Decentralized Data Feeds using UMA

Abstract

This document describes a grant request for the creation of a practical tutorial that teaches how to design and implement decentralized data feeds using UMA.

This proposal is inspired by the initial design of [John Shutt.](#)

Learning Objective

Readers will learn:

- How a decentralized data feed oracle could be built using UMA
- The different types of applications that can be built with this architecture
- How to design permissionless smart contracts that use economic incentives in order to work
- Step by step tutorial on how to create a decentralized data feed oracle using UMA

Description

The educational material will include the following:

- Architecture and smart contract design of a decentralized data oracle using UMA
- Step by step guide on how to create decentralized data oracle using UMA in Solidity

Acceptance Criteria

The smart contract design should cover:

- A general design that can support multiple decentralized data feeds
- Dispute and resolution mechanisms using UMA
- Economic incentives for honest actors
- Staking mechanisms to secure the decentralized data feed
- Slashing mechanism for bad actors

Other considerations

- The article should be reviewed and approved by the community
- Sample source code for learners
- Support for the integration of the tutorial into the official UMA Docs

Amount requested

$10,000 in UMA tokens

Milestones

1. $1,500 in UMA tokens to begin work (1500/1.70 = 882.35 $UMA).
2. $8,500 in UMA for deliverables listed (8500/1.7 = 5000 $UMA).