November 2025 Report

Author: Grace Onah

Role: Facilitator at Wims Cardano Global

Group: GO18 University of Nigeria Nsukka Haskell Plutus

Number of students: 5

Date: 30 November 2025

Table of Contents

1. Executive Summary

I began my role as facilitator at Coxygen Global in November, focusing on three key areas which involves outreach efforts to university students and graduates through targeted promotional activities about Coxygen Global and Cardano which five people were successfully recruited.

I conducted three days of facilitation with participants' registration followed by two sessions of Haskell lessons which showed strong engagement from attendees.

Additionally, I collaborated with senior facilitators and colleagues on smart contract development, gaining practical experience across all work areas which includes outreach, mentorship, smart contract development with personal improvement towards professional soft skills like team work, problem solving and critical thinking.

2. Outreach Activities

This is done basically for creating awareness to the public about Coxygen Global and the Cardano Blockchain. The target audience are mainly students in tertiary institutions and graduates that are unemployed as they seem to be fit for the system. Posters are also made to enhance communication. The approach to this outreach includes:

- A one-to-one interactive session
- Referrals
- Social media outreach via WhatsApp posts and LinkedIn

Here is the link to the LinkedIn post:https://www.linkedin.com/posts/grace-onah_careergrowth-blockchaindevelopment-womeninmovesolutions-activity-7397546383043616768-mGlB?utm_source=share&utm_medium=member_android&rcm=ACoAADVDCcoBvajj7zKFJZtj6dS19efVy5ZGGRE

Here is the poster that is being used sensitization

3. Facilitation

3.1 Welcoming of New Students Developers

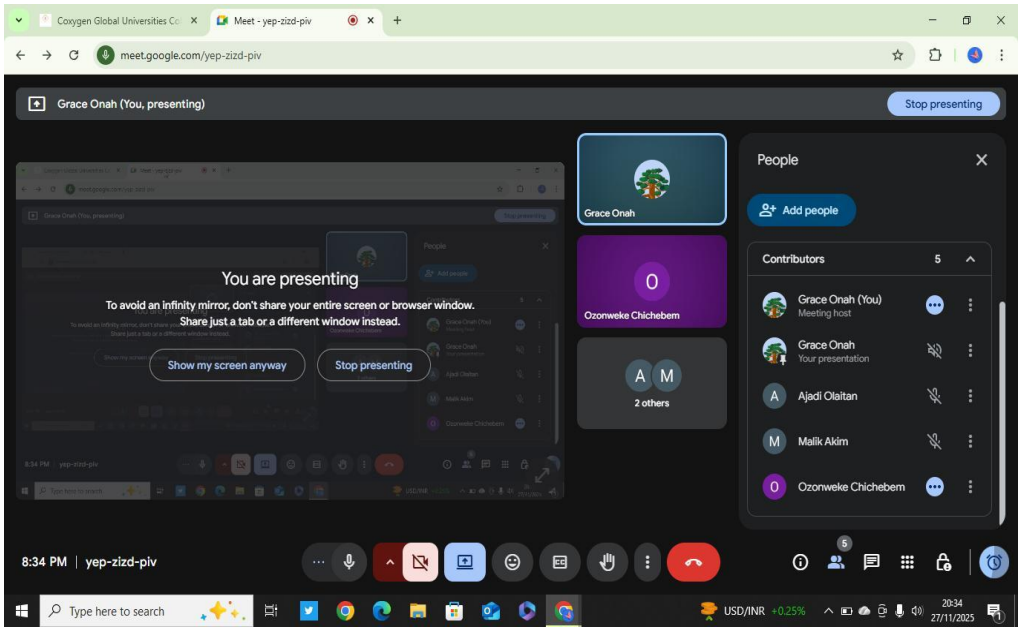
During this meeting, the student's developers were all sensitized individually via WhatsApp call as they were not able to join the meeting on Google meet due to some challenges and individual schedules. The student's developers were registered on Coxygen Global successfully and proper orientation done on the Cardano Blockchain computational layer and Coxygen Global. There is no pictorial representation as google meet was not used. The method used includes

- one-to-one online chit chat
- Source material link: https://github.com/wimsio/universities/wiki/Cardano-Architecture

3.2. First Haskell Lessons

Date: 27th November 2025
Time: 20:00 – 21:00
Attendees: Heritage Adebayo
Akeem Maleek
Ozonweke Chichebem

Activities: Introduction to Haskell- Students developers present were introduced to Haskell programming language, how to navigate through on the Coxygen window space and how to write code and run them on the Haskell code editor section.
Result: One among the three students showed maximum cooperation during the session because he has a background knowledge in programming while the other two demanded proper explanations with attention to detail.
The image below shows that of the Google meeting with two other facilitators that assisted.



3.3. Second Haskell Lessons

Date: 29th November 2025

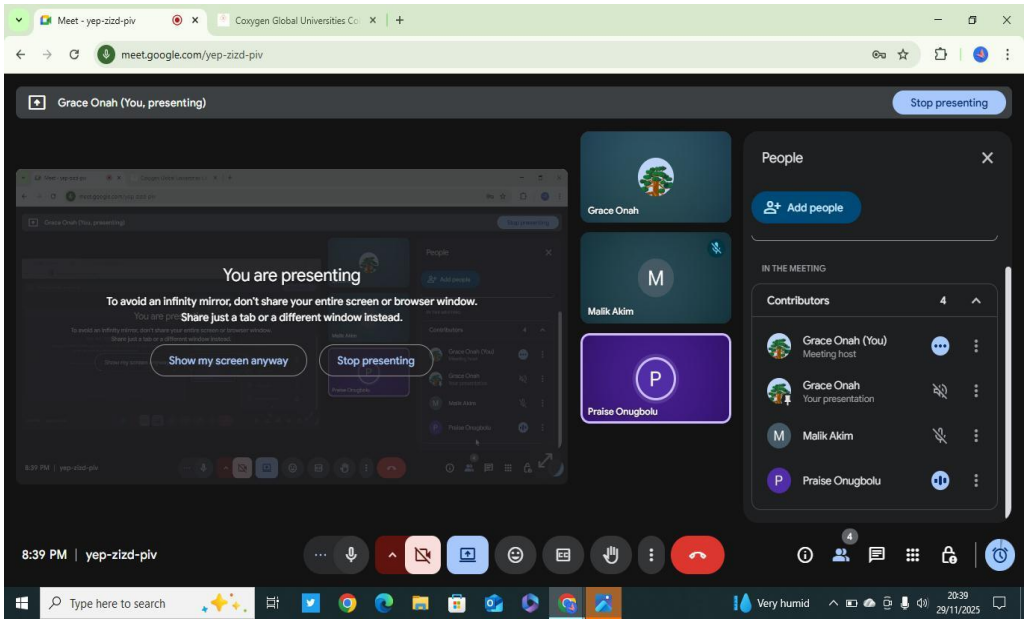
Time: 20.00 – 21:00

Attendees: Akeem Maleek

Onugbolu Praise

Activities: Continuation with a recap on the last meeting, writing codes and detailed explanations of terms in Haskell to the students' developers.

Result: Students were able to differentiate between type class and function names, mention the different type functions that are in Haskell and their functions in Haskell. They were also able to fix the bugs in their codes. Below is the pictorial representation of the google meeting with attendees:



4. Smart Contracts

I was able to write the following six smart contracts with their outlines and source code to my GitHub page.

4.1. Snapshot voting (CIP-68 / reference inputs)

Brief: Freeze voting power at block/time without moving tokens. On-chain spec: Snapshot UTxO binds policyId + slot; validator reads balances via CIP-68 metadata refs or accumulator proofs; CreateSnapshot|Verify. Flows: Governor references snapshot when tallying. App: Snapshot explorer, balance proof helper, audit trail

Source code **https://github.com/Kamara23-tics/plutus-nix**(code/wspace/tests/code/wspace/tests/Snapshot.hs)

4.2. Fashion & Beauty — authenticity + royalties

Brief: Product authenticity NFTs + creator payout split. On-chain spec: AuthNFT {brand, model, serial, hash}; Splitter for royalties; resale validator enforces royalty. Flows: Mint at manufacture; resale routes royalty. App: Scan-to-verify, ownership history, drop auctions.

Source code: https://github.com/Kamara23-tics/plutus-nix (code/wspace/tests/Fashion-Beauty.hs)

4.3. Social Media — creator payouts + token-gating

Brief: Monetize posts; access via community tokens; on-chain reputation. On-chain spec: PostRef {hash, author}; AccessPolicy{token, threshold}; RepScore{non-transferable}. Flows: Fans pay → splitter to author/treasury; gating checks balance; rep accrues by attestations. App: Pay button, token-gated rooms, rep badges

Source Code: https://github.com/Kamara23-tics/plutus-nix: (code/wspace/tests/Social-Media.hs)

4.4. Communication — prepaid vouchers & spam deposits

Brief: Token vouchers redeem for data/voice; message requires deposit to reduce spam. On-chain spec: Voucher {quota, expiry}; MsgEscrow{sender, deposit, ttl} refundable when recipient accepts. Flows: Burn voucher to redeem service; message accepted → deposit returned; else forfeited. App: Top-up store, inbox with "deposit" filters.

Source Code : https://github.com/Kamara23-tics/plutus-nix (code/wspace/tests/Communication.hs)

4.5. Politics — transparent campaign funds

Brief: Open campaign treasury + grants with milestones. On-chain spec: Campaign {treasurer, limits, disclosureRef}; Grant {milestones, reportHash}. Flows: Donations in; disburse against reports; audit trail immutable. App: Donor breakdown, spend explorer, milestone tracker.

Source Code **: https://github.com/Kamara23-tics/plutus-nix** (code/wspace/tests/Politics.hs)

4.6. Identity — DID/VC + KYC badges

Brief: Verifiable credentials; SBT KYC badges; zk gates. On-chain spec: VCRef {issuer, subject, schemaHash, expiry}; KYCBadgeSBT; consumer snippets check issuer & TTL. Flows: Issuers publish VC refs; apps read via reference input; revocation list. App: Wallet for VCs, proof builder (selective disclosure), revocation viewer.

Source Code: **https://github.com/Kamara23-tics/plutus-nix** (code/wspace/tests/Identity.hs)

5. Conclusion

My first month at Coxygen Global yielded substantial results across three core areas. I successfully recruited five participants through multi-channel outreach targeting students and graduates. Facilitation efforts included conducting two Haskell programming sessions, where participants progressed from basic concepts to practical debugging skills, though learning curves varied. I developed six smart contracts addressing diverse applications: snapshot voting, fashion authentication, social media monetization, communication systems, political transparency, and digital identity, all adhering to Cardano standards. This experience enhanced both my technical capabilities and professional soft skills including teamwork and problem-solving, establishing a strong foundation for continued contributions to Coxygen Global and the Cardano ecosystem.