

# Rootstock: Bitcoin Scaling Hackathon

## Executive Summary

The project aims to address the challenge of low user engagement and lack of resources for learning about networks like Rootstock. The solution, called L2E (Learn-to-Earn), leverages mobile learning and gamification to reward users for learning about Rootstock and make complex topics approachable. The mobile app delivers short-form content, allowing users to learn on the go, and adds a social element to the learning activities. By incentivizing users through rewards and integrating with existing infrastructure like RIF Wallet and Relay, the project aims to onboard and engage numerous users while gathering valuable data.

## Project Overview

Scaling a network and creating user-centric utility is one of the biggest problems these days. Users usually do not know very much about a network they are interacting with, and the user engagement is therefore fairly low. This is due to an absence of resources to learn more about how e.g. Rootstock works and how they can interact and profit from it. We are solving this issue with our L2E (Learn-to-Earn) model, where we allow users to be rewarded for learning about Rootstock and make complex topics approachable for everyone. By presenting short form content on our mobile app, we allow the community to learn on the go and get them engaged, while also adding a social element to the learning activities. With our solution, we are able to onboard and engage a lot of users, as well as keeping them.

## Background & Context

Mobile learning is the future. In addition to the rapid increase in mobile devices, especially in developing countries, more and more people have access to the internet and the corresponding possibilities. The mobile learning market is growing by almost 30% per year and will continue to do so in the medium term. Companies such as Coinbase and Metamask have also recognised this opportunity and offer an L2E model for users, whereby users acquire knowledge about a coin through videos and texts in order to subsequently receive a monetary reward.

Such models solve the problem of bringing users to the platform and achieving long-term adoption. We are trying to improve these already existing models and to develop a L2E model within the framework of this hackathon, which binds users in the long term, sustainably and efficiently. One-off rewards and interactions are not enough here, and we also focus on mobile development, with experience to show for it.

## Value Proposition

Studies like "Stieglitz (2015) - Gamification - Vorgehen und Anwendung" show that interactive gamification and tokenisation can play a crucial role in connection with education. Interactive gamification describes the process of implementing typical gaming technique into educational content, such as rewards to winners or successfully solved challenges. With tokenisation, you can then introduce a native token to the system to make learning more fun and motivate them to collect the tokens. Paired with a mobile device, most of the people these days can then access mobile education apps that encourage them to learn on the go while also being rewarded in our model. The key benefits are the higher engagement rate with the learning material, the possibility to learn on the go, the branding process which is initiated, as well as the possibility

to gather data about users and use this data to let them engage in the ecosystem even more. It is better than already existing solutions, as it provides way more incentives for the users to be onboarded and engaged.

## **Technical Description**

The following steps are taken to achieve our goal:

- Research and analysis and project lead
- Set up server-side infrastructure and GUI
- UI & UX frontend design to match Rootstock
- Frontend development functionalities and design
- Integration of frontend with backend
- User acceptance testing and bug fixes
- Content creation

Both the RIF Wallet and the Relay can be integrated into our application. This allows for a more seamless user experience when it comes to the payout of the learning reward. This further improves the learning journey of the users and thus keeps them engaged with the content. Using relay account abstraction will make the onboarding smoother and is more intuitive, especially for beginners.

## **Market Analysis**

The global mobile learning market grew from \$53.94 billion in 2022 to \$69.33 billion in 2023 at a compound annual growth rate (CAGR) of 28.5%. The mobile learning market includes revenues earned by entities by providing enhanced learning engagement and uptake while lowering the cost of learning programs. The market value includes the value of related goods sold by the service provider or included within the service offering. It is expected to grow to \$199.06 billion in 2027 at a similar growth rate like mentioned before (<https://www.reportlinker.com/p06319496/Mobile-Learning-Global-Market-Report.html>).

Our solution addresses a large market as it can be implemented with a system like Rootstock while also providing the possibility to integrate different projects from Rootstock and therefore promote a vibrant ecosystem. As we're already working on a solution, similar to the one we're presenting here, and have got first applications such as yzer.io, we have a first mover advantage when it comes to the market. We can furthermore deeply customise our solution and implement a mobile solution, so that we differentiate from simple solutions and implementations such as Coinbase Earn, Metamask Learn or other L2E approaches.

## **Project Plan**

We first develop and customise the application, so that it perfectly fits the current needs of Rootstock. We afterwards integrate with a suited payment partner and mobile app stores. Beside the development process, as described above, we last but not the least focus on the content creation. This step includes among others the setup of learning modules, questions, levels and social parts of the app.

## **Team & Resources**

Our team consists of Renato, leading the project, as well as coordinating the effort with having a good understanding of the underlying processes. Yann, as our frontend developer, already received multiple grants with his frontend libraries. Joao, a blockchain engineer, already completed multiple Learn-to-Earn systems on different chains, while Itamar constructed the backend on different chains and projects as well. Richie acts as the lead frontend developer at the previously mentioned L2E app Yzer. We require resources regarding our development, with AWS being one of them. Besides that, we need to rely on a payment provider to pay out rewards to the users. As we plan our solution to be mobile-friendly, we lastly require the mobile stores to approve our app(s).

## **Conclusion**

The project proposes a novel solution, L2E (Learn-to-Earn), to address the challenges of user engagement and knowledge acquisition in the context of Rootstock and similar networks. By leveraging mobile learning, gamification, and tokenization, the project offers a user-centric approach that incentivizes learning and rewards users for their participation. The integration with existing infrastructure like RIF Wallet and Relay enhances the user experience and streamlines the reward payout process. The project's focus on mobile development aligns with the growing mobile learning market, which presents significant opportunities for adoption and scalability. With a strong team and first-mover advantage, the project is well-positioned to tap into this market and differentiate itself from existing solutions. By providing a comprehensive plan encompassing development, integration, and content creation, the project demonstrates a clear roadmap for success. With its potential to onboard and engage a large user base while promoting a vibrant ecosystem, the L2E project presents a compelling opportunity for the future of user-centric utility and education within the Rootstock network.