PocketVR

Virtual Reality on-chain art galleries

lightpaper

Powered by the Coinex Smart Chain

Public beta developed for the MetaFi Hackathon 2022

Executive Summary

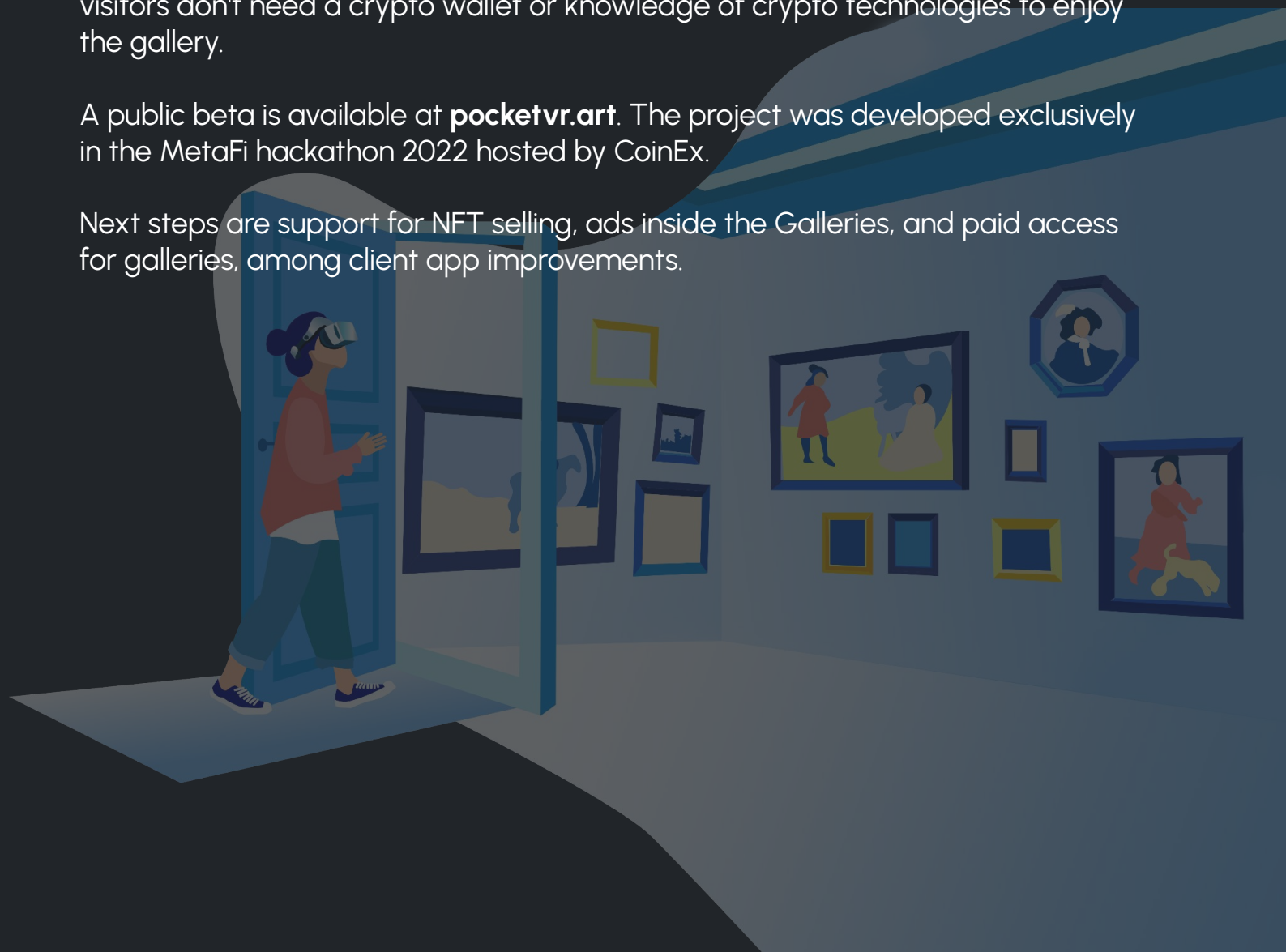
It's pocket not poker! ;)

PocketVR is a dapp backed by the CoinEx Smart Chain that allows visual artists to create private virtual reality galleries where each painting is an NFT owned by the artist. Galleries are represented by ERC721 contracts generated and deployed by a contract factory.

Galleries can be accessed by a regular link using a virtual reality capable browser (Meta Quest, Pico, Valve Index, HTC Vive, ...), no app installation is required, and visitors don't need a crypto wallet or knowledge of crypto technologies to enjoy the gallery.

A public beta is available at **pocketvr.art**. The project was developed exclusively in the MetaFi hackathon 2022 hosted by CoinEx.

Next steps are support for NFT selling, ads inside the Galleries, and paid access for galleries, among client app improvements.



Ideology

PocketVR adheres to the principle of **decentralization**. The whole backend service is powered by the CoinEx Smart Chain and the front end is an **open source** MIT license webapp application running on Github Pages that anyone can clone and host.

PocketVR does not want to be or create a new token economy, instead it focuses on a very specific use case and delivers a solution that sits well and make sense within the web3 technologies.

And finally, PocketVR strives to be easy to use, **no-code** and low complexity solution for content creators and indistinguishable from regular web2 applications for content consumers.

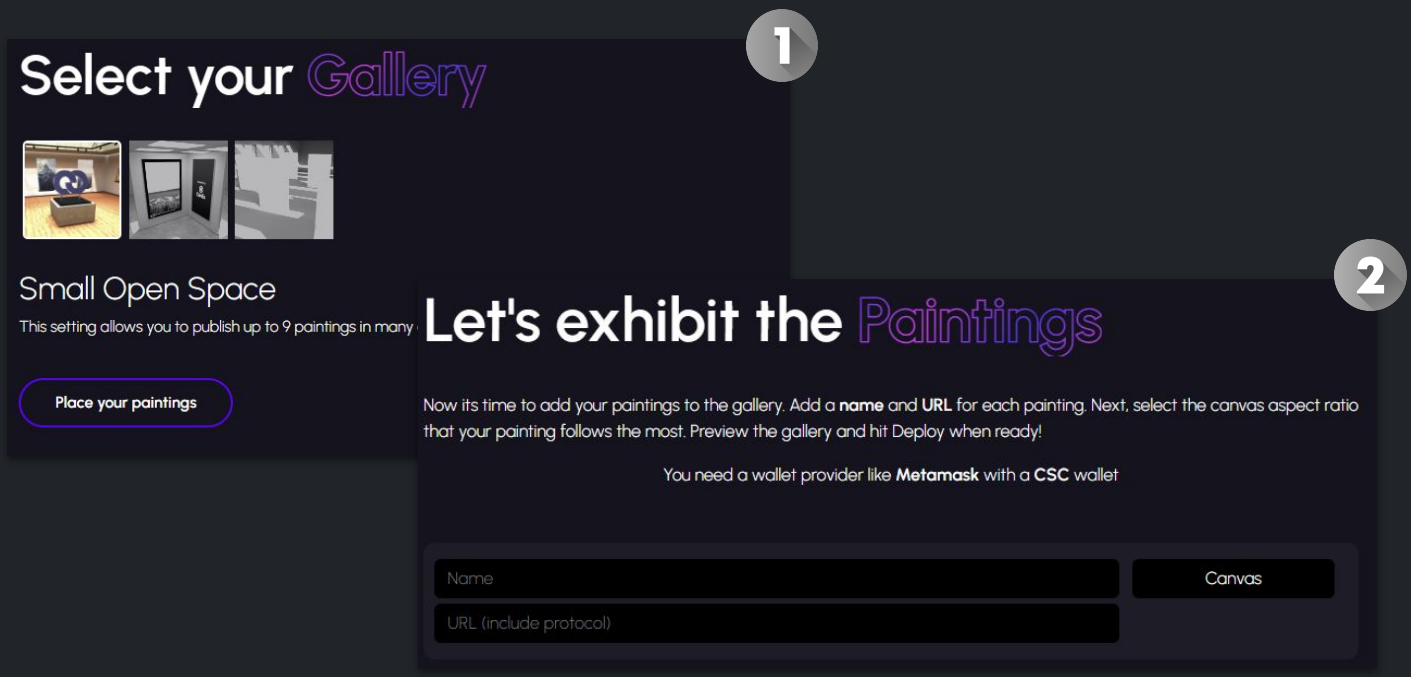
Truly decentralized

Open source

No-node

How it works

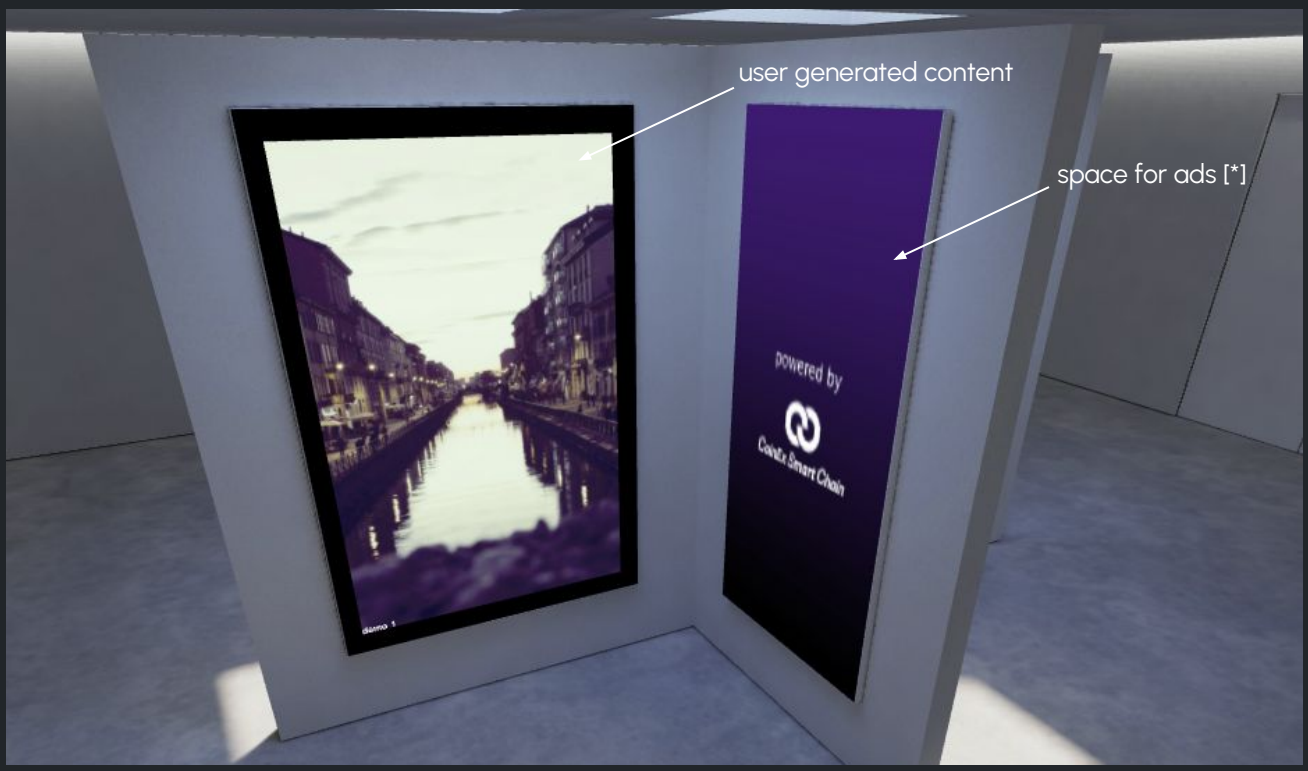
The user goes to an instance of the front-end (ie. pocketvr.art) and starts by choosing a gallery model. These are VR ready 3d models of different types of art galleries designed to hold different paintings, that are in the beginning just URLs pointing to a jpg/png file (animated gif in the future).



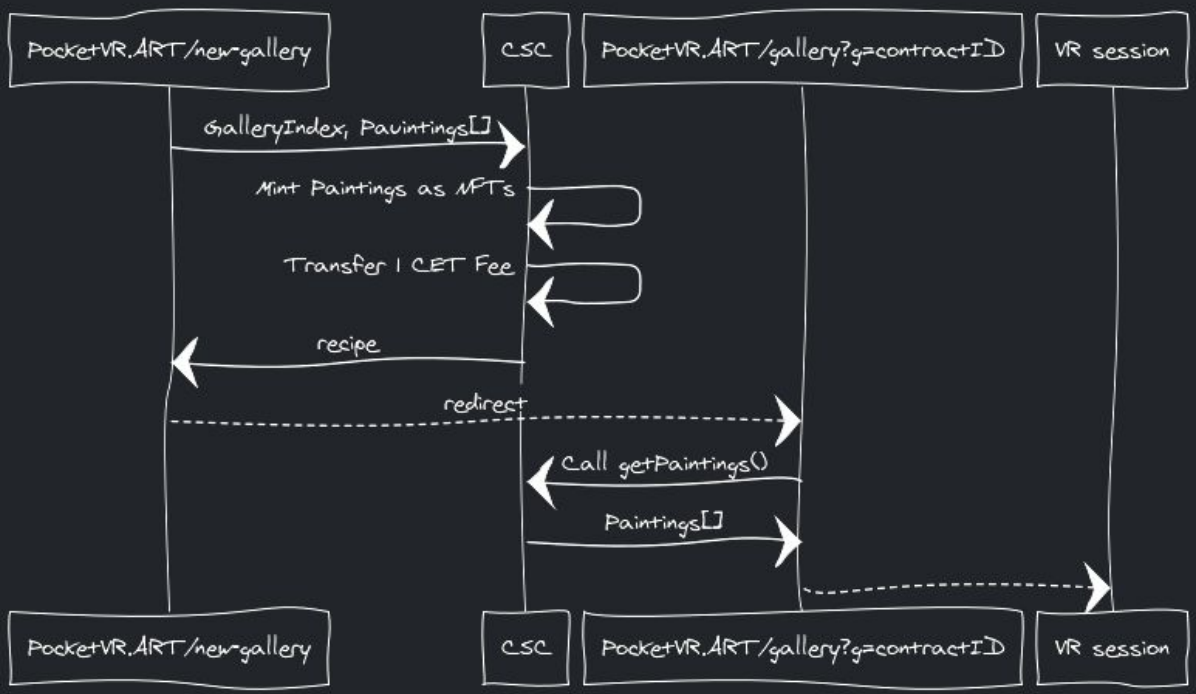
Paintings also need to specify a name and a canvas ratio for optimal display in the gallery.

When the user is done with the data input, a preview of the paintings in the selected gallery can be requested and a 2d version of the VR environment will be rendered in the browser.

A minimum of interaction UX is available for the user to manipulate the preview.



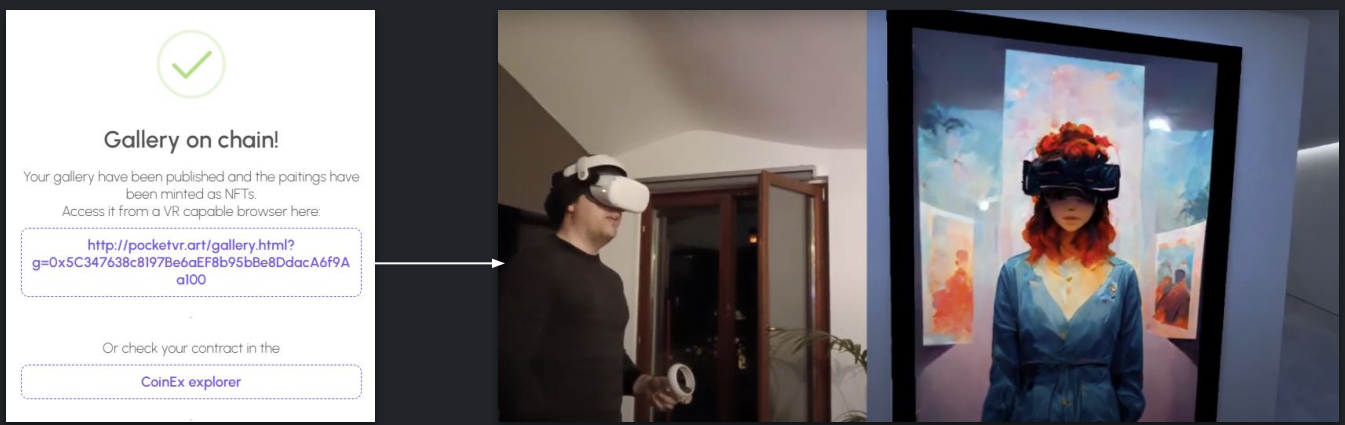
When the user is ready, the gallery can be deployed to the CSC. This means all metadata regarding the selected gallery and the paintings is sent to CSC in the form of a ERC721 based contract and each painting is minted as an NFT. A small fee of 1 CET is sent to the PocketVR team.



The new contract generated by the Dapp and the minting of 4 paintings cost around 5 CET and is done in less than 5 seconds, in general 10 to 15 cents of a dollar for each gallery at the time of writing this document, thanks to the inexpensive and fast CSC.

Tx Hash	0x46e654e0d64b72d902f310a91cbab5075f6e3812531521288690e892cdd64fcc
Status	Success
Block	13515888 2 Block confirmation
Confirmed at	5 secs ago (2022-10-10 21:16:58 UTC+2)
From	0x448fd452c47cE7bdbafaC4af61f53FB8E3Fbd54D
To	Contract 0x5C347638c8197Be6aEF8b95bBe8DdacA6f9Aa100 Created
Details	TRANSFER 1 CET From COINEXGALLERY(CEG) To ⟶ 0x3Dd715f...03fc8C9 TRANSFER COINEXGALLERY(CEG) From 0x0000000...0000000 To 0x448fd45...3Fbd54D Token ID [1] TRANSFER COINEXGALLERY(CEG) From 0x0000000...0000000 To 0x448fd45...3Fbd54D Token ID [2] TRANSFER COINEXGALLERY(CEG) From 0x0000000...0000000 To 0x448fd45...3Fbd54D Token ID [3] TRANSFER COINEXGALLERY(CEG) From 0x0000000...0000000 To 0x448fd45...3Fbd54D Token ID [4]
Amount	1 CET ($0.043631)
Tx Fee	2.3032375 CET ($0.10049255)
Gas Price	0.0000005 (500 Gwei)

Finally, the id of the contract becomes part of the URL that the consumers will use inside a virtual reality browser.



What's next

PocketVR was born during the MetaFi hackathon 2022 organized by CSC with the usual time restrictions of hackathons, so there is a lot to improve upon.

There are several improvements in the pipeline for the front-end in order to make it easier to use in the flat browser and in VR along with new art galleries.

A privacy policy and terms and conditions were neglected during the hackathon but they will be mandatory when the project becomes live.

But, what is going to be the main milestone for PocketVR will be a system of independent private NFT marketplace inside each gallery, allowing the artists to not only display the art as NFT but also sell it.

Secondly, a paid gate system for the artist to allow entrance to the gallery after a ticket is bought in CET.

Finally, a basic AD system to allow publishers to add dynamic content in the galleries.

PocketVR is open source and very willing to collaborate with developers that want to improve the project even further. New ideas are always welcome!

The team

Domingo Lupo

Telecom engineer and Computer scientist
MILAN, ITALY 🍕

CTO and co-founder of GrowishPay

I've been working on fintech (web2) solutions for the past 10 years, and recently in DEFI.

linkedin.com/in/domingolupo