

# KNOWLEDGE FOUNDATION

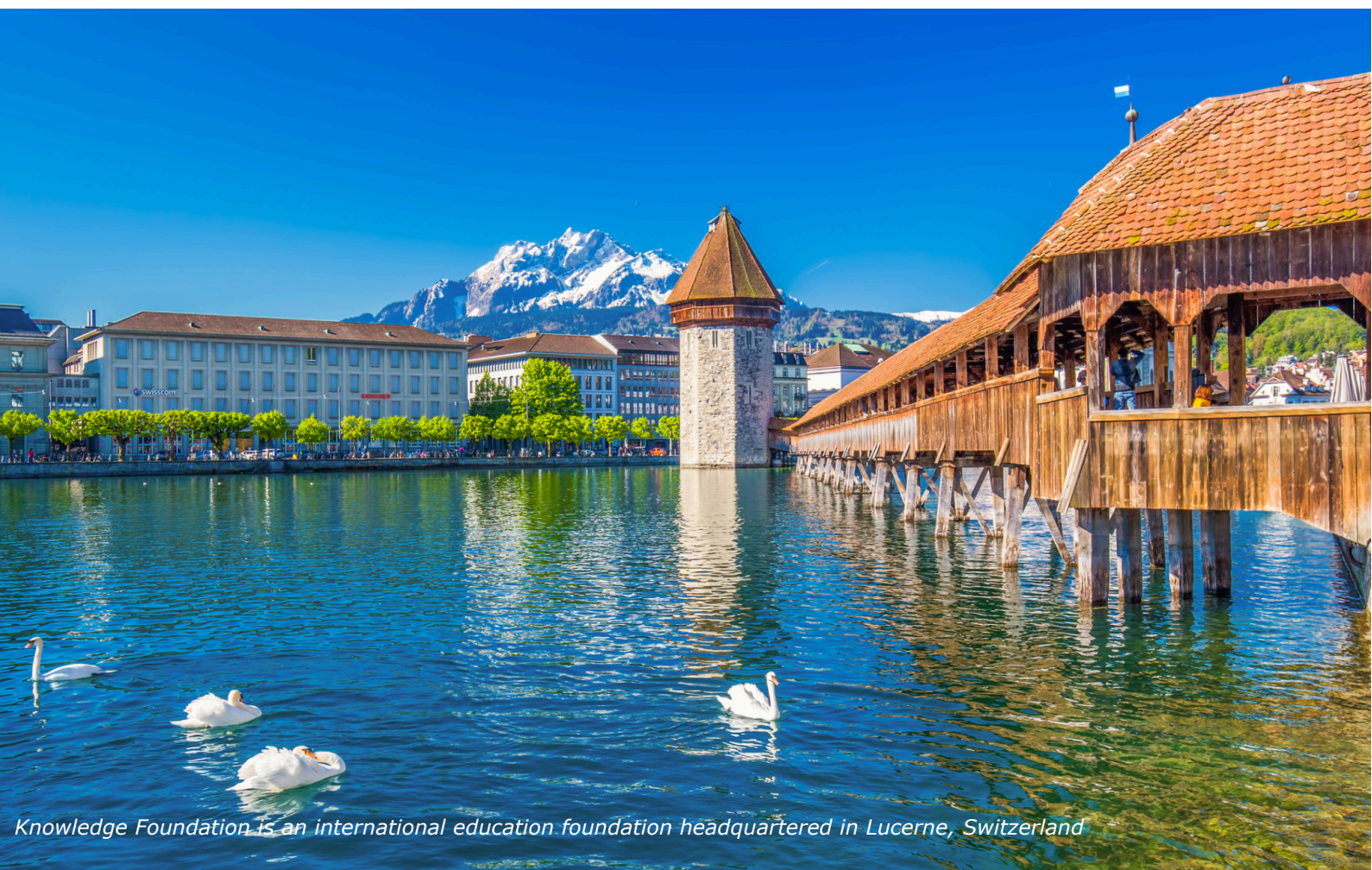
KNOWLEDGE



FOUNDATION

Knowledge Foundation : [KnowledgeFound.org](https://KnowledgeFound.org)

| Knowledge Token® : [KnowledgeFound.org/token](https://KnowledgeFound.org/token)



*Knowledge Foundation is an international education foundation headquartered in Lucerne, Switzerland*



# KNOWLEDGE FOUNDATION

Knowledge Token® In Action



KNOWLEDGE FOUNDATION  
Lucerne, Switzerland

The [Knowledge Foundation](#) is a non-profit global education organization headquartered in Lucerne, Switzerland, chartered to advance global education through the application of advanced and emerging technologies such as Knowledge Token®, Artificial Intelligence (AI), Virtual Reality (VR), Augmented Reality (AR), blockchain and robotics.

The Knowledge Foundation's mission is to democratize access to knowledge by creating an open, inclusive educational ecosystem that spans the globe.



*University of Oxford 2023 Knowledge Foundation Summit*

Established in 2022 in partnership with the Lucerne University of Applied Sciences and Arts and Immersive Education Initiative, Knowledge Foundation collaborators today include the United Nations Office on Drugs and Crime (UNODC) Global Resource for Anti-Corruption Education and Youth Empowerment (GRACE) initiative, UNODC Global Programme on Cybercrime, DFINITY Foundation (Switzerland), Lando & Anastasi, LLP (USA), Africa Civic Tech Innovation Network (Africa), Luxembourg House of Financial Technology (Luxembourg), Massachusetts Institute of Technology (MIT) Bitcoin Club (USA), University of Oxford Blockchain Research Centre (UK), University of Zurich Blockchain Center (Switzerland), Yale University Blockchain Club (USA), Brown University Blockchain Club (USA), University of Pretoria (South Africa), Stellenbosch University (South Africa), Web3 Foundation (Switzerland), CreaTech (Bulgaria) and ImbachDEV GmbH (Switzerland).

Together with its collaborators, the foundation designs and delivers educational content, activities and events utilizing advanced and emerging technologies for which [Knowledge Token®](#) "learn and earn" rewards are provided as detailed below.

# KNOWLEDGE TOKEN<sup>®</sup>

Knowledge Token<sup>®</sup> was introduced to the public in 2017 at the international [Immersive Italy Summit](#) held in collaboration with the [Italian Ministry of Education, Universities and Research](#).

[Knowledge Token<sup>®</sup>](#) is a family of digital assets that serve as intellectual currency (awarded to learners for academic achievements) while privately and securely storing the learner's corresponding academic activity (transcripts, records, certifications and diplomas) on cryptographically secure blockchain networks. Knowledge Tokens can be used to pay for essential and non-essential products and services, and may be programmed to be redeemable only for specific goods on a specific schedule (e.g., one kilo of rice from a certain grocery store every two weeks).

The digital token system and protocols fundamentally transform the way in which learners, educators, and educational content creators acquire, value, distribute and generate knowledge.

As an incentive and participation token that is awarded to learners in exchange for intellectual achievements, while privately and securely recording corresponding academic progress, Knowledge Tokens are issued in amounts that correspond to the units or amounts of knowledge, skills and/or credits that learners earn.

The protocol utilizes advanced cryptography to privately and securely record and represent the detailed knowledge, skills and/or credit earned via formal and informal education, educational software (e.g., websites, apps, etc.), training exercises, self-paced and self-directed educational experiences, professional development (PD), and other forms of teaching, training and education.

Knowledge Token<sup>®</sup> is *intellectual currency* that may be used to pay for essential goods and services as well as those related to education (e.g., electricity, food, water, Internet access, textbooks, tuition, courses, learning games, electronic devices such as mobile phones and computers, etc.).

As a programmable digital asset, custom and region-specific renditions of the token can be programmed with precise redemption restrictions, such as only being redeemable for certain food products through trusted local vendors and at a limited rate. A given class of tokens, for example, can be programmed to be spendable for up to one kilo of rice every two weeks, and only from a certain local grocery store. Likewise, a token might be programmed to only be useful for "unlocking" specific online educational materials such as lessons, courses and textbooks that are directly relevant to that particular learner's academic path.

## Optional Digital Currency Functionality

The digital currency functionality of Knowledge Token<sup>®</sup> is optional and can be disabled in cases where this feature is not needed or desired, such as in the case of the United Nations digital certificates issued by the UN Global Programme on Cybercrime (see below).



# HACKATHONS

Global development of the most current rendition of Knowledge Token® commenced in March 2023 at the [2023 Oxford Knowledge Token Hackathon](#) (coding competition) that was held during the Knowledge Foundation's 2023 Blockchain in Education Summit at [University of Oxford](#).

Knowledge Tokens are awarded to all hackathon winners, in addition to participants that successfully complete the hackathon (even if not winners), which may be redeemed for entrance to Knowledge Foundation and Immersive Education Initiative events and activities.

Based on the success of Oxford and subsequent Knowledge Foundation hackathons, on 09 April 2024 the Knowledge Foundation, United Nations Office on Drugs and Crime (UNODC) and DFINITY Foundation officially announced a 3-year partnership to reshape the way in which learners, educators, and educational content creators acquire, distribute and generate knowledge via Knowledge Token® on the Internet Computer platform.

Over the coming three years the organizations will co-develop an innovative suite of AI and blockchain technology products to educate participants on anti-corruption topics through a series of unique hackathon events under the UNODC Coding4Integrity youth hackathon framework.

The hackathons, of which four occur each year for the coming three years, achieve this through the ongoing development of Knowledge Token® and corresponding [Open International Standards](#).



*Oxford University is among the prestigious universities that host Knowledge Foundation hackathons*



**Oxford 2023 (Summit and Hackathon):**

[summit.ImmersiveEducation.org/Oxford/2023/overview.html](https://summit.ImmersiveEducation.org/Oxford/2023/overview.html)

[KnowledgeFound.org/hackathons/Oxford/2023](https://KnowledgeFound.org/hackathons/Oxford/2023)

**Oxford 2024 (Summit and Hackathon):**

[summit.ImmersiveEducation.org/Oxford/2024/overview.html](https://summit.ImmersiveEducation.org/Oxford/2024/overview.html)

[KnowledgeFound.org/hackathons/Oxford/2024](https://KnowledgeFound.org/hackathons/Oxford/2024)

**South Africa 2024 Stellenbosch (Symposium and Hackathon):**

[summit.ImmersiveEducation.org/SouthAfrica/2024/overview.html](https://summit.ImmersiveEducation.org/SouthAfrica/2024/overview.html)

[KnowledgeFound.org/hackathons/SouthAfrica/2024/Stellenbosch](https://KnowledgeFound.org/hackathons/SouthAfrica/2024/Stellenbosch)

**South Africa 2024 Pretoria (Symposium and Hackathon):**

[KnowledgeFound.org/hackathons/2024-South-Africa-Pretoria.html](https://KnowledgeFound.org/hackathons/2024-South-Africa-Pretoria.html)

[KnowledgeFound.org/hackathons/AGENDAS/2024-South-Africa-Hackathon-Opening-Talks-Agenda.pdf](https://KnowledgeFound.org/hackathons/AGENDAS/2024-South-Africa-Hackathon-Opening-Talks-Agenda.pdf)

**Qatar 2023 (Symposium and Hackathon):**

[KnowledgeFound.org/hackathons/2003-Doha-Qatar.html](https://KnowledgeFound.org/hackathons/2003-Doha-Qatar.html)

**Virtual 2024 Hackathon:**

[KnowledgeFound.org/hackathons/virtual/2024](https://KnowledgeFound.org/hackathons/virtual/2024)

**Bulgaria 2025 Virtual Reality (VR) Hackathon:**

[KnowledgeFound.org/news/2025-VR-Hackathon-Winners-Announced.pdf](https://KnowledgeFound.org/news/2025-VR-Hackathon-Winners-Announced.pdf)



Gold Medal Ceremony during the United Nations [2023 Conference of the States Parties to the UN Convention against Corruption](#) (USA) for the 2023 Arab Youth Anti-Corruption Hackathon (Qatar), awarded by [Knowledge Foundation](#).



# KNOWLEDGE ACCELERATORS

[Knowledge Accelerators](#) (KAx) are locally-run non-profit Knowledge Foundation communities focused on growing and upskilling regional and local technology talent through smaller and more frequent hackathons, challenges, meetings, talks, discussions, break-out sessions, demos, workshops and webinars that revolve around advanced and emerging technologies (AI, Virtual Reality, Augmented Reality, robotics, blockchain and so forth).

Knowledge Accelerator participants receive Knowledge Tokens for attending and participating in accelerator activities.

The inaugural Knowledge Accelerator, recently held at University of Pretoria, South Africa, in conjunction with the university's Computer Science Department, provided incoming freshmen with supplementary learning activities held through a dedicated peer support group each Saturday during the semester to ensure that every incoming Computer Science student had the opportunity to succeed.

Knowledge Tokens were awarded weekly to every University of Pretoria student that participated in the Knowledge Accelerator, which were redeemable at the university cafeteria for food and drink (see [video](#) below).



Knowledge Accelerator at the University of Pretoria, South Africa ([video](#))

Subsequent Knowledge Accelerators are planned for South Africa, Saudi Arabia, Qatar, United Arab Emirates (UAE), Bulgaria, Egypt, Kenya, Nigeria, Ghana, Rwanda, Indonesia, and India.



# UNITED NATIONS CERTIFICATIONS

The [UNODC Global Programme on Cybercrime](#) was established in 2013 to assist UN Member States in their struggle against cyber-related crimes through capacity building and technical assistance. As such, the UNODC Global Programme on Cybercrime enhances the capabilities of law enforcement agencies (LEAs) and criminal justice practitioners in addressing cyber threats.

In December 2023 experts of the UNODC Global Programme on Cybercrime gathered at the UNODC headquarters in Vienna, Austria, to celebrate the Programme's 10th anniversary and draft the most frequently delivered training programs across the globe over the past decade. This initiative aimed at supporting the operations of the newly established Centre by providing a [catalogue of training programs](#) that would be provided by the Centre.

To this end the Knowledge Foundation and UNODC Global Programme on Cybercrime are collaborating on the design and development of a digital credentialing and diploma system built around the [course catalogue offerings](#) via [Knowledge Token](#)<sup>®</sup>. Key features include:

- Tamper-proof, blockchain-based digital certificates
- Encrypted learner data and identity (privacy protection)
- Verifiable by authorized 3rd parties (judges, legal teams, employers, universities, etc.)

## Optional Digital Currency Functionality

Certificates issued by the UN Global Programme on Cybercrime do not require digital currency functionality. This optional Knowledge Token<sup>®</sup> feature is therefore disabled.



Verifiable and tamper-proof UN digital certificates made possible with Knowledge Token<sup>®</sup>

# U.N. VIRTUAL REALITY TRAINING



Knowledge Foundation [2025 Virtual Reality Hackathon](#) competitors building VR learning experiences for the United Nations Global Programme on Cybercrime. All competitors received €250 in Knowledge Tokens, with the top team also winning United Nations Office on Drugs and Crime (UNODC) sponsorship to present their winning solution at the UN Convention against Cybercrime high-level conference and signing ceremony in Hanoi, Vietnam.

In addition to the digital certificates program noted above, the Knowledge Foundation is also working with the [UNODC Global Programme on Cybercrime](#) to strengthen cybersafety and cybercrime resilience worldwide using Virtual Reality (VR) training systems that build on the Knowledge Token® global education platform.

Specifically, the two organizations are collaborating on the design and development of next-generation VR learning solutions for the UNODC Global Programme on Cybercrime [catalogue of training programs](#) to visualize and enable virtual interaction with complex topics related to cybercrime, for which Knowledge Token® rewards are issued to learners who engage with the VR solutions.

The Knowledge Token® platform will also securely record and store academic records for every learner that utilizes the cybercrime VR education solutions, providing a comprehensive, verifiable and tamper-proof academic record for all learners using the system.





As an aspect of this work the Knowledge Foundation recently held the [2025 VR Hackathon](#) to advance the mission of the United Nations Global Programme on Cybercrime by inspiring the creative minds of talented creatives and developers to conceive and develop engaging, innovative, interactive and immersive virtual experiences on the topic of cybercrimes.

The event, co-organized with the United Nations Office on Drugs and Crime Regional Center for Combating Cybercrime in Doha, Qatar, CreaTech Bulgaria, the Municipality of Burgas, Bulgaria, and the Web3 Foundation, is the first of its type and is anticipated to become an annual event that brings together immersive and gaming talents of the South East European region and beyond.

Participants in the Virtual Reality competition were tasked with developing VR prototypes that showcased innovative concepts that can support the training of criminal justice practitioners with basic Information Technology (IT) skills in the understanding of technology concepts, misbehaviour or use for criminal justice purposes, as included in the UNODC Cybercrime catalogue of training programs.

All participants in the competition received €250 in Knowledge Tokens, with the top team also winning United Nations Office on Drugs and Crime (UNODC) sponsorship to present their winning solution at the [UN Convention against Cybercrime high-level conference and signing ceremony](#) in Hanoi, Vietnam.



The Knowledge Foundation recently held the [2025 VR Hackathon](#) to advance the mission of the UN Global Programme on Cybercrime by inspiring talented creatives and developers to conceive and develop engaging, innovative, interactive and immersive virtual experiences on the topic of cybercrimes.



# UNITED NATIONS AI LEARNING

The Knowledge Foundation, United Nations Office on Drugs and Crime (UNODC) Global Resource for Anti-Corruption Education and Youth Empowerment (GRACE) initiative, and DFINITY Foundation are collaborating on a multi-year development project that is focused on improving the way in which learners, educators and educational content creators acquire, distribute and generate knowledge on anti-corruption, ethics and integrity via open educational Artificial Intelligence (AI) software products, protocols and standards.

Built upon the Knowledge Token® global education platform, with a focus on AI, the 3-year project is chartered to develop [Open International Standards](#) (OIS) and corresponding open protocols and tools that advance the construction, dissemination and analysis of all forms of digital personalized education systems.

The organizations are co-developing these AI products through a series of international hackathons under the UNODC Coding4Integrity framework. These coding competitions are designed to result in the creation of digital AI-based educational products based on Open International Standards, and varied individual components of more complex education projects (such as the use of immersive Virtual Reality and 3D technology, generative AI, game-based learning, and personalized adaptive 3D learning games).

Knowledge Tokens are featured prominently in two aspects of this work: both as incentives and rewards for participants in the coding competitions, and as intellectual currency issued to learners who utilize the AI-based learning system.

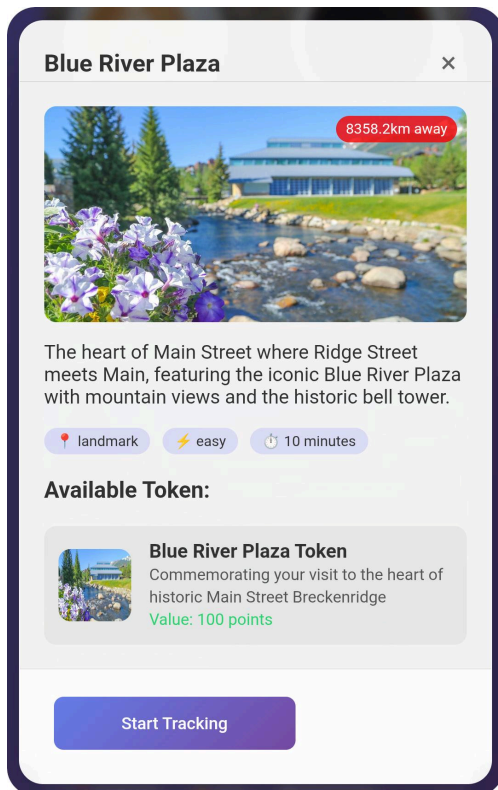


Knowledge Tokens are issued to learners who utilize a new AI-based learning system being developed for the UN, and they are also issued as intellectual currency rewards for those who participate in the corresponding international hackathons (coding competitions) through which the AI learning system is developed.



# ARTS, CULTURE & TOURISM (ACT)

The Knowledge Foundation's Arts, Culture and Tourism (ACT) mobile platform combines geolocation and target-finding with Knowledge Token® technology to enable a new class of location-based activities and events (such as "in your seat" teaching and training, scavenger hunts, point-of-interest city tours, museum tours, concerts, and conferences) for which corresponding token rewards are issued.



ACT's location-based services are based on the real-time geographic location of the end user's device (e.g., mobile phone) as determined by technologies such as GPS and Wi-Fi. The location of the user's mobile device facilitates ACT's "target finding" capabilities that guide the user to specific geographic locations, such as certain pieces of art in a museum or particular points of interest in a city or town.

Upon arriving at a specified location Knowledge Token® rewards are issued to the user. The earned tokens can then be redeemed in a predetermined manner, such as at specific restaurants, souvenir shops, or to pay for certain products or services.

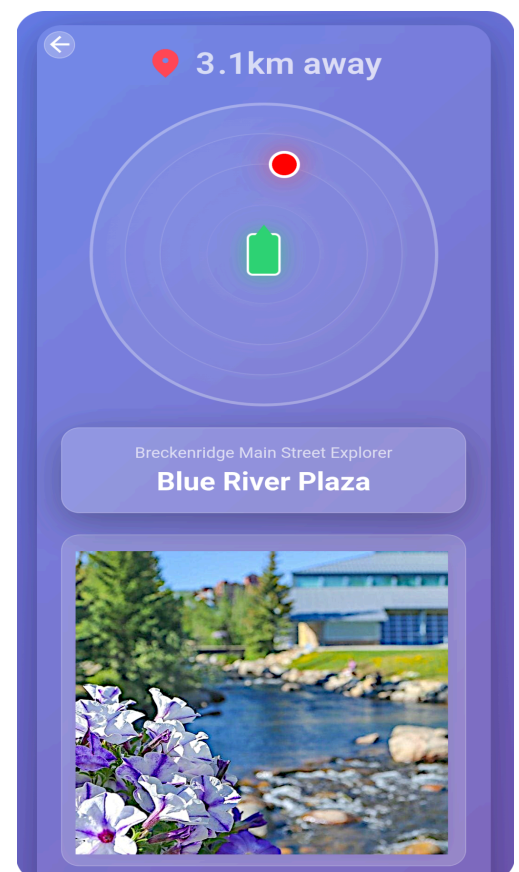
Token redemption, either in whole or in part, can be programmed to occur only through authorized parties and also at specific times or ranges of time (to encourage visits during slow or down months of the year, for example).

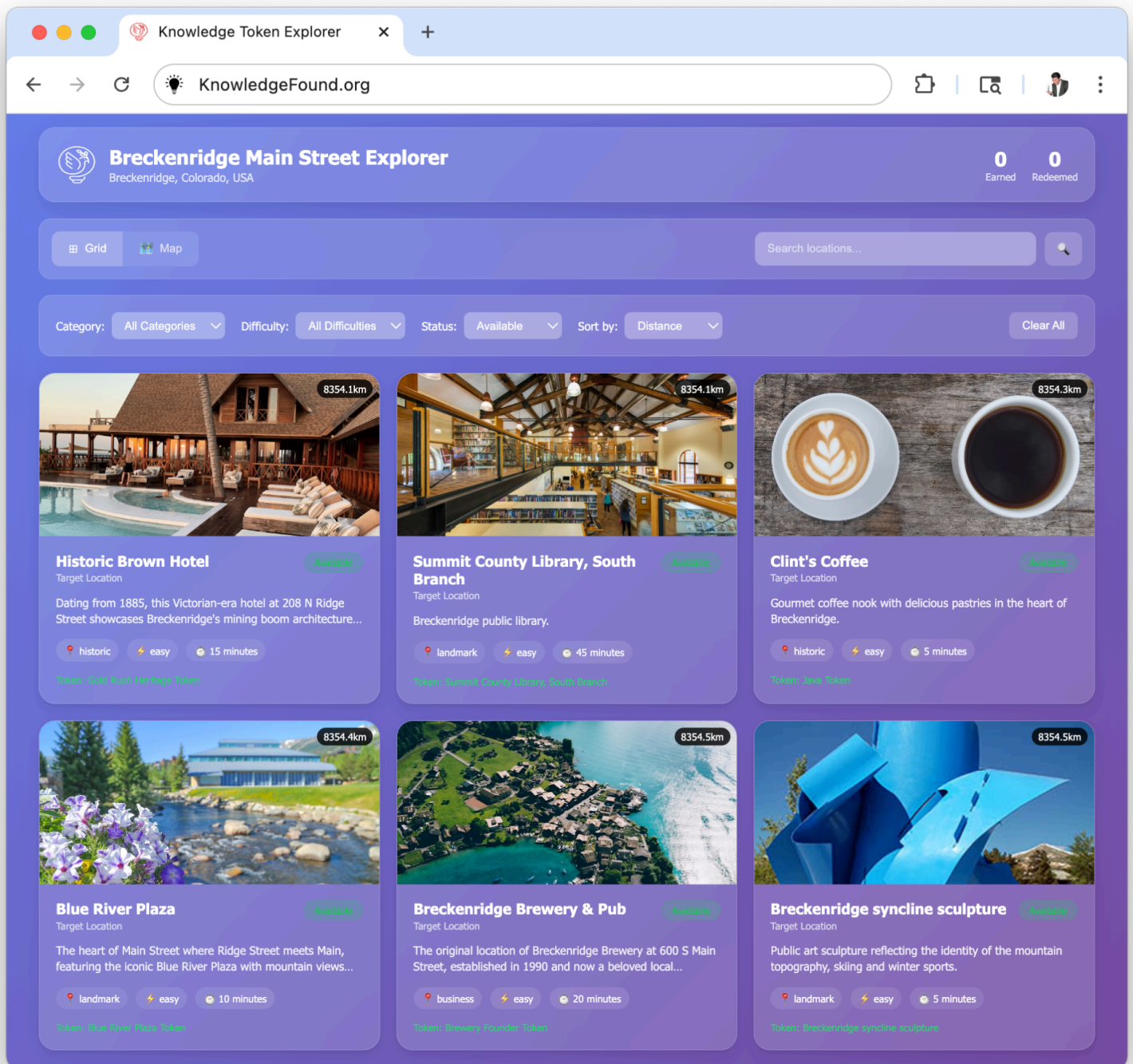
The precise time and location of every Knowledge Token® that is earned, and also when and where they are redeemed, may be recorded for the purpose of data analytics in order to unveil patterns, identify trends, and uncover insights into user behaviors and activities.

## United Nations Trafficking in Persons (TIP) Event Premier

The Knowledge Foundation ACT platform is currently under development and will be made available to the public for the very first time during the [United Nation's Trafficking in Persons \(TIP\) hackathon](#) (Mozambique, October 2025).

Participants at the UN Trafficking in Persons event will receive Knowledge Tokens through location-based proof of participation, which they can then redeem for future Knowledge Foundation and Immersive Education Initiative events and activities.





The Knowledge Foundation's Arts, Culture and Tourism (ACT) mobile platform combines geolocation and target-finding with Knowledge Token® technology to enable a new class of location-based activities and events such as "in your seat" teaching and training, scavenger hunts, point-of-interest city tours, museum tours, concerts, conferences, and so forth.





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