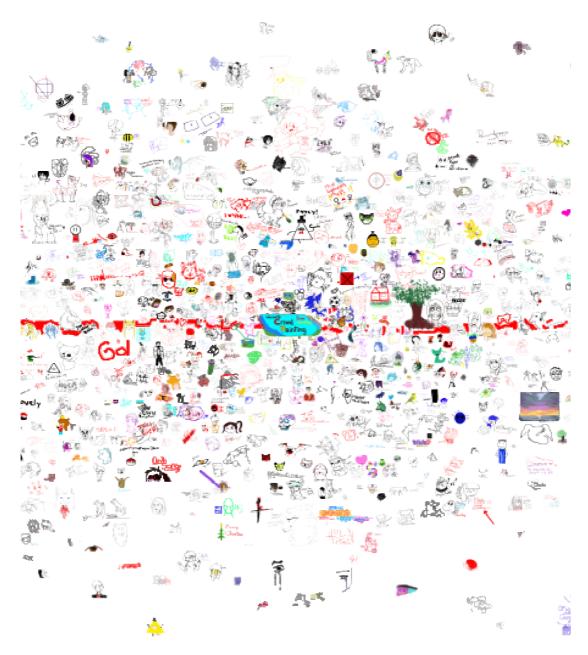


DECENTRALIZED SOCIAL-ECONOMIC ART COLLABORATION PROJECT



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ABSTRACT

CrowdPainting is a decentralized social-economic art experiment that aims to become the world's largest collaborative painting, owned and managed by all of its contributors. Artists can buy INK tokens and use them to paint empty areas of the canvas, receiving a CANVAS ADDRESS for their painting in return. Users can also use INK to upvote and downvote specific paintings, represented by their CANVAS ADDRESS. This will alter that CANVAS ADDRESS' POPULARITY SCORE.

The INK consumed with each painting will have two uses: a) to fuel the CrowdPainting DAO (Decentralized Autonomous Organization) funds, so that the Ethereum Gas costs can be covered, new features implemented, and general marketing expenses, and b) to be distributed proportionally amongst all currently participating artists, according to their overall contributions, as determined by the sum of their CANVAS ADDRESSES POPULARITY SCORES, motivating artists to paint more and better paintings. This motivation system transforms CrowdPainting into an investment and revenue stream for participating artists, rewarding both first comers and late comers and incentivizing users to spread the word and attract more users.

From a technical point of view, CrowdPainting will leverage the speed and redundancy of the Interplanetary FileSystem, IPFS, to scale and deliver the images in a fully decentralized manner. Only each artists INK, CANVAS ADDRESSES, and POPULARITY SCORES will be stored in the Ethereum blockchain. The goal is for CrowdPainting to exist on its own, to be fully autonomous, and to never stop growing!

Checkout our WORKING APP, with over 1600 registered artists, at www.crowdpainting.com

HISTORY

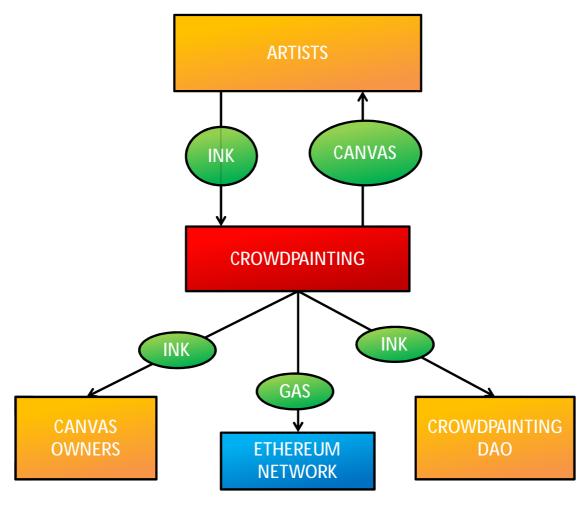
The idea behind CrowdPainting was first conceived in 2012 by Alexandre Sallum. After remaining a few years as project on paper and in the back of his head, in 2014 he decided to make it happen and proceeded to learn the necessary skills to implement and develop it. After 9 months work, the website went live. Since then, he developed proprietary algorithms to optimize the system where once a painting is saved no one can paint over it, resulting in a reduction of over 80% of the resource consumption of this pixel-by-pixel analysis. Even with a virtually non-existing marketing budget, CrowdPainting has acquired over 1600 registered active artists, has had over 172 million pixels painted, and if printed at 72 PPI resolution, would be over 20 x 10 meters in size!

Today, with the advent of blockchain technology, CrowdPainting is ready to take a leap into the future and become one with the world, existing autonomously, with limitless growth possibilities, offering economic incentives to those who partake, and lots of fun to all those watching it grow. Will you help us out?



BUSINESS MODEL

To save an image into CrowdPainting, the artist will spend a small amount of INK. The bigger the image, the more INK will be used. This INK will be split amongst the CrowdPainting DAO, to cover development, marketing and gas costs, and to all currently participating artists, based on the sum of their CANVAS ADDRESSES POPULARITY SCORES. Every time a user spends INK to save an image into CrowdPainting, he will receive an identifiable CANVAS ADDRESS in return, and each CANVAS ADDRESS will have a POPULARITY SCORE attached to it, which will be the result of the upvotes and downvotes his painting receives.



In the future we can add new revenue streams. One such example would be to allow users to "buy" parts of the image in super high resolution, paying in INK an amount proportional to the size of the painting they want. This revenue would be split amongst all CANVAS holders, proportionally, or maybe only amongst the CANVAS holders of the area that was bought – the DAO will decide!

Demand for INK will grow as CrowdPainting becomes more popular, and because INK supply is fixed, the higher the demand for INK, the higher its price will be.



FEATURES

CrowdPainting's main feature is that no one can paint over the paintings of others. You can however paint over your own paintings! Each painting, when saved, will be represented by a specific CANVAS ADDRESS, which will have its own POPULARITY SCORE, allowing artists to effectively own CrowdPainting proportionally to their contributions.

Other than that, CrowdPainting also features a system of infinite expansion and zoom to allow users to view "the whole picture" easily and prevent drawings from being made so far off that they will never be seen. Whenever the canvas gets filled to a certain %, it expands, allowing more paintings to be made.

Drawing Tools

In terms of drawing tools, CrowdPainting currently offers the following:

- 08 different types of brushes, that can each be adjusted with up to 2 variables, creating a plethora of options.
- Rectangle, circle and line shapes
- Smudge
- Eraser
- Dropper
- Color Picker
- Brush Size Picker
- Undo/Redo
- Save

Social Features

In terms of social features, CrowdPainting already has the following implemented:

- "Like" button, where users can like parts of the painting
- "Artists" button, where users can view all artists that participated in a given section of the painting. Within this window, users can click on each artist's portrait to view only their contributions.
- "Comment" button, where users can comment on a given section of the painting.
- "Top Areas", where users can view sections of the painting ranked by number of likes, and click on them to navigate to that specific area.
- "Top Artists" where users can view artists ordered by score, and click on them to filter the entire painting to show only their specific contributions.
- "Recent Comments", where users can view all recent comments made and click on them to see in which sections of the painting the comment was made.
- Facebook Like Button.

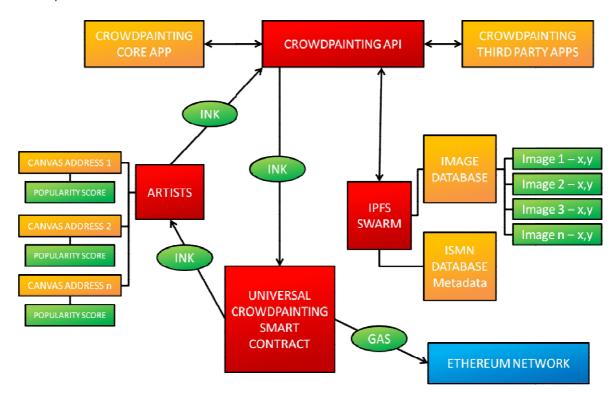
More brushes, tools and features can be implemented in the future by our Core team or by third party apps.



TECHNOLOGY

Overview

CrowdPainting will use the InterPlanetary Files System (IPFS) to store image files in a decentralized manner. The image files will be accessed by the CrowdPainting API and translated into the core and third part apps, while important user data such as INK and CANVAS ADRESSES and POPULARITY SCORES, will be stored on the Ethereum Blockchain.



Inter Planetary File System (IPFS)

IPFS is a peer-to-peer distributed file system that seeks to connect all computing devices with the same system of files. In some ways, IPFS is similar to the World Wide Web, but IPFS could be seen as a single BitTorrent swarm, exchanging objects within one Git repository. In other words, IPFS provides a high-throughput, content-addressed block storage model, with content-addressed hyperlinks. This forms a generalized Merkle directed acyclic graph (DAG). IPFS combines a distributed hash table, an incentivized block exchange, and a self-certifying namespace. IPFS has no single point of failure, and nodes do not need to trust each other, except for every node they are connected to. Distributed Content Delivery saves bandwidth and prevents DDoS attacks, which HTTP struggles with.

The filesystem can be accessed in a variety of ways, including via FUSE and over HTTP. A local file can be added to the IPFS filesystem, making it available to the world. Files are identified by their hashes, so it's caching-friendly. They are distributed using a BitTorrent-based protocol. Other users viewing the content aid in serving the content to others on the network. IPFS has a name service called IPNS, a global namespace based on PKI, serves to build trust chains, is compatible with other NSes and can map DNS, onion, bit, etc. to IPNS.



CROWDPAINTING DAO

CrowdPainting by nature is supposed to be owned, used and managed by its collaborators. To make this possible we will be implementing a fully Decentralized Autonomous Organization (DAO) through the Ethereum Smart Contracts.

CrowdPainting Marketing & Development Fund

To ensure the DAO can carry out its determinations, we will be implementing a marketing & development fund which will be responsible for accordingly compensating all active actors that work towards making CrowdPainting better and in carrying out what the DAO has determined.

Our current plan is to allocate approximately 2-3 % of all the INK used within CrowdPainting towards the fund, but this can be changed depending on what the community wants.

Proposals and Voting

Any individual will be able to propose a request to the CrowdPainting DAO. However, proposals will burn INK to stop spam. There will be a 1 month period for voting and submissions where the number of Yes/No votes are weighted by the number of INK tokens the voter holds. Anybody can participate in this voting procedure. At end of the month, winning proposals will be funded.

We weigh each vote by the amount of INK the voting address owns, in order to protect against Sybil attacks.

To make the best use of these funds, we will implement a monthly voting framework. Users who own a significant amount of INK, and who have the network's best interest at heart, will be able to vote monthly on budget proposals people submit to the network. At the end of the month, INK will be paid to the winning proposals.

Community Participation and Opinion

By the time the DAO is implemented we want to make sure it adheres to the best practices available and to the needs and desires of our active community. We will be performing pools, research, open discussions and forums to hear and understand what makes most sense and what our community wants the most before the rules are set in motion and the DAO is fully implemented.



ROADMAP

CrowdPainting's development started in 2014 and has ever since been maintained and updated with new features, including new painting tools, algorithm optimizations to reduce server loads, graphic interface improvements, mobile ready interface, amongst others.

These features have paved the way into the future where we fully integrate CrowdPainting into the blockchain and allow it to exist autonomously and decentralized, owned and managed by its contributing artists and collaborators.

O	JAN/2014 – DEVELOPMENT START
	APR/2014 – GRAPHIC USER INTERFACE REVAMP
	JUN/2014 – ADDITIONAL FEATURES IMPLEMENTED
	OCT/2014 – V01 LAUNCH
	NOV/2014 – DRAWING ALGORITHM OPTIMIZATION
	FEB/2015 – CONTINUED ARTISTS/USERS ACQUISITION
	JUN/2015 – V02 LAUNCH WITH MANY NEW FEATURES
	MAY/2016 – MOBILE READY INTERFACE COMPLETE
	APR/2017 – SERVER MIGRATION
	NOV/2017 – CROWDFUNDING ICO
	Q1 / 2018 – BLOCKCHAIN INTEGRATION Q2 / 2018 – DAO IMPLEMENTATION
	Q3 / 2018 ONWARDS – CONTINUED DEVELOPMENT, MARKETING
	AND IMPLEMENTATION OF DAO VOTED NEW FEATURES



TEAM



Alexandre Sallum

CEO & Technical Development

Engineer, University of São Paulo, Brasil - Monashees, ECOM group, McKinsey, currently Managing Partner at CSallum.

Entrepreneur, blockchain enthusiast and developer since the age of 12. Besides developing, Alexandre has gathered years of experience in many complementary areas such as venture capital, finance, strategic consulting and real estate, giving him the widespread set of skills necessary to develop and manage CrowdPainting into a successful project that will impact the cryptocurrency and art landscapes.



Larissa Daud

Marketing and Promotion

International Relations, Escola Superior de Propaganda e Marketing, São Paulo, Brazil - Monsanto, Troféu Cidade São Paulo, JJS, Pisos Daud

Social network and marketing expert. Responsible for the brand awareness, social profile, marketing and promotion of many famous events, including the official São Paulo Anniversary Marathon, which is held every year. Larissa will be responsible for promoting and marketing CrowdPainting, as well as interacting with users, managing social profiles, and developing our community of fans, artists, investors and enthusiasts.



Luiz Henrique Elias

Business Management

Engineer, Fundação Educacional Inaciana, São Paulo, Brazil - Expert at McKinsey and Company for 5 years.

Vast experience in managing businesses and in generating consistent positive results. Luiz will guarantee that CrowdPainting strives as a DAO and as a business by applying the knowledge he acquired throughout the years solving some of the world's biggest companies' problems.



Rudolph del Sar

Art Advisor.

3D Animation & Visual Effects Program, Vancouver Film School, Vancouver, Canada

3D modeler and texture artist. Works for high-profile names such as DreamWorks and helps us develop the art tools, make sure they work and are adequate for artists to use and create awesome paintings! Take a look at his work here: http://dropr.com/rudolph.



ICO RESOURCES

Our objective is to raise enough resources to allow our team to work full time on this project for at least two years, and to invest as much as possible in marketing and partnerships.

We plan to make the experience as user-friendly as possible, and hope to quickly attract many users into using CrowdPainting as well as creating a broader, real and fun motive for people to learn about and use cryptocurrencies, attracting more consciousness, knowledge and capital to Cryptocurrencies as a whole.

ICO Structure

10 000 000 INK tokens will be issued. No more tokens will ever be created.

Out of all INK tokens created:

5 000 000 will be available for fundraising at a price of 1 Ether for 2 000 INK;

1 000 000 will be held by the CrowdPainting DAO;

1 000 000 will be distributed to all users who used the current version of CrowdPainting and helped us develop and test tools, gave us feedback, moral support, etc.;

3 000 000 will be distributed amongst developers, advisors and contributors.

If the amount of resources raised is not enough for the team to work full time on the project, we will still proceed with the implementation however will have to adjust the roadmap accordingly. Any unsold fundraising tokens will be burned.

Estimated ICO Market Cap: USD 1 500 000 (considering 1 ETH = USD 300).

Estimated Fundraising: USD 750 000 (considering 1 ETH = USD 300).

Financing Structure

30% - Technical Development

40% - Marketing

10% - Project management and administration

10% - Legal services

10% - Contingencies



VALUATION

CrowdPainting's value will depend largely on the community it manages to create. The fact that paintings can never be painted over or deleted from the canvas mean that besides the entertainment factor and art value, CrowdPainting could be used as advertising, portfolio exposition, skill check, high-res image sourcing/selling, amongst many other uses.

CrowdPainting as a Social Medium

Considering the social capabilities of CrowdPainting, where users are able to interact, we can look up at DeviantArt, that was sold for USD 36 million¹.

CrowdPainting as a Work of Art

Recently a Basquiat was sold for USD 110 million², Nafea Faa Ipoipo sold for nearly USD 300 million³. As an unique art project that never ceases to grow and to become more complex, involving the collaboration of thousands, possibly millions of artists, CrowdPainting has the potential to be worth as much as or even more than these famous paintings.

CrowdPainting as a Decentralized Social-Economic Art Experiment

Being able to be a part of CrowdPainting, leave your message to the world, share your art with other enthusiasts and appreciators, and be remembered forever, that's *priceless*.

Sources:

- 1:https://techcrunch.com/2017/02/23/website-builder-wix-acquires-art-community-deviantart-for-36m/
- 2:http://fortune.com/2017/05/19/basquiat-painting-auction-record-maezawa/
- 3:https://www.thequardian.com/artanddesign/2015/feb/07/paul-gauguins-when-will-you-marry-becomes-most-expensive-artwork-ever

CONTACT

We will be more than happy to chat, have some coffee (if you can reach us in São Paulo), answer your doubts and concerns and listen to your opinions, suggestions, praises and criticisms. Send us an email at contact@crowdpainting.com and we will reply as soon as possible!