## **RAIN Hackathon 1.0 Project Proposal Guidelines.**

Welcome to the Robotics and Artificial Intelligence Nigeria (RAIN) Hackathon 1.0! As part of the registration process, participants are required to submit a detailed project proposal. The proposals will be reviewed, and only selected projects will be shortlisted for the hackathon. Please follow the guidelines below to structure your proposal effectively.

## **Proposal Structure:**

- 1. Title of Project(15 words max): Provide a clear and concise title for your project that reflects the core idea.
- 2. Team Members (Max. of 3 people and full names): List the names and roles of all members of your team. Include brief descriptions of their expertise or background.
- 3. Aim and Objectives(100 words max): Clearly state the aim of your project and list the specific objectives you intend to achieve. Please indicate if any part of the objectives has already been achieved and what part is yet to be achieved.
- 4. Problem Definition(150 max): Describe the problem your project is solving. Explain the significance of the problem in the context of AI and robotics.
- 5. Proposed Solution(150 max): Present the solution you are proposing. Include how AI and robotics will be applied to address the problem. If applicable, include diagrams, flowcharts, or images that help visualize the solution.
- 6. Duration: Provide an estimated timeline for developing the project and break down the project phases (e.g., research, prototyping, testing, etc.).
- 7. Expected Challenges: Identify the potential challenges or obstacles you might face while executing the project and suggest how you plan to overcome them.
- 8. Location: Indicate the location where the project development will take place (e.g., office, home lab, university, etc.).
- 9. Project Type (Software or Hardware): Specify whether your project involves software development, hardware prototyping, or a combination of both.
- 10. Resource Persons: List any experts or mentors who will assist your team during the project development phase.

- 11. Funding: Provide a breakdown of the financial requirements for your project, including a summary of any external funding sources, if applicable.
- 12. Manner of Funding: Indicate how the funding will be allocated and managed throughout the project.

## **Additional Requirements:**

- 13. Expected Impact (100 words max): Describe the expected impact or contribution to knowledge that your project will have in society. Explain who will benefit from your project.
- 14. Project Importance(100 words max): Justify the importance of your project and explain why you should be shortlisted for the hackathon.

## **Thematic Areas:**

Projects must fall under one of the following thematic areas, focusing on AI and robotics:

- 1. Food Security: How can we leverage technology to ensure a sustainable and resilient food supply for Africa's growing population?
- 2. National Security: What AI and Robotics innovations can enhance national safety and security in an increasingly complex world?
- 3. Healthcare: How can technology revolutionize healthcare systems to improve accessibility and patient outcomes?
- 4. E-Commerce: How can we leverage AI and Robotics to create smarter, more efficient e-commerce solutions?
- 5. Special Education: How can we develop tools to empower and enhance the learning experience for students with special needs?