NatWest
Hack4aCause 2025

Join us in a transformative AI hackathon focused on driving social impact in education and employability. Let's work together to add the next game changer feature on to Snowflake **LearnAIx** platform, the AI-assisted, open-source learning system that you all will be helping build via this hackathon.

Purpose

With **LearnAIx**, our goal is to develop a scalable and accessible platform that can be leveraged by non-profits and academies alike to enhance learning experiences and open doors of opportunities to all learners.

Through your involvement in this hackathon, you will get the opportunity to socialise and network with like-minded enthusiasts who believe in open-source enablers for community benefit. You will use AI to improve learning solutions in the education sector.

Objective

To create AI enabled Moodle plugins on existing **LearnAIx** alpha solution on Snowflake public platform. Shortlisted plugins will feature in the **LearnAIx** beta version that will be available for free for non-profits to consume.

LearnAIx

NatWest Group

Plugin Themes

● **AI Companion for Learning & Development**

Any LMS assistant (chatbot, voice or other) on **LearnAIx**

Think of something that can enable navigation, query resolution, real-time doubt clarification, soft skills enhancement, multilingual support, and data-driven insights to improve learner engagement and reduce human dependency. Think of this as your personal ChatGPT on **LearnAIx**.

● **AI-Powered Assessment Tool**

Anything that can help automate assessments.

Think of something that can complete assessment lifecycle within LMS, generating questions, providing adaptive complexity, real-time feedback, enabling scalable, personalized, data-driven evaluations for enhanced learning outcomes.

● **Feedback as a Service**

Anything that can integrate feedback on to the **LearnAIx** platform.

Think of a plugin enabling structured, real-time feedback exchange between learners and instructors with AI-powered sentiment analysis, dashboards, and actionable insights for continuous improvement.

● **Gamification Features on LearnAIx**

Anything that engages the users via Gamification.

Think of badges, leaderboards, and points-based rewards to enhance learner motivation, participation, and retention through achievement recognition, healthy competition, and improved engagement for better learning outcomes.

● **Learning Pathway as a Service**

Anything that can help build a learning pathway journey.

Think of something that delivers AI-powered, personalized learning journeys using learner profiles and assessment data to recommend tailored courses, continuously adapting based on progress to bridge skill gaps and achieve career aspirations.

● **Paper to Digital**

Anything that can bridge the paper-digital gap in learning.

Think of using AI, computer vision, or NLP to transform handwritten/printed questions into digital queries, automate grading processes, and bridge physical-digital learning environments within the LMS platform.

● **Practice Test as a Service**

Anything that can generate infinite practice questions and answers.

Think of AI-driven features creating personalized practice assessments, adapting to learner performance, providing instant evaluation with detailed feedback, and tracking progress for continuous improvement across technical and non-technical subjects.

Plugin Themes (cont'd)

Proctoring as a Service

Anything that can help secure controlled environment evaluations.

Think of AI-enabled feature providing secure online exam monitoring through identity verification, real-time behaviour analysis, secure browser environments, and detailed incident logging to ensure exam integrity with a seamless learner experience.

AI-Powered Project Evaluator Tool

Anything that helps judge projects using AI.

Think of AI-enabled feature that automates project-based assessment within **LearnAIx**, generating problem statements, evaluating submissions on quality and functionality, providing detailed feedback, and scoring for scalable, objective evaluation.

Wildcard LMS Features

Any more value added AI-driven solutions which are unique and can be plugged into **LearnAIx**.

Does this sound like something you would like to be part of?

Please register here – <u>Early Internal form (link)</u>

Training Calendar

For a better hack experience, we have organised trainings which will be communicated to you after your registration is completed.

Here is a sneak peek into some learnings coming your way:

- NatWest Snowflake **LearnAIx** introduction.
- Plugin Development on **LearnAIx**.
- Deployment on **LearnAIx**.
- Snowflake LLM and Co-Pilot Session.
- Why Hack4aCause.
- Logistics of Hack4aCause – Hackworks platform.
- Code expectation for Hack4aCause – Codebase and OSPO template.
- Build like AWS.
- Intro to FINOS.