kintsugi

MERCURY DEX

Prepared for

Juno Network - RFP1

From

Kintsugi Technologies Pte. Ltd.

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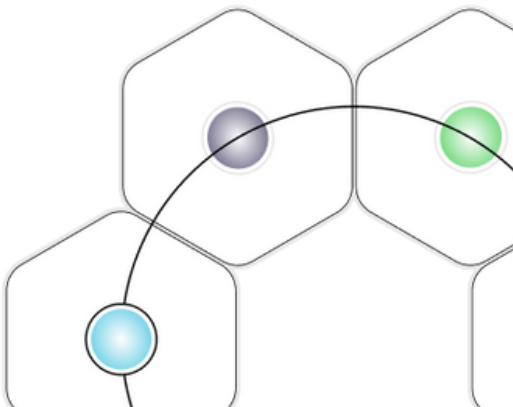
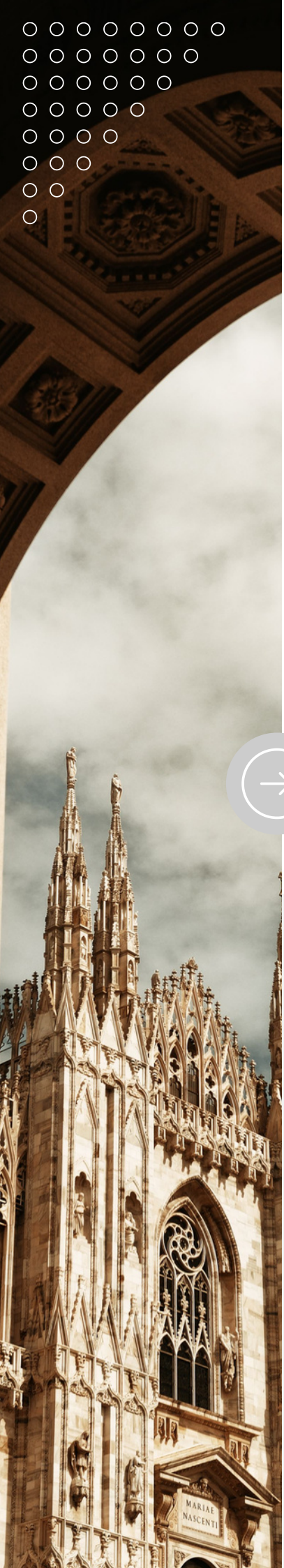
059192 Singapore





Who We Are

Established in 2022 in Milan, Made in Block emerged as a pioneering Italian company with a focus on blockchain validation. In 2023, after a strategic rebranding, we partnered with Kintsugi Technologies, aligning with their mission to enhance and expand blockchain technology globally through localized validators and influencers. We are dedicated to advancing the Web3 space by developing cool and innovative decentralized applications (dApps), contributing to the evolution and adoption of blockchain technology.

2022

Founded

15+

SmartContracts

50+

Contributions to existing Blockchains

10+

Active Validators

TEAM

Daniel Hwang

Head of Protocol

Dimi

Blockchain Engineer

Stefano Annovi

Operations

Niil Petruccioli

Blockchain Developer

Ivan Zaccaron

Head of Infrastructure

Portfolio

Our public projects

Slash Refund Module

Cosmos-SDK module to handle refunds of Validator Double Sign and Downtime slashing.

https://github.com/kintsugi-tech/slash-refund

Cosmos SDK

Namada Extended Nebb

We contributed to the namada Shielded Expedition by building a UI that connects to an onchain indexer to show players rankings and transactions.

https://github.com/kintsugi-tech/extended-nebb
https://github.com/kintsugi-tech/namadexer

Next JS

Rust

Cosmos Governance Slack Bot

Slack Bot to handle governance proposal scraping and voting.

https://github.com/kintsugi-tech/governance-backend

TypeScript

CW-Starter

CosmWasm Template to build smart contracts.

https://github.com/kintsugi-tech/cw-starter

CosmWasm

Dynamic NFTs

Dynamic NFTs (dynNFTs) are a unique type of tokens that bridge the gap between classic NFTs and badges.

https://github.com/kintsugi-tech/dyn-nft

CosmWasm HaskWasm 2023 Winner

CW-Drip

CosmWasm implementation of the now onchain module x/drip.

https://github.com/kintsugi-tech/cw-drip

CosmWasm

Non-Fungible-Stories

Give life to your NFTs by creating stories with them as main characters!

Currently in development and closed source. Feel free to contact us if you want a sneak peek!

https://github.com/kintsugi-tech/nfs
https://github.com/kintsugi-tech/nfs-ui

CosmWasm NextJS Coming Soon

Achievments

In recent years Made in Block & Kintsugi has achieved several goals by actively contributing to the Cosmos ecosystem.

Top 10 Interchain delegations program

For two consecutive years, we ranked between top 10 validators in the Interchain Foundation delegation program, thanks to our public goods contributions.

Winners of HackWasm Berlin

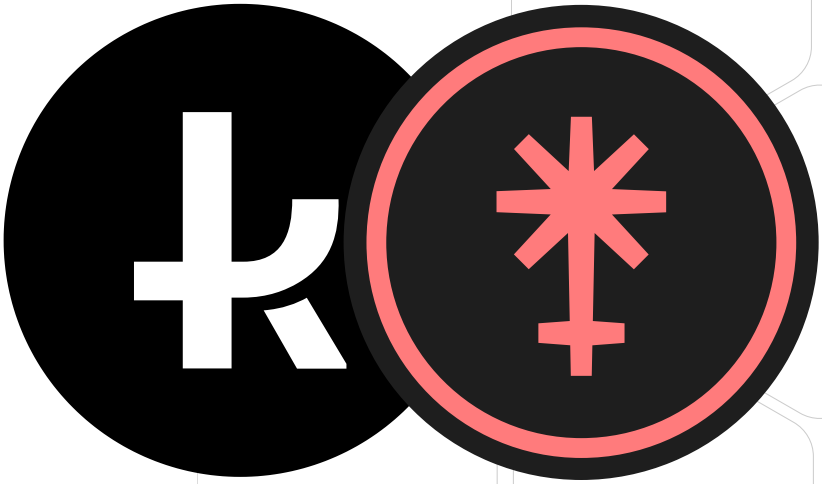
Our team won the first prize of Hackwasm Berlin 2023 sponsored by Aura Network, with the Dynamic NFTs project.

Climate & Public Goods

We've helped establish the blockchain-climate sector through our creation and participation

- Working Groups (BICOWG)
- Nonprofits (BxC)
- UN COP

MERCURY DEX



When we discovered the RFP 1 for the creation of a Community-Owned DEX on the Juno Network, we instantly recognized the immense potential it presented. This is an ideal opportunity to both prove our development capabilities and at the same time contribute to one of our favored networks. Aware of the limited budget Juno operates with, we have carefully tailored our technology decisions to prioritize cost-efficiency.

TECH CHOICES

Smart Contracts

After analyzing various existing CosmWasm DEX projects, we discovered that Astroport already offers most of the features requested by the Juno Community in RFP1. Additionally, their code has been audited and is live on many chains. Therefore, we believe a lightweight fork of it might be the best option to contain costs while ensuring security and code quality.

- **Supported Pools**: Astroport supports 3 types of Pools: Constant, Stable, and Concentrated Liquidity. While the effort to adapt these contracts is not huge, designing a UI that implements different pool types in a simple and clean way would raise costs too much, therefore initially only the classic constant pool will be implemented.

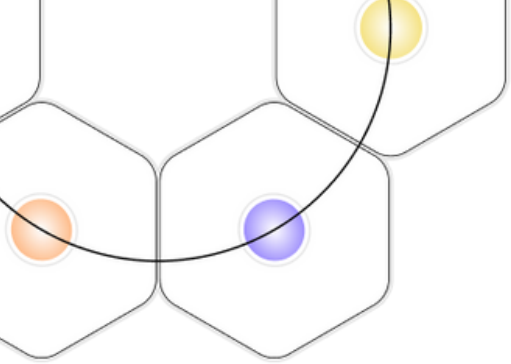
- **Swap Fees**: Astroport natively supports the ability to update swap fees via governance, we only need to update from DAO governance to Onchain Governance.

- **Fee Distribution**: There is no ability to split gas fees across multiple wallets, however, it is possible to add this functionality, here some possible implementations:
  - Send fees to a custom split smart contract that will handle the fee distribution.
  - Send fees to a Juno Subdao that then will handle redistribution manually.

- **Incentivisation:** Astroport supports incentivisation of pools by default.

- **Tokenless**: Astroport governance is managed by its native token, however it is possible to remove the token and allow Juno's stakeholders to manage Mercury Dex.

- **Skip**
  - *MEV:* We'll collaborate with the Skip team to ensure our dex is added to the fair MEV mechanism already supported on Juno Chain.
  - *Dex Aggregation*: We'll collaborate with the Skip team to ensure our dex will be added to the aggregation UIs like ibc.fun.
  - *Bridge:* Skip API will be used to allow deposit / withdrawal of assets on Mercury Dex.



Web UI

Even though the JunoSwap UI has been well-received by the majority of the community, its code is outdated and requires a major rewrite to support the new smart contracts. We have estimated that the effort required to update it is very similar to building from scratch.

We believe the best option is to reuse the open-source Juno UI Components provided by DesignDAO in the Juno-Website repository, while adapting them to build a Juno-branded dashboard-like UI.

To develop the frontend, we will use the latest, most innovative libraries and UI frameworks, such as:

- **NextJS**
- **shadcn/ui**
- **CosmJS / Quirks**

These libraries will allow us to focus on user experience, fast development, easy maintenance, and accessibility, without neglecting the very important notifications and disclaimers around the UI to ensure users are always aware of their actions and what is happening on-chain behind the scenes.

SPENDING OVERVIEW

Budget

While drafting this proposal, we prioritized cost-effectiveness in every decision. The majority of the work will be conducted internally by our developers, with assistance from contractors who have experience in UI design and have previously worked with us. The smart contracts are already audited, but our modifications may require a re-audit of some parts. We cannot include this in the proposal, and it will be up to the Juno Community to decide if they wish to hire someone for this task. The total expenditure we propose has been minimized as much as possible, with very slim margins to cover our additional operational costs.

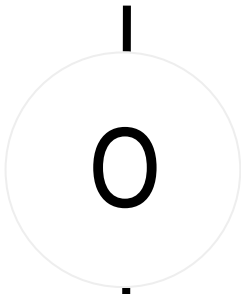
SKIP

While we will do our utmost to collaborate with the Skip Team to incorporate all the features outlined in RFP1, it's uncertain if there will be additional costs involved.

According to their documentation, some required features are definitely free to use, but we are unsure whether they might ask for additional charges for more advanced developments.

Should that occur, the project will initially be delivered without the advanced features. It will then be up to the Juno Community to decide whether the extra expenditure for these features is worth it.

Timeline

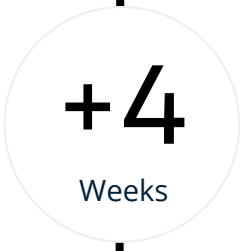


Project Kickstart

Submission of our proposal and acceptance from Juno DAO

MVP

Publish of an MVP UI + basic smart contracts. First iteration of feedbacks.

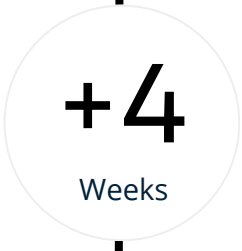


More features

Extend UI with all the requested features, such as incentives. Implements feedbacks from the phase before. Second iteration of feedbacks.

Testing

UI Refinements, release of the dahboard to a small group of testers.



Final Release

Deployment of the contract and UI for the final release to the broader community.

Our best quote

Total Project Cost

The total cost for the completion of the project is **USD 45,000**

Payment Schedule

- Initial Payment: Upon acceptance of this proposal, 50% of the total cost (**USD 22,500**) will be payable to demonstrate commitment and begin the project.
- Final Payment: The remaining 50% (**USD 22,500**) will be due upon the project's delivery, ensuring satisfaction and completion in accordance with the agreed specifications.

Payment Methods

All payments are to be made via on-chain transactions using **Noble USDC.** Directed to our Company multisig wallet. This method ensures transparency, security, and ease of transaction for both parties involved.

We believe this payment structure supports a balanced approach to risk management, motivating timely and quality-focused delivery while providing financial flexibility for the Juno Community.

Conversion rates & Addresses

Description	Amount	USDC Amount	Address
Tranche 1	USD 22,500	USDC 22,500	osmo1ruxpcljuhpepuw2ywxlqsuhy8u3eulz5hdrsedcvwex8qnsd9yqsqv09j7
Tranche 2	USD 22,500	USDC 22,500	osmo1ruxpcljuhpepuw2ywxlqsuhy8u3eulz5hdrsedcvwex8qnsd9yqsqv09j7
Total	USD 45,000	USDC 45,000	osmo1ruxpcljuhpepuw2ywxlqsuhy8u3eulz5hdrsedcvwex8qnsd9yqsqv09j7

LOOKING TO THE FUTURE

We are long-term supporters of Juno and have no intention of leaving the network or ceasing our contributions. We commit to providing support for bug fixes and code upgrades in response to new CosmWasm versions for at least 6 months after delivery.

Furthermore, we have several ideas for potential future implementations that may interest the community. If requested, we are prepared to submit new proposals for these ideas.

A few examples include:

Integration with x/drip and x/tokenfactory
This would allow users to quickly create new tokens, distribute airdrops to Juno stakers, and establish the necessary liquidity pools.

Indexer
Having an indexer behind the frontend ui will allow faster page loads and an overall best user experience.

Liquidity Battles
Gamify liquidity provisioning by implementing a score & rewards system.

Copy Trading
This feature would enable expert traders to demonstrate their skills on a customizable leaderboard. Traders who opt in could also activate a "copy-trading" feature, allowing other users to potentially achieve similar profits.

Notice: All these features requires much more thoughts and are listed here just an example of what will be possible to implement.

DISCLAIMERS

The timeline provided is indicative and subject to variation due to various factors. We are committed to delivering the project in a timely manner, though we cannot guarantee specific delivery dates.

Portions of this document have been reviewed using AI-based grammar tools, so AI detectors may identify it as AI-generated content.

Our team has diligently worked to draft the best possible proposal, and we hope it will be well-received by both the Juno Operations Department and the wider community.

Golden regards,
Kintsugi Team