress or completion (To what extent has the team made towards completing the project, How much has been done so far?)



Prize and awards

Certificates will be awarded to all team members that will participate in the Hackathon and have submitted the required materials.

Awards will be given to three winning teams i.e the first winning team from each challenge. The awards will either be in kind or cash.

Post Hackathon

Firstly, we want you to know that the hackathon is just the beginning of a potential long-term relationship. After the hackathon, we will review all the projects that were presented to us during the event. If we come across promising projects with viable solutions and high-quality prototypes, we will offer our support to help bring those projects to completion so that they can become real-world products. Our team will provide guidance, resources, and support to help you take your project to the next level.

Secondly, we will also be on the lookout for exceptional talent during the hackathon. If you show great potential and have a good character, we may offer you an opportunity to work with us on future projects as a part of our organization. We value talent and character equally and believe that both are necessary for success.

In conclusion, we want you to know that we are committed to supporting you beyond the hackathon. Our goal is to create a community of developers who are passionate about solving real-world problems and making a positive impact. We hope that you will join us in this journey.

Note: We encourage you to take photos during your discussions and throughout your Hacking stages. Participants who will use virtual tools to conduct discussions please make sure you take screenshots during your meetings.

Remember to immerse yourself and enjoy the experience! The goal is not only to win, but to gain added insight, skills and new experiences.