



# Melon Reporting & Auditing

Expert Presentation

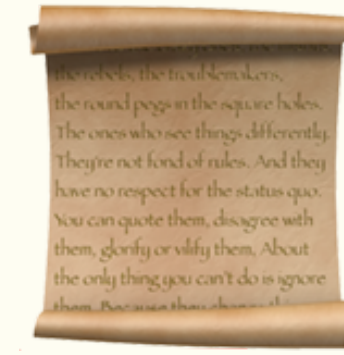
18th May 2018

# Contents

1. Status Quo
2. The Future
3. Blockchain Basics
4. Melon Smart Contracts
5. Requirements
6. System Architecture
7. Mockup
8. Next steps

Status Quo

**Investor**



**Prospectus**



**Bank / Custodian**



**Asset**

**Manager**



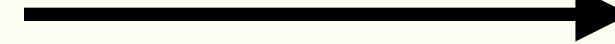
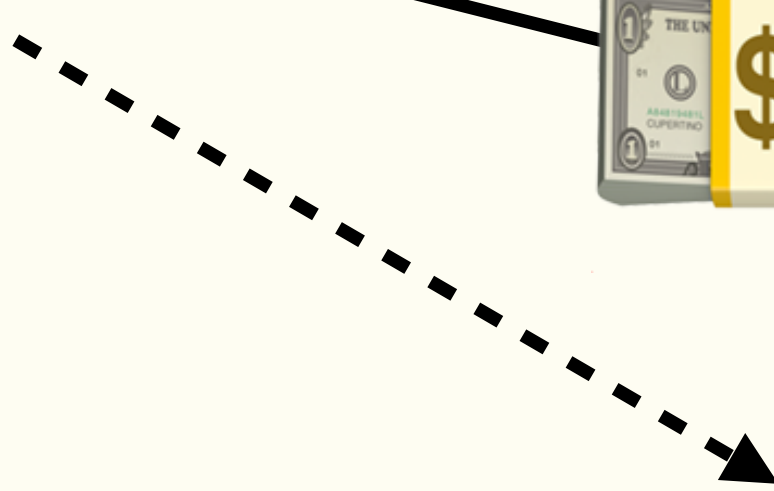
**Administrator**



**Auditor**



**Regulator**



The Future

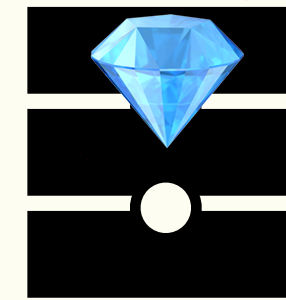
**Investor**



**Regulator**



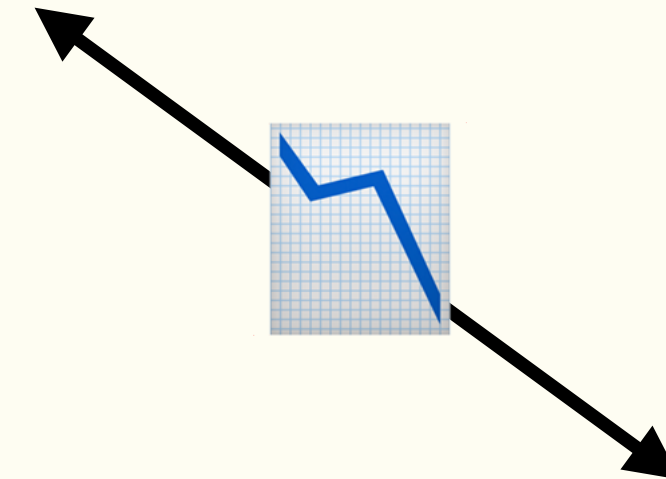
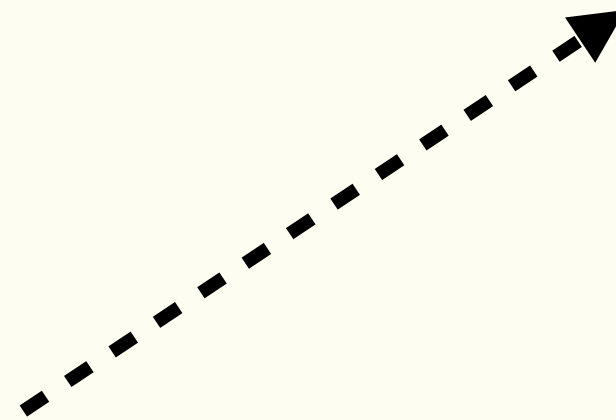
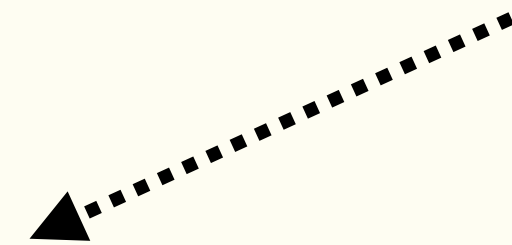
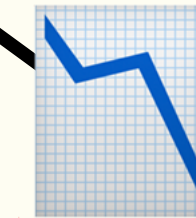
**Blockchain**



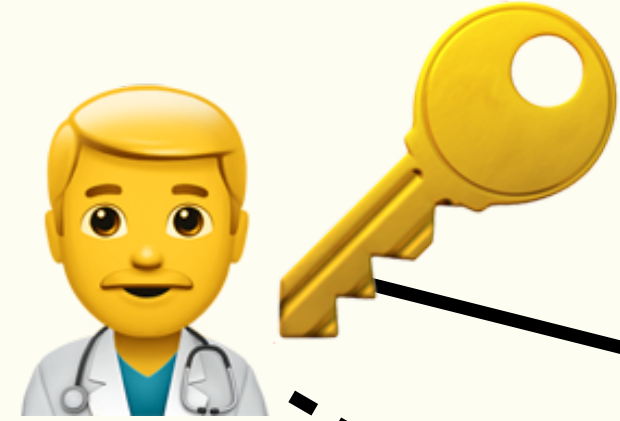
**Manager**



**Auditor**



**Investor**



**Prospectus**



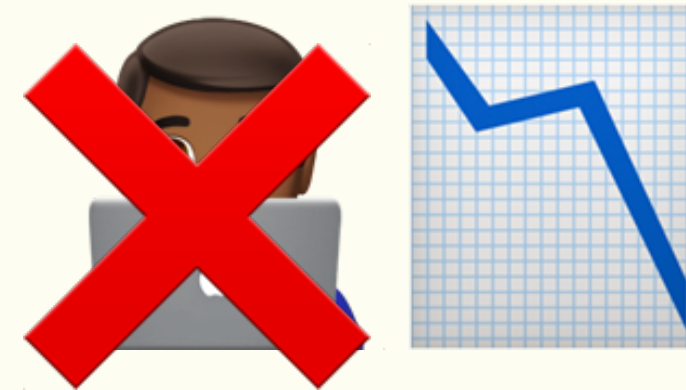
**Bank / Custodian**



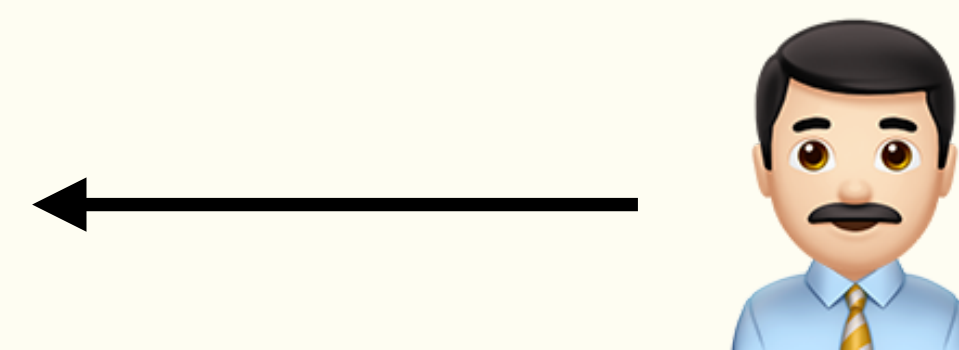
**Asset**



**Manager**



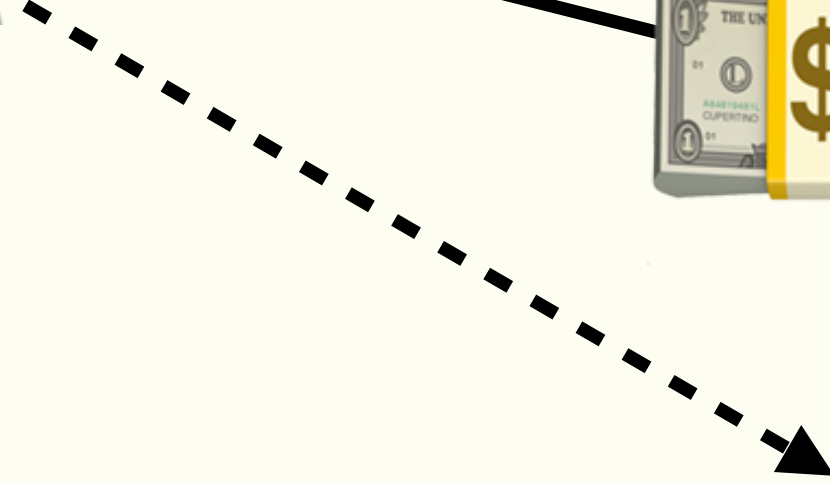
**Administrator**



**Auditor**



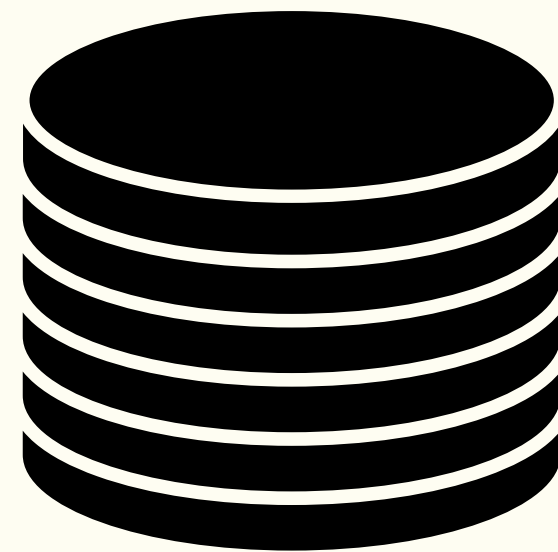
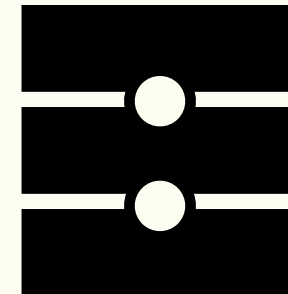
**Regulator**



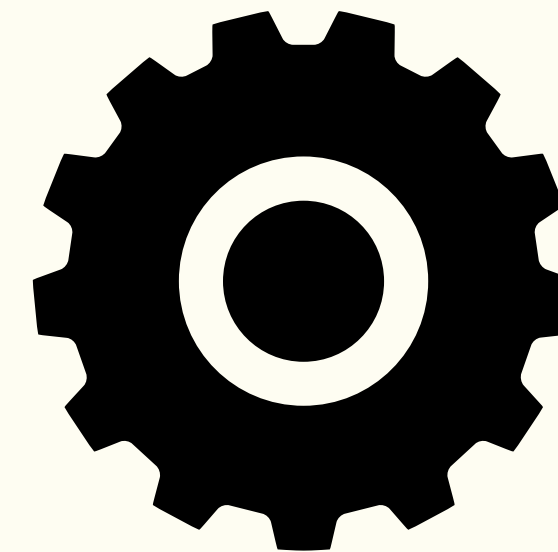
# Blockchain Basics



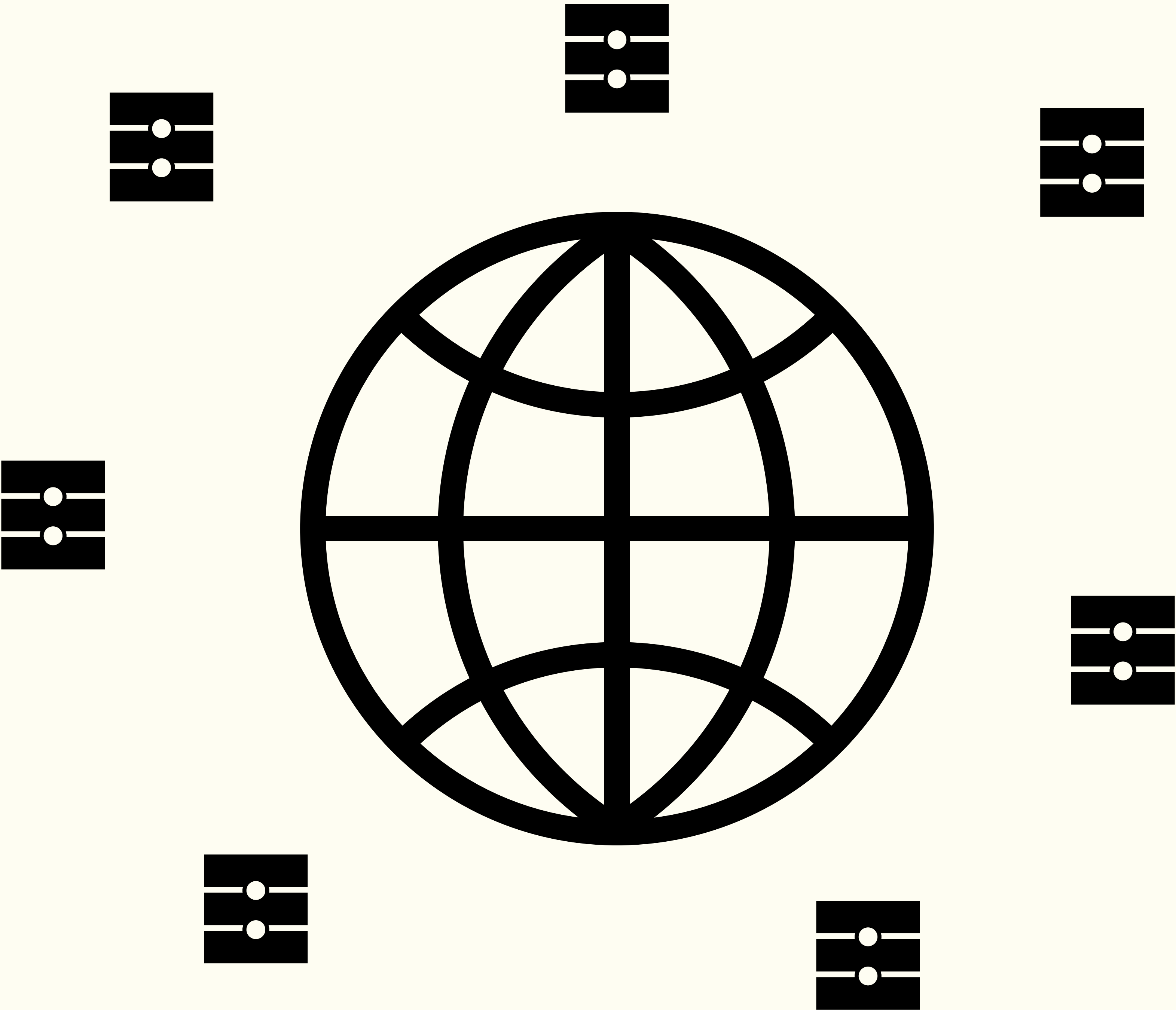
# Smart Contract

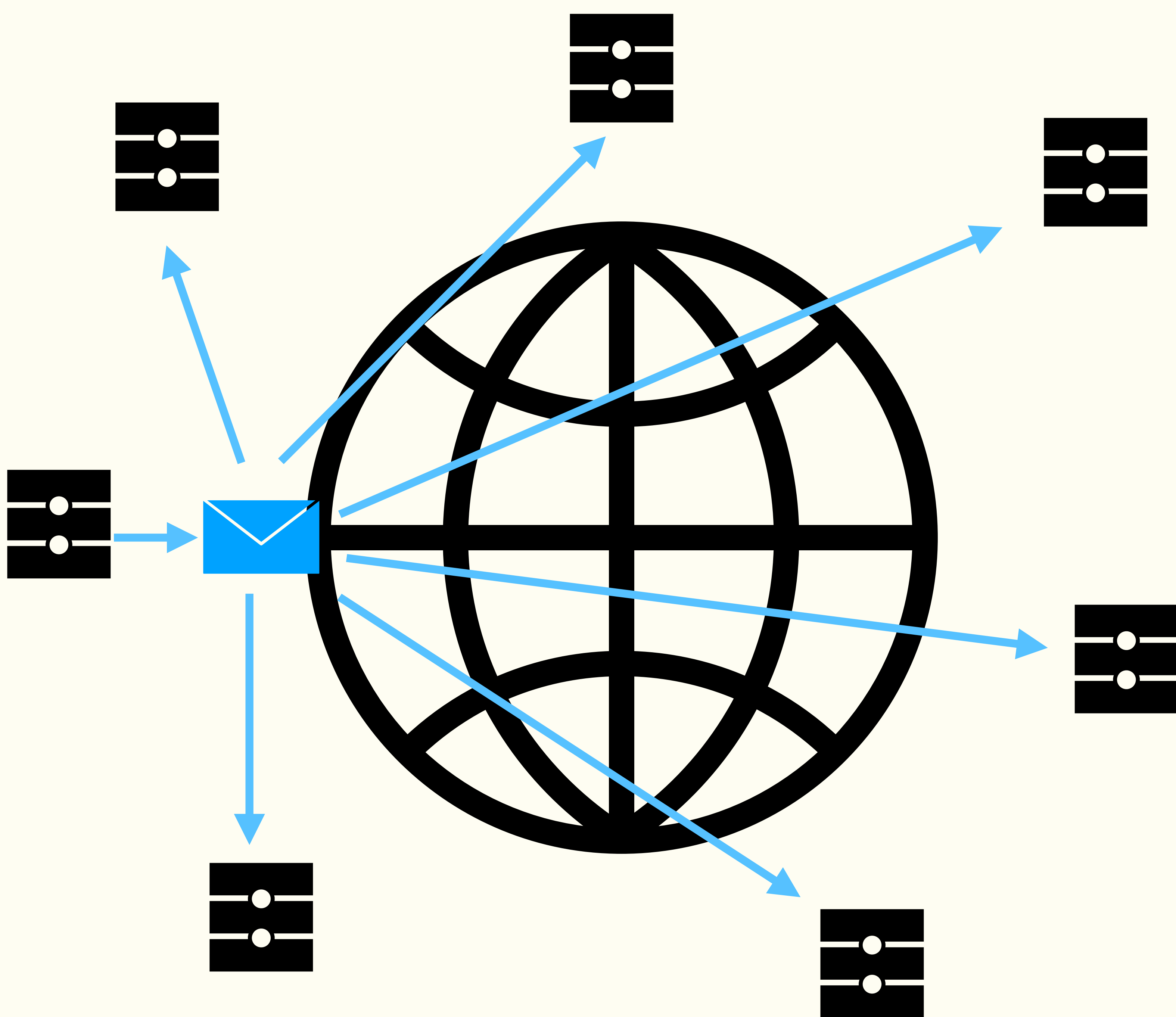


**Data**

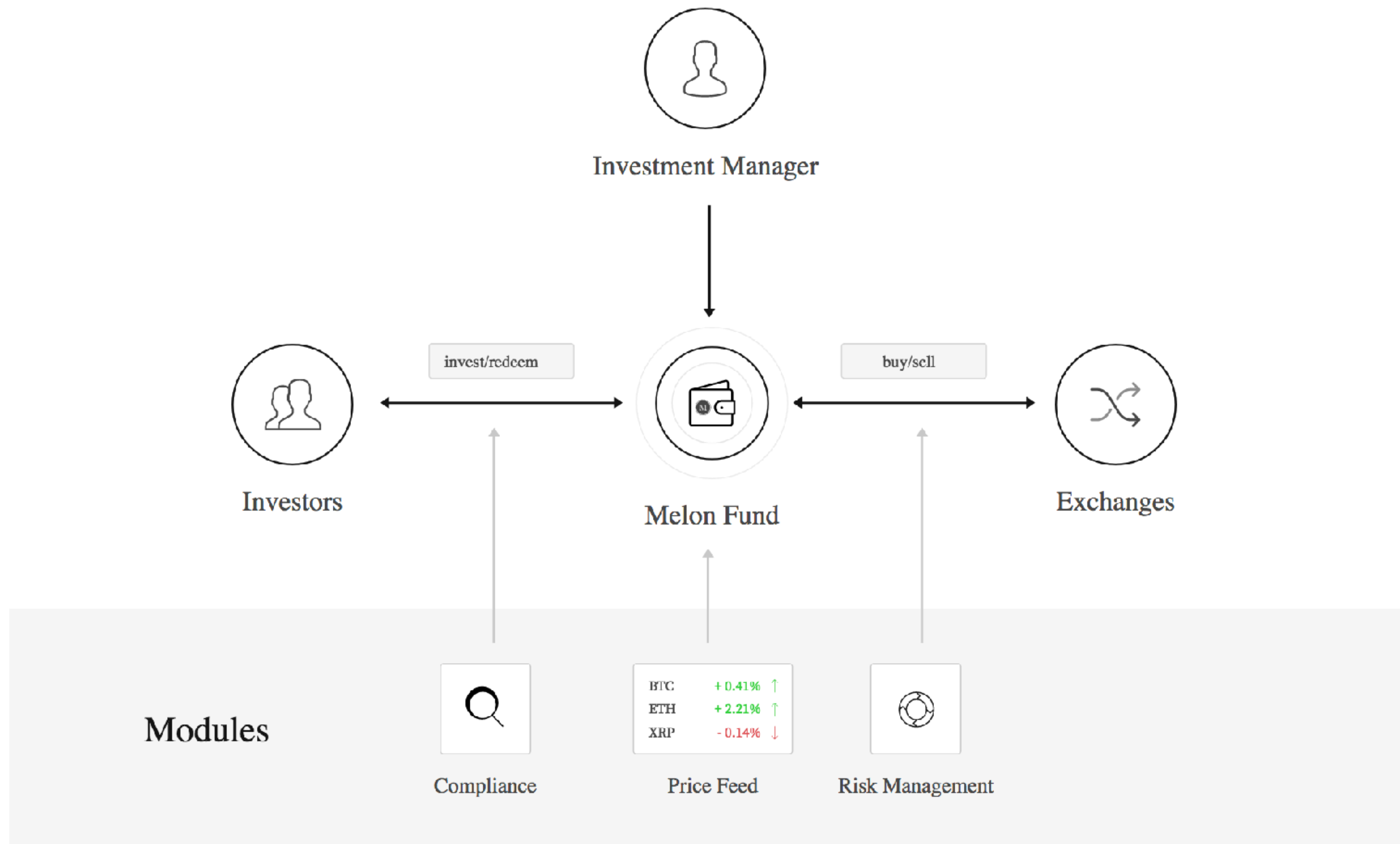


**Rules**

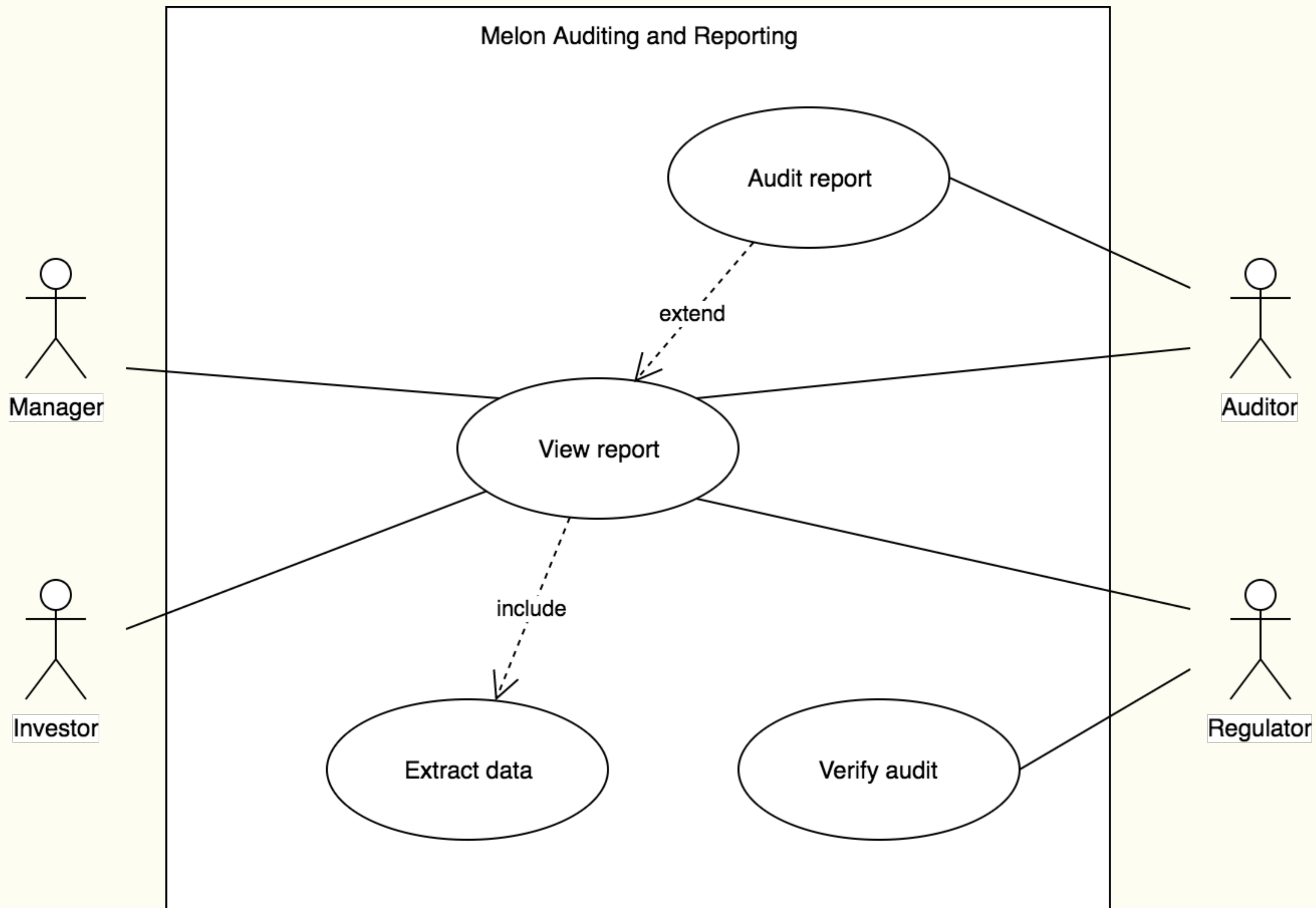




# Melon Smart Contracts

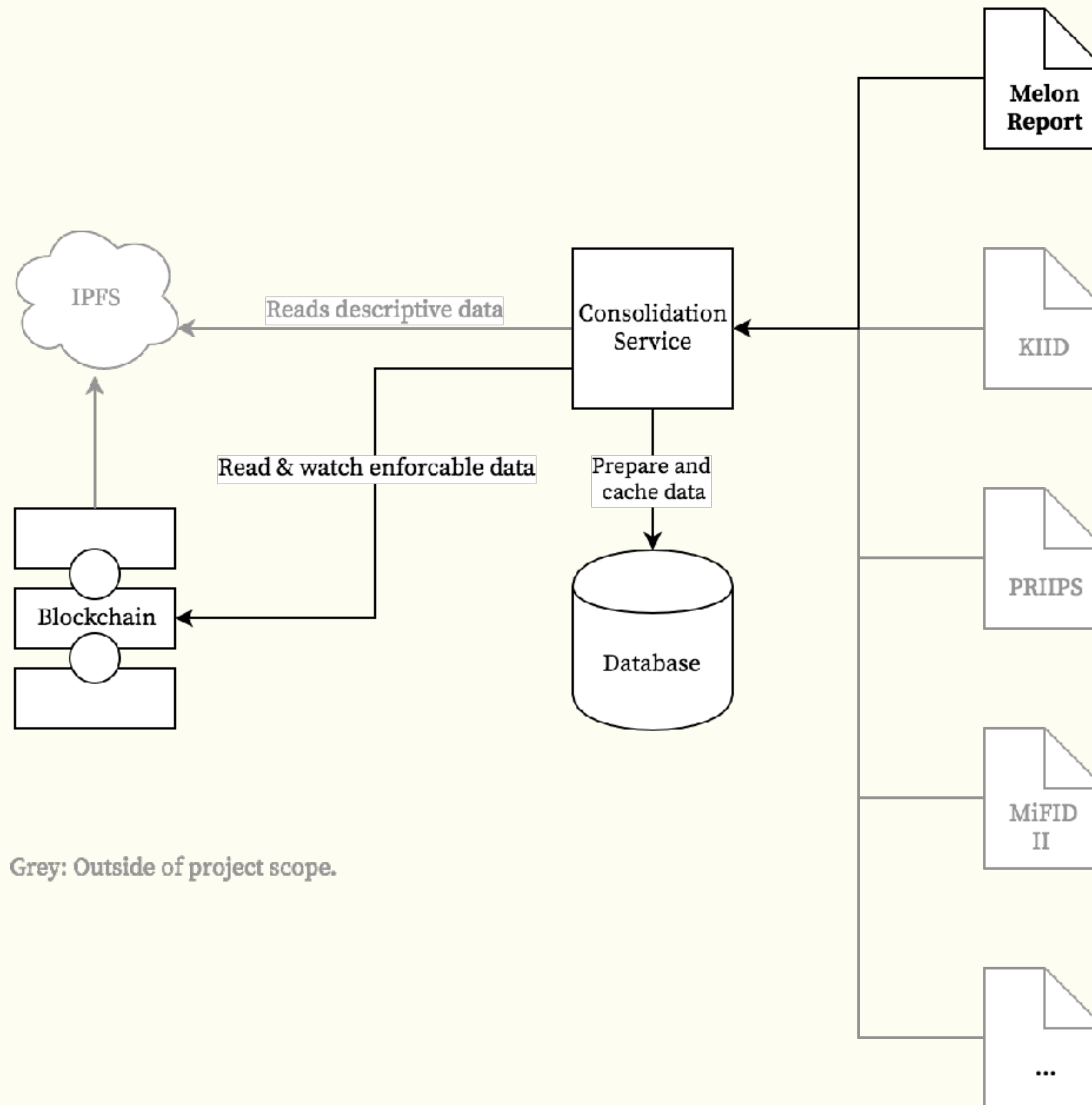


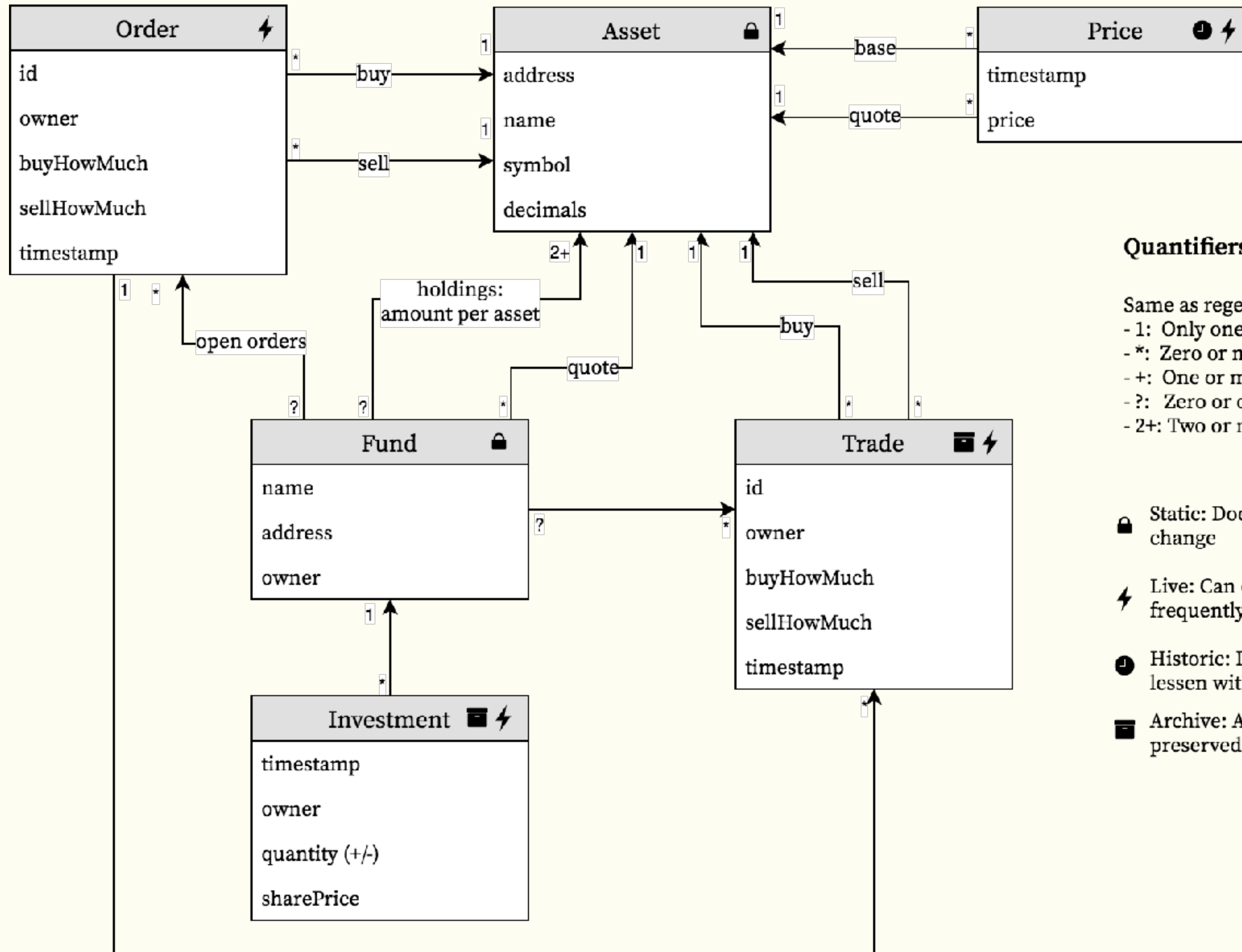
# Requirements



# System Architecture







## Quantifiers

Same as regex:

- 1: Only one
- \*: Zero or more
- +: One or more
- ?: Zero or one
- 2+: Two or more

🔒 Static: Does not change

⚡ Live: Can change frequently

🕒 Historic: Information density can lessen with age. Entries do not change.

📁 Archive: All entries preserved and static.

general | REINVENT FINANCE

hackathon-resources.md

Melonport - Asset Management

Fund Report Data Schema · Git

← → ↺

https://melon-reporting.now.sh/01-thesis/05-solution/04-FundReportDataSchema.html

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Boundaries

Method

Document Organisation

Background

Current State of Fund Reporting

Analysis

Use Cases

Data Classification

On-Chain Data

Off-Chain Data

Solution

System Overview

Software Architecture

Screen/Paper Design

Fund Report Data Schema

Melon Auditing Contract Standard

Auditing Contract

Conclusion

Findings

Future work

Reflection

APPENDICES

Schema "Fund Report"

```
// TODO:
// add descriptions where useful
// $id when schema place is fixed --> link to schema on github
// some bigNumbers might just be normal javascript numbers
{
  "$schema": "http://json-schema.org/draft-07/schema#",
  "title": "Fund Report",
  "$version": "0.1",
  "description": "Fund data to generate a report from and create a hash for auditing.",
  "type": "object",
  "definitions": {
    "nonNegativeInteger": {
      "type": "integer",
      "minimum": 0
    },
    "ethereumAddress": {
      "type": "string",
      "pattern": "^0x(\\d|[A-F]|[a-f]){40}$"
    },
    "erc20TokenSymbol": {
      "type": "string",
      "pattern": "^[A-Z]{1,9}$"
    },
    "bigNumber": {
      "type": "string",
      "pattern": "^\\d*\\.\\d*$"
    }
  }
}
```

#

\* general | REINVENT FINANCE

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hackathon-resources.md

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Melonport - Asset Management

×

Melon Auditing Contract Stand

×

MIP1 Auditing · Issue #1 · melon

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↻

GitHub, Inc. (US)

https://github.com/melonproject/MIP/issues/1

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This repository

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Pull requests

Issues

Marketplace

Explore

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👁 Watch

4

★ Star

0

🍴 Fork

0

<> Code

🔔 Issues 1

🔗 Pull requests 0

📁 Projects 0

📖 Wiki

📊 Insights

MIP1 Auditing #1

New issue

🔔 Open

benzumbrunn opened this issue 20 days ago · 0 comments

benzumbrunn commented 20 days ago

+😊💬

MIP: 1  
Title: Auditing  
Authors: Benjamin Zumbrunn, benzumbrunn@gmail.com; Simon Emanuel Schmid, simon@schmid.io  
Status: Draft  
Type: MIP  
Created: 2018-04-24  
Reference implementation: https://github.com/melonproject/reporting-thesis/blob/master/pack

Abstract

This MIP describes standard functions an auditing contract must implement in order to be compatible as a Melon Auditing module.

Background

The auditing process goes like this:

- A clearly defined algorithm can extract on-chain and off-chain data (I.e. meta data on IPFS) from a fund into a well defined format for a specified timespan.

```
generateData(fundAddress, timespanStart, timespanEnd): FundReportJSON
```

◦ Invariant: A call to `generateData` with the same arguments should always return the same

Assignees

No one assigned

Labels

None yet

Projects

None yet

Milestone

No milestone

Notifications

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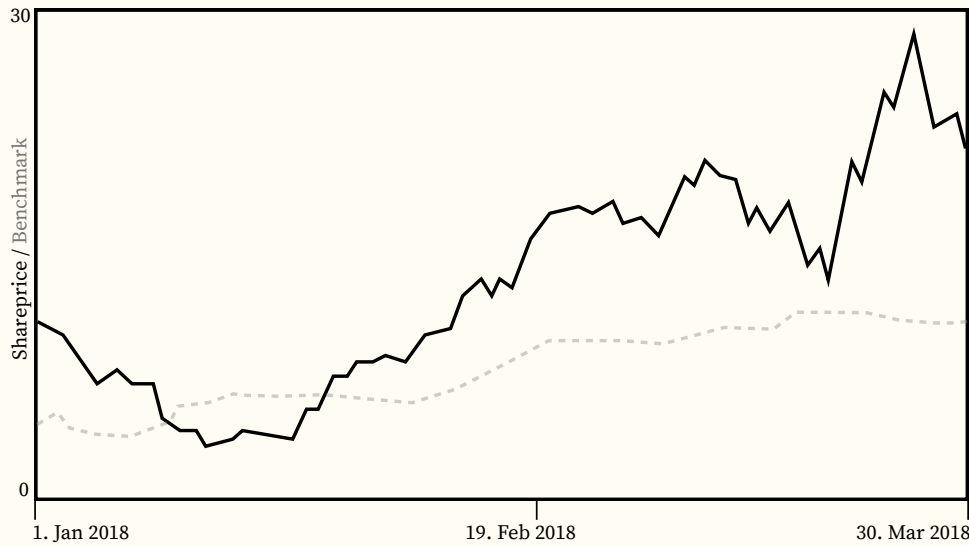
1 participant

Mockup



# Melon Crypto Capital

Report from 1. Jan 2018 to 31. Mar 2018



Address (ID): 0x44741EAcA12736bc9ADcF92FEED25ad46b4c1fD8

Report Span (UTC): 2018-01-01 00:00:00 - 2018-03-31 23:59:59

Inception: 23. Jun 2017

Quote Token: DAI

Manager: Jenna Blackturtle

0xAeEc31C192CcC234B1fB3b6E0346278A6343218F

Exchanges: Radar Relay, ERC Dex, Dexy, OasisDex

Legal Entity: Melon Crypto Capital AG

Herrengasse 18

FL-9490 Vaduz

Liechtenstein

## Strategy

Melon Crypto Capital focuses on the most promising crypto tokens in Global world-class webservices channels relationships, ROI rss-capable, deliverables paradigms tagclouds visionary distributed; magnetic syndicate revolutionary evolve e-markets, design networks killer, next-generation. Killer back-end engage transition blogging robust beta-test iterate bandwidth, channels, "user-centric; incentivize web-enabled expedite, tag target," podcasts integrated rich-clientAPIs; platforms.

Share Price (DAI/Share): 23.124

Total Number of Shares: × 53.235

Assets Under Management (DAI): 1 231.037

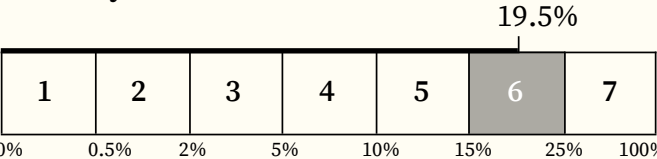
Management Fee: 2%

Performance Fee: 20%

Sharpe Ratio: 1.2

Alpha: 13.5%

Volatility / Risk Indicator:



## Policy

### Portfolio

Max Positions: 100

Best Price Tolerance: 5%

Max Trades: 50 per month

Max Volume (DAI): 10 000.000

Volatility Threshold: 25%

### Tokens

Whitelist: MLN, ETH, DAI, MKR, ANT, ZRX, BAT, DGX, GNO, OMG, JNT, REP, REQ, KNC, NET

Liquidity: 10 days

Market Cap Range: 10 000 000 - ∞

Volatility Threshold: 35%

### Participation

Investment Fee: 0%

Redeem Fee: 0%

Compliance Module: Bitcoin Suisse KYC

Next Steps

Week		2018																2019																																											
		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37																														
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Workforce																																																													
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Benjamin	360	10	10	10	10	8	8	8	8	8	40	8	8	8	8	8	8	8	16	16	0	8	24	24	24	32	32		6	2																															
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Rough Planning																																																													
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Strategy																																																													
Research																																																													
Prototype																																																													
Evaluate																																																													
Design																																																													
Production																																																													
Review																																																													
Iteration																																																													
Milestones																																																													
17.4.2018	Prototype & goals specified (Coach meeting)											■																																																	
3.5.2018	Prototype presentation (Meeting in Zug)																					■																																							
12.6.2018	Final specification (Coach meeting in Brugg)																															■																													
5.7.2018	Presentation of results second iteration (Meeting in Zug)																															■																													
6.8.2018	Presentation of release candidate (Meeting in Zug)																																									■																			
16.8.2018	Final submission																																									■																			



# Questions