KENYA RE
STRENGTH & WISDOM BEYOND BORDERS

University of Nairobi

KENYA REINSURANCE CORPORATION LTD
AND UNIVERSITY OF NAIROBI

(AI4I) HACKATHON 2024

THEME:
REIMAGINING (RE)INSURANCE WITH AI
FOR OPERATIONAL EFFICIENCY

Table of Contents

1.0 Background Information

The Kenya Reinsurance Corporation (Kenya Re) and the University of Nairobi (UoN) join forces for a ground-breaking hackathon!

The Kenya Re inaugural hackathon is a unique opportunity for talented University students to leverage their expertise in AI and machine learning models. Students passionate about innovating, automation and keen on contributing to operational efficiency in service offerings are encouraged to participate.

1.1 Theme

Reimagining (re)insurance with Artificial Intelligence

2.0 Innovation Challenge

2.1 Challenge Overview

This inaugural hackathon unites Kenya Reinsurance and top and creative minds in our universities– to tackle real-world challenges and shape the future of reinsurance. Working collaboratively, participants will leverage cutting-edge technologies in Artificial Intelligence (AI) and Machine Learning (ML) to develop innovative solutions that enhance operational efficiency.

Participants are expected to use the provided datasets for each problem area and cutting-edge AI technologies including but not limited to the state-of-the-art machine learning algorithms, analytics, visualizations, ChatGPT technologies among others. Participants are challenged to understand the current business challenges as presented and provide solutions in areas such as

a) Finance bank reconciliation process with AI

b) Reinsurance business underwriting process automation using AI

c) Claims Processing with AI Fraud Detection Capabilities

d) Reinsurance Receipts debt Allocation using AI

e) Improving Customer Service Operations with AI.

Participants shall be expected to analyse and understand the data, and craft compelling, AI-driven solutions that enhance efficiency, security and strategic positioning of the re-insurance business.

3.0 Hackathon Objectives

- **Spark Innovation:** Foster a collaborative environment where participants can develop creative solutions using AI and ML.
- **Bridge the Gap:** Connect university top minds with AI talent to address everyday challenges in reinsurance.
- **Empower Efficiency:** Identify solutions that streamline operations and improve processes within the reinsurance industry.
- **Develop a community of insurance AI experts:** create a community of AI developers for insurance and reinsurance industry.

3.1 What We're Looking For

- **Technical Brilliance:** Showcase your proficiency in AI, ML, and software development.
- **Problem-Solving Prowess:** Develop solutions that address a specific challenge statement (to be provided).
- **Design Thinking:** Craft user-friendly and impactful solutions that consider design and usability.

4.0 Judging Criteria

- **Innovation:** Uniqueness and originality of the proposed solution.
- **Technical Complexity:** Level of technical expertise demonstrated in the solution.
- **Potential Impact:** The solution's ability to address a significant challenge and improve efficiency.
- **Design & Development:** Clarity, functionality, and user-friendliness of the solution.
- **Problem-Solving:** Effectiveness in addressing the challenge statement.

4.1 Why Participate?

For the participants, this hackathon offers a unique opportunity for innovation, learning, networking and building their personal professional portfolios.

You will

a. **Showcase Your Innovation:** Present your solutions to a panel of industry leaders and AI experts

b. **Win Prizes:** Attractive prizes await the most innovative and impactful proposals.

c. **Network and Collaborate:** Connect with peers, industry professionals, and potential mentors or investors

d. **Build solutions that benefit our country**

e. **Relationship:** Potential Long-term relationship with Kenya Re

5.0 Competition Structure

Below are the main stages of the hackathon

- Pre-Hackathon Online Briefing
- Hackathon stage 1 (Registration, live competition and live demonstration of solutions, judging and feedback, awards ceremony)
- Hackathon stage 2 (Development of the prototype into product over 4 weeks.)

6.0 Problem Statements

Each participant is expected to come up with a solution for one of the following problems:

- Reinsurance business underwriting process automation using AI
- Claims Processing with AI fraud detection capabilities
- Reinsurance receipts debt allocation using AI
- Improving customer service operations with AI.
- Finance bank reconciliation process with AI

7.0 Submission Guidelines

Eligibility: Open to students with a background, understanding and passion for AI and software development in their 3rd or 4th year of studies from our local universities.

Dataset: Anonymised insurance datasets will be provided with registered participants. Registered participants will be required to sign non-disclosure agreements upon registration as the data provided to them is sensitive and proprietary to Kenya Re.

Tools: Any AI driven software tool can be used during this hackathon. The cost for a such tool (if any) is expected to be borne by the participant(s).

Format: Solutions will be presented to the judges via live demos.

8.0 Important Dates

Registration:	Monday 9th September – Friday 20th September 2024
Preliminary Hackathon Briefing:	Monday 23rd September 2024
Hackathon Stage 1:	Wednesday 25th September 2024 – Friday 27th September 2024
Presentation and Awards:	Friday 27th September 2024
Hackathon Stage 2:	Tuesday 1st October 2024 – Thursday 31st October 2024
Prototype development:	3 months Internship

8.1 Dataset Overview

The datasets for the various problem statements include information on

- Bank reconciliation
- Debt allocation
- Customer service
- Claims
- Underwriting data

9.0 Judges

The prototypes will be judged by a panel comprising of professionals within the academia, and reinsurance industries.

1. Prof. Peter Waiganjo, Professor of AI, Department of Computing and Informatics - University of Nairobi
2. Dr. Lawrence Muchemi, Senior Lecturer of AI, Department of Computing and Informatics - University of Nairobi
3. Mr. Samuel Ruugia, Manager, ICT & Hackathon Lead – Kenya Re
4. Mr. Davis Onsakia, Assistant Manager, ICT – Kenya Re, Customer service improvement
5. Mr. Leonard Kipngetich, Underwriting Assistant, Local Business – Kenya Re, Reinsurance business quotations analysis
6. Mr. Leonard Langat, Senior Management Accountant, Finance – Kenya Re, Bank reconciliation
7. Mr. Anelick Makokha, Underwriting Assistant, Claims Management – Kenya Re, Claims processing and analysis with fraud detection capabilities
8. Ms.Mary Wangari, Accounts Assistant, Credit Control – Kenya Re, Reinsurance debt allocation

10.0 Winners

1st position -	Cash prize of Ksh.200,000 and 3 months internship opportunity at Kenya Re
2nd position -	Cash prize of Ksh.100,000 and 3 months internship opportunity at Kenya Re
3rd position -	Cash prize of Ksh.50,000 and 3 months internship opportunity at Kenya Re
Finalists	(Position 4 to 10) - Ksh. 5,000 appreciation tokens per finalists.

11.0 How to register

Interested participants can access the registration form through https://forms.office.com/r/S4zgnkDtkJ or by scanning the QR code below.

SCAN ME

12.0 Contact Information

Email: hackathon@kenyare.co.ke
Tel: +254 703 083 000/200