Credit Scoring & Lending Product Requirements

Emurgo Labs

1. Introduction

This project is to calculate the credit scoring for user in our system, using both onchain and offchain data.

After that, the scoring will be used in other systems, for example: to borrow money from Lending contract, etc.

Total score = base score + lending score

Base score will be recalculated at the beginning of each month based on onchain and offchain data.

Lending score will be recalculated based on lending history.

1. Introduction

In Lending contract, operator will create lending packages (also define lending fee).

User can borrow a lending package that suitable with their score, lending fee will be sent directly to operator address.

Then user need to pay back before borrowing another package, and lending score will be recalculated based on lending history.

Operator will claim back old (expired) lending package, and create new ones.

2. Plutus Smart Contracts

Based on these requirements, there will be three plutus smart contracts in the system, including:

- 1. MintScoringToken Contract: this contract is to mint a new Scoring Token for user based on onchain and offchain data.
- 2. ManageScoringToken Contract: this contract is to manage the Scoring Token's flow and data when the operator update new base score or when user borrow/payback a lending package.
- 3. Lending Contract: this contract is to manage lending packages.

3. Architecture

Our own cardano-graphol node

