2022

The Immortal Timeline

Ada

time·stamp

"

That brain of mine is something more than merely mortal; as time will show.

Ada Lovelace

1815 – 1852

01

ABSTRACT

Where time is your Canvas

What

For the first time in history, it is possible to purchase moments of Time defined in terms of Cardano's protocol: Ouroboros. Starting at Cardano's genesis block in September 2017 until today, anyone can purchase TimeStamps of days filled with special moments.

Beyond owning a piece of time, each ATS contains original art created by the recognized Dimitris Ladopoulos, known for his style of algorithmic recursive subdivision and artwork for roadmap.cardano.org.

Finally each ATS holds future rights to place immutable content on Ada's timeline. A new immortal method to share the impact created by you, your team, or your organization.

Why

On Cardano and powered by AdaTimeStamps (ATS), people will be able to leave a footprint on ADA's timeline. A democratized archive that stretches along the permanent and predicable axis of time.

Our TimeStamps empower people to make personal digital footprints that will not be washed away and forgotten. Instead of individual timelines stored on centralized servers, Ada's timeline is open, immutable, and built on Cardano's ever-evolving system.

Educate, entertain or inspire others today and tomorrow on Cardano's timeline. Share your message with today as well as with future generations.

Mission

To build the most epic timeline in history.

> "
>
> A drop of ink
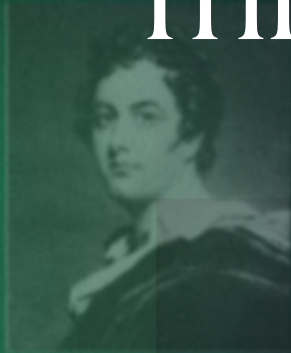> may make a
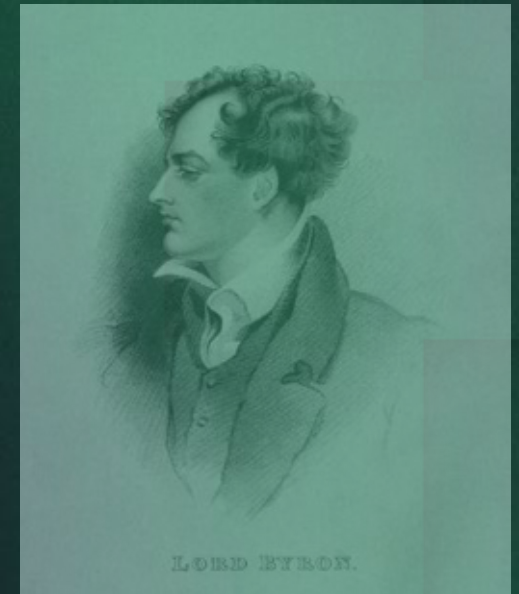> million think.

Lord Byron

1788 – 1824

Table of Contens

Definitions

AdaTimeStamp (ATS): Project name and NFT, where each NFT represents a unique time stamp, piece of art and associated rights.

Ada's Timeline: Used to refer to the visualization of each customized ATS NFT, whereby each NFT is allocated rights to write on specific intervals of Cardano's timeline.

AmsterdamNode: The origin of the team behind AdaTimeStamp, owner, developer, and interim governance holder of Ada's Timeline up to the Marcus Aurelius governance phase.

Constitution of Content: The document and technical application of what content is determined to be acceptable. After the initial version the Constitution of Content is determined by the community.

TimeStamp: The unique interval of time that is only ever represented once by each ATS, denominated by the Ouroboros protocol (in epochs and slots) and UTC.

DAO: Decentralized Autonomous Organisation

Epoch: The time interval of 5 days with which Ouroboros makes a snapshot of the blockchain state.

Era: The chapters of Cardano's roadmap (Byron, Shelley, Goguen, Basho, Voltaire) are denoted by HFC (Hard-Fork Combinator) events and/or as defined by the Cardano Foundation.

FCFS: First Come First Serve - ATS NFTs are sold on this basis. ATS inbound transactions to our store (sales) are processed in the order as denoted by Cardano's ledger. 'Late' inbound transactions will be refunded (minus transaction costs).

Future right: Rights intended for the holder of an ATS NFTs that has not yet been developed at the moment of sale but is planned to be developed in the event of a successful sale and defined in the roadmap.

Public Sale ATS NFTs: The number of NFTs sold to the public during the first Byron sale event, 80% all minted ATS NFTs .

Randomized sale/selection: ATS NFTs sold are selected at random from the Byron NFT population (except first ATS#0 containing the genesis block kept in the treasury).

Slot: About one second, a sub-denomination of the epoch.

UTC: Coordinated Universal Time.

01

Ada's Timeline: A new system for legacy

1.

Define a long term strategy for creating tradeable moments of time on a shared timeline

2.

Create utility to customize moments of the shared timeline

3.

Sustain a transparent governance mechanism, and hand immutable content control to the **active community**

4.

Preserve data as posted by our community forever.

5.

Use resources for community backed impact projects

ADATIMESTAMP.IO

"

I met a traveler from an antique land.
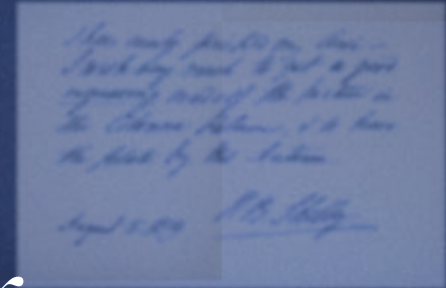
Percy Bysshe Shelley

1792 - 1822

02

Building on history

AdaTimeStamp takes on a bold mission. That of becoming the most celebrated timeline in the world. In order to make history, we should learn from history. From the humans that created it, the technology that powered it, and the institutions that perpetuated it. Consider: Ada Lovelace, the Ancient Pyramids of Egypt, and the 'Musaeum' of Alexandria.

2.1 Ada Lovelace

Ada Lovelace is considered the world's first computer programmer. Because of her unbridled vision for the future, she became the namesake of Cardano's native asset "ADA" and so too AdaTimeStamp. Ada foresaw the multi-purpose functionality of the modern computer. Whilst her contemporary Charles Babbage believed the use of his machines was confined to numerical calculations, Ada mused that any piece of content could be translated to digital form and manipulated by a machine. She wrote that the analytical engine "might act upon other things besides number, where objects found whose mutual fundamental relations could be expressed by those of the abstract science of operations…"

AdaTimeStamp is an extension of Ada's vision from the eighteen hundreds. She had the foresight to believe that anything could be abstracted into the science of operations. Similarly, we have taken Cardano's infrastructure, primarily designed for the numeracy of financial operations, and repurposed it into a powerful mechanism for users to create, possibly in ways that have not yet been imagined.

02

BUILDING
ON HISTORY

2.2 The Ancient Pyramids

We are inspired by the pyramids of Egypt. Their architectural elegance, the quality of their component materials, and their continued contribution to society and culture have ensured their resilience.

What the pyramids have done in the physical world, blockchains are building in the digital. In our pursuit of resilience, we draw on three of their key attributes: Architecture, Quality, and Purpose.

Purpose

Perhaps most importantly, today's pyramids remain well cared for due to their continued value to society in the realms of science, art, and culture. If AdaTimeStamp is to last across time we must ask the community a vital question: what do you think is worth saving?

Quality

The Pyramids were built out of 10 ton limestone and granite blocks. Some of the hardest and heaviest shaped stones on the planet. We build using Cardano's Ouroboros. Cardano's proof of stake, functional programming and scientific principles have fed into our decision to choose Cardano's approach to the trilemma (scalability, security, and decentralization) and build a resilient blockchain that still has the power to evolve.

Architecture

Pyramids still exist today due to an architecture that could withstand both forces of nature and the attacks of militant adversaries. When looking at methods of storing in the digital realm, we consider blockchain the equivalent architecture to store and manage data.

02

BUILDING
ON HISTORY

Museum of Alexandria

In the year 300 BC, the 'Musaeum' of Alexandria represented the greatest collection of human knowledge ever created. Papyrus scrolls and books from all corners of the then-known world were stored together, becoming a beacon of knowledge and learning. AdaTimeStamp will be the first digital museum that continually stores content along the unending axis of time on Cardano.

The library's Ptolemaic rulers intended to make a collection of all knowledge, expanding the collection through an aggressively funded approach to book (papyrus) purchasing. Older texts were favored over newer ones as those texts would have been copied/-influenced less, thus more closely resembling what the original author had intended.

The library also served as home to a host of international scholars, poets, philosophers, and researchers. It was not affiliated with any particular philosophical school and, consequently, scholars who studied there had considerable academic freedom.

The decline of the library was due to a number of hardships, starting with the purging of intellectualism, natural degradation, and even a fire in the time of Julius Caesar. Eventually, the lack of continued funding and support for the library saw it whither and vanish.

Lessons

Continual effort is required to build a fair system that stores and visualizes new content while retaining the old.

Protect from external and internal intellectual purges, degradation, and natural disasters through multiple tiers: architecture, quality, and lasting purpose.

Flexibility to evolve with the only constant that is change.

Diverse philosophical schools of thought are welcome under a single constitution of content.

Content significance increases with age if it remains unaltered.
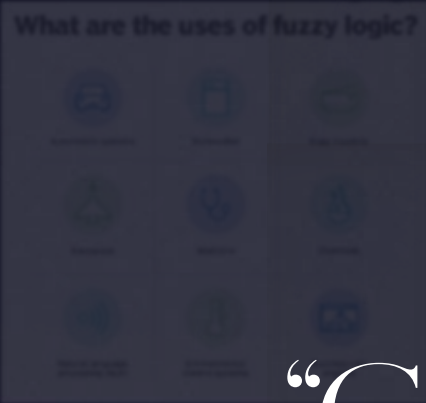
"Getting the definitions right is the hardest task.

Joseph Goguen

1941 – 2006

03

ABSTRACT

Why get involved

If you care about shaping a positive legacy, join the AdaTimeStamp community. The first sale of Byron era ATS will raise funds needed to develop the core features described in this paper.

3.

RIGHT TO WRITE INTO
THE SHARED TIMELINE*

2.

OWN UNQIUE ART CREATED
BY INDEPENDENT ARTIST.
BYRON: DIMITRIS
LADOPOULOS

5.

COMMUNITY DEFINED
ENVIRONMENTAL AND
SOCIAL IMPACT*

1.

OWN UNIQUELY DEFINED
MOMENTS IN TIME AND
DIGITAL SPACE

4.

BECOME PART OF
ADATIMESTAMP GOVERNANCE*

*TO BE DEVELOPED

03

3.1 Own uniquely defined moments in time and digital space

Never before has technology been able to capture Time in such a transparent, secure and transactable manner. Every ATS is imprinted with a unique 'Time Stamp' that it, and only it represents.

Each TimeStamp represents an interval of time and could continue on, in theory, until the end of time itself. They will be available for purchase in the form of

Non-Fungible Tokens by phases, where the initial releases will coincide with the Era's of the Cardano Roadmap (Byron, Shelley, Goguen). AdaTimeStamp is interlocked in a highly transparent manner with the Ouroboros protocol, rendering it extraordinarily resilient.

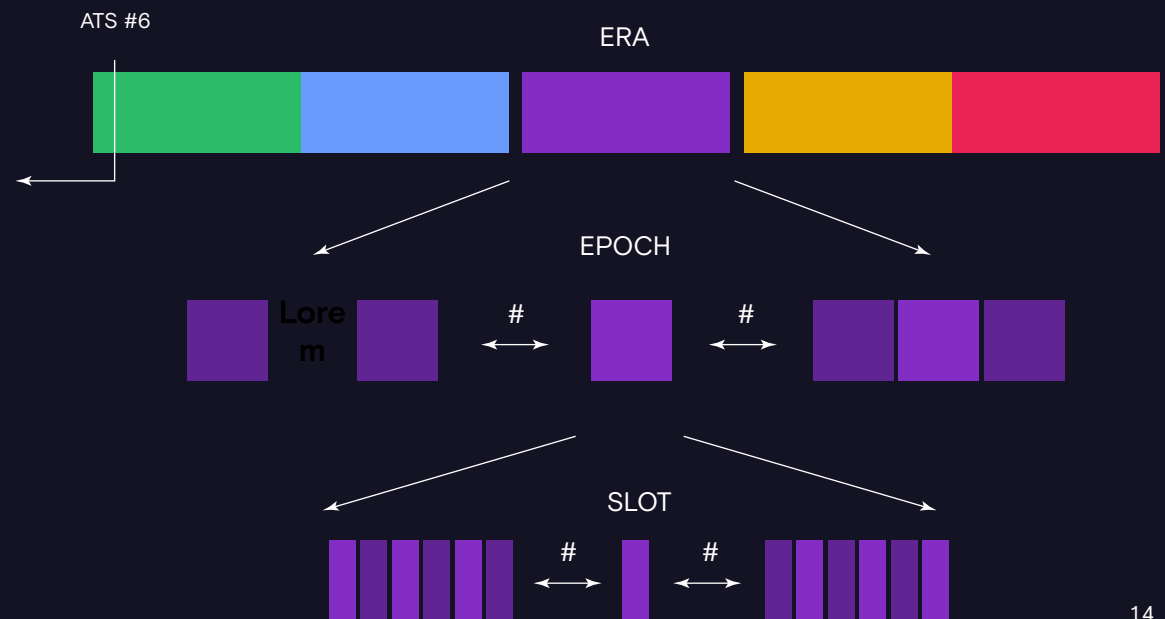For a detailed breakdown of how this is done see our technical paper.
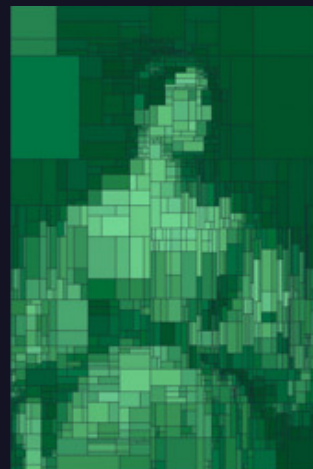
Ouroboros Time

Start	End
E1 S00406	E1 S04725

Coordinated Universal Time (UTC)

9/29/2017	9/30/2017
0:00:11	0:00:11

Time According to Cardano's protocol, Ouroboros

ATS #6

ERA

EPOCH

Lorem

SLOT

Ø3

3.2 Own unique art created by independent artists. Byron era: Dimitris Ladopoulos.

For the first Byron era (the first 1041 NFTs) we are working together with the original artist of the Cardano road map, Dimitris Ladopoulos. Each NFT will include a unique piece of art created specifically for the AdaTimeStamp project by Dimitris, adding a distinct visual life to our nascent timeline.

Dimitris is known for his beautiful algorithm for recursive subdivision art that combines classic (aged) impressions with a modern algorithmic style to create something truly unique. The team and Dimitris are collaborating to build an initial foundation for AdaTimeStamp that balances Dimitris's sense of technology, art, and ethics.

Cardano road map ↗

Dimitris Ladopoulos ↗
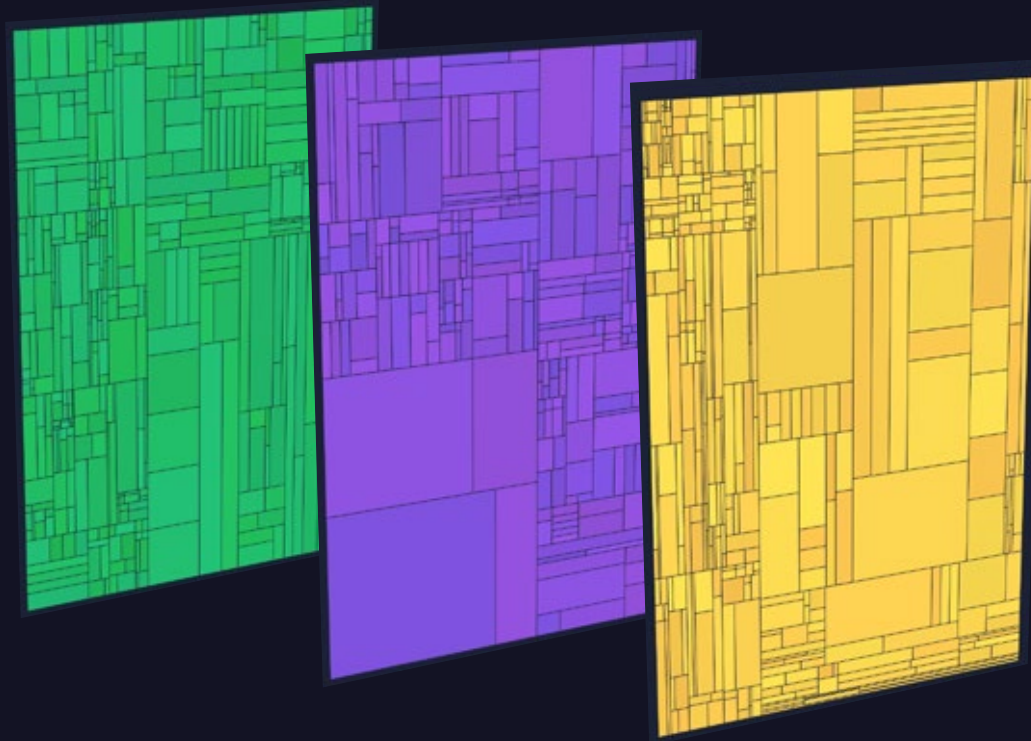
3.3 Right to write into the shared timeline

AdaTimeStamp is pioneering a new method by which people's ideas can be immortalized. By creating a decentralized concept of time and space, AdaTimeStamp opens up a new canvas to inspire across the generations.

At launch, each ATS will come with the future right for owners to put forward pieces of text to be loaded, curated, and stamped onto the timeline. However, text is just the beginning. As the project evolves we aim to integrate services that will allow more diverse types of content to be introduced to the timeline.

There are multiple methods under consideration for the mechanism for placing content on Ada's Timeline which we will discuss with our community. ATS strives to test, improve and share its methods with the community in order to build with e ciency and integrity.

Given the storage and operational efforts involved with adding user data to the timeline, each entry will involve some form of costs. For example, transaction costs will be incurred to confirm data entries from ATS NFT wallet holders. In addition, costs will vary depending on the types of data, and the degree of reliability of data storage.

UTC DATE:

09.23

2017
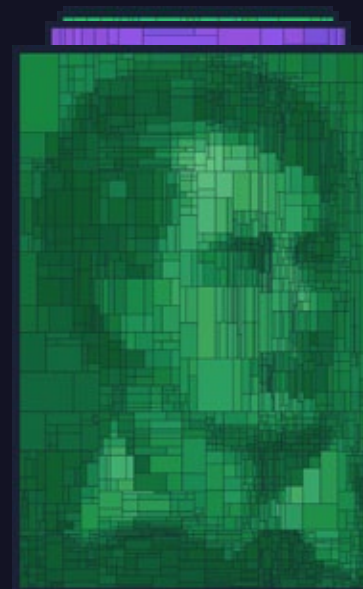
Paint your moment

3.4 Become part of AdaTimeStamp governance

AdaTimeStamp aims to be flexible in giving its community creative freedom. The content and ethos will adapt in accordance with the will of the AdaTimeStamp community. Our community will ultimately become responsible for defining the timeline's balance between truth, beauty, and creative freedom, curating with a view toward maximizing positive longevity.

In the early stages of the project, the founding team will take an iterative approach to how community content is deployed on the Timeline. The team will propose and test transparent mechanisms that adhere to the ethos of the project. Harmful or abusive content will not be added to the timeline. Iterative discussion with the community will serve as the starting point for shaping the rules of curation that will eventually lead us into the decentralized governance phase.

### 3.5 Community driven environmental and social impact

Starting in FY2025 AmsterdamNode B.V. (owner of ATS) will dedicate 42% of net profits after tax attributable to AdaTimeStamp to funding to socio-environmental impact.

Any organization to receive funding must adhere to the following prerequisites

1. Communicate how their initiative connects to systematic positive impact (with a preference for UN SDG definitions).
2. Communicate receiving of funds from the AdaTimeStamp community publicly.
3. Describe how the funds were used and what the resulting impact was.

There are many ideas, questions and comments that we have not discussed or only touched on. We are building by an iterative approach that is guided by community feedback. Get involved if you are as driven to build some good into the world that lasts!

"

"Every day is a journey, and the journey itself is home.
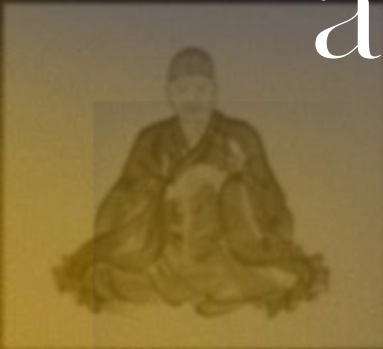
Matsuo Basho

1644 – 1694

Ø4

Roadmap

AdaTimeStamp echoes Cardano's approach to the process of development. This roadmap is in high level draft form to be specified further in detail after discussions with the community.

1. Simone
FOUNDATIONS

Our initial phase. This will see the launch of our historical NFT sales (pre-current day sales) to finance development. The foundation phase aims to bring together a community that believes in a shared vision for shaping history. In this foundational phase we focus on how the community interacts to help shape the project.

"An artists duty is to reflect the times" – Nina Simone

2. Plato
DECENTRALIZATION

In the Plato phase we will build the project's beta platform having taken input from the community. We start testing long-term development and data management principles on Cardano's infrastructure. The community and the team will collaborate to create a draft constitution outlining how content will be curated and presented on the shared digital canvas.

"A good decision is based on knowledge and not on numbers" – Plato

3. Van Gogh
UTILITY

This phase will test the use case for smart contracts, content classification options, and community voting mechanics. "Current day" NFT sale mechanics will be tested. The community is asked to give input on how it defines positive legacy for projects profits. The team will assess additional partnerships to bring the project toward a steady scalable state.

"I feel that there is nothing more truly artistic than to love people"
– Vincent van Gogh

4. Kepler
SCALABILITY

Core utility functions will be developed further, allowing users to write unique content into the timeline. Content presented to visitors will be made more dynamic and immersive. The team (and its partners) will present and expand upon their vision for how the ATS writing utility will work, as well as how user content will be visualized in the museum.

"Truth is the daughter of time, and I feel no shame in being her midwife"
– Johannes Kepler

5. Hypatia
GOVERNANCE

ATS will first vote with its community on what it wants in terms of governance structure. We will present multiple models, in detail, and vote on the possibilities in a fully transparent manner on the Cardano blockchain.

"He who influences the thinking of his time, influences all the moments that follow him. Leave your opinion for eternity." – Hypatia

THE NUMBERS

NFT Tokenomics & Sale

Let's talk numbers. The ATS NFT sales will start by Era. The Cardano roadmap defines 5 eras. Byron, Shelley, Goguen, Basho and Voltaire. The first era of Cardano (the Byron era) has existed 1041 days on the UTC calendar. For our Byron era release, each of our AdaTimeStamps will represent (approximately) one day. Therefore, in our initial release Cardano's Byron era, we will mint 1041 NFTs.

For a detailed breakdown of how time is linked to the Ouroboros blockchain, how time is accounted for, and how the policy ID is protected over time, we refer you to our technical white paper.

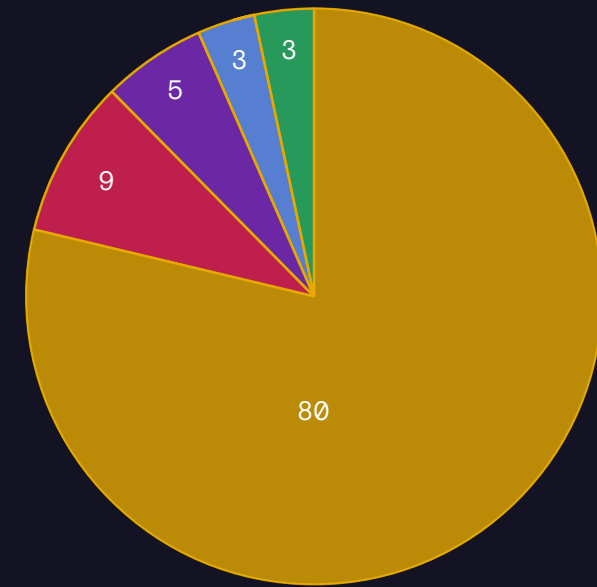| BYRON	TYPE	ARTWORK	#ATS NFT
	Era start & end	Byron portrait	2
	Prime numbers	G. Cardano portrait	8
	Prima numbers	Unique multi colored art	125
	Start of new Epoch	A. Lovelace portrait	207
	Unique time stap	Unique art	699
			1041

05

NFT TOKENOMICS & SALE

5.1 Rarity

Although each ATS is stamped with a singular point in time that only it represents, rarity has also been ascribed to each ATS via the incredible art created by Dimitris. These pieces of art will signify significant moments for Ouroboros, as well as naturally occurring phenomena, such as:

• The start and end of the Byron era
• The beginning of epochs
• Prime numbers (as determined by NFT# counted using index 0)

5.2 Distribution of 1041 ATS NFTs for Byron (%)

Our distribution breakdown for these first 1041 ATS are displayed on the right. 80% of the ATS will be sold during our public sale event. The remaining 20% will be: distributed for marketing purposes, given to third party collaborators, held by the ATS team, or placed in our treasury. The very first Byron ATS (Era start/day 1) will be reserved in the treasury. The remaining ATS will be distributed randomly among all remaining parties in order to reflect a population of rarities.

ATS Tokenomics (%)

- Byron first sale
- Third party & marketing
- Team
- AmsterdamNode delegators
- Treasury

*See the technical white paper for a detailed breakdown of time-keeping and handling of anomalies (like the first day being shorter).

05

NFT TOKENOMICS & SALE

5.3 Frist decentralized sale of Byron era AdaTimeStamp NFTs

AdaTimeStamps first sale is planned to be a much-trafficked event. As some moments in time are more significant than others, the first sale will occur in a randomized manner. Buyers of AdaTimeStamp NFTs will be handled on a first-come first-serve basis (transactions prioritized as noted on Cardano's EUTxO ledger). The number of NFTs one person can buy will be capped to attempt to enhance the decentralization of NFT ownership.

Price in ADA will be set in advance of the sale and communicated through our official channels.

The official sale will occur at AdaTimeStamp.io and will be announced through our official Twitter (@adatimestamp)

PRICE LEVEL	% TOTAL FIRST SALE BYRON ERA SALE EVENT	# OF ATS NFTS SOLD	RARITY NOTE**
Early bird	10% of ATS	83	Normally distributed rarities
Standard	90% of ATS	751	Normally distributed rarities

* The first ATS (NFT# "O") will be kept in the treasury of AdaTimeStamp.
For further information regarding the sale, we refer you to AdaTimeStamp.io.

06

Some Final Thought

By putting trust into the many and not the few, we can create a new system that can go further.

AdaTimeStamp strives to empower the legacy of its community. Anyone can create, govern, and inspire for today as well as tomorrow.

It's time to make history.

ADATIMESTAMP.IO

"Let us read, and let us dance; these two amusements will never do any harm to the world.

Voltaire

1694 – 1778

07

About us

We are a multidisciplinary team that wants to offer the world a new way to build heritage through technology and decentralization. We want to decide collectively what should be remembered, what inspires us, and what makes us think. Big or small. We see it as our mission to preserve knowledge, history, humor, good acts, and carry on their legacy, using the building blocks of our digital society. AdaTimeStamp's goals may seem grandiose, but we treat them with the seriousness they deserve.

Our team also runs Cardano stake pool AmsterdamNode.com since Epoch 210, hosted the Cardano summit 2021 in Amsterdam, and helped a bar in Amsterdam to accept ADA for beers! Stake to AMS!

ADVISORS

Dimitris Ladopoulos [↗]
Artist

Manuel Chakravarty [↗]
Computer Scientist

Thomas Burnscully [↗]
Storytelling

COLLABORATORS

LamaLama Agency [↗]
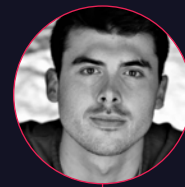Beautiful visual experience builders

Amalia
is our content marketer and researcher that keeps us historically as well as technically correct.
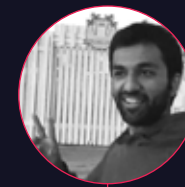

Walter
is our astrophysicist (every team should have one), we turn to him for all the difficult questions about time, the universe, and optimizing EUTxO's.

David
is our anti-echo chamber engineer, product manager, and resident realist. He turns our big ideas into actionable steps.

Syed
is our trusted senior developer, data analyst and technological rabbit hole explorer, with a humble outlook on life that keeps the team grounded.

Max
is our economist, technology consultant and the 'lets do it' dyslexktic entrepreneur who shapes teams and partnerships to build on the Cardano tech stack.

ADATIMESTAMP.IO

BE PART

Join the Community

MEDIUM	TYPE	US
Website	OFFICIAL	https://adatimestamp.io/ ↗
Twitter	OFFICIAL	@AdaTimeStamp ↗
Reddit	COMMUNITY	https://www.reddit.com/r/AdaTimeStamp ↗

We will never reach out to you first to request your details.
Initial sales of AdaTimeStamps are only at AdaTimeStamp.io
Beware of scammers.

ADATIMESTAMP.IO

Sources

1. https://eprint.iacr.org/2016/889.pdf
2. https://opensource.com/article/18/10/first-computer-programmer-ada-lovelace
3. https://heritagesciencejournal.springeropen.com/articles/10.1186/s40494-020-0356-9
4. https://books.google.com/books?id=Gz2wCQAAQBAJ&pg=PA70#v=onepage&q&f=false
5. https://whitepaper.io/document/581/cardano-whitepaper
6. https://bitcoin.org/bitcoin.pdf
7. https://ethereum.org/en/whitepaper/

"

"What you leave behind
is not what is engraved
in stone monuments,
but what is woven
into the lives of others."

Pericles
495 BC - 429 BC

Ada
time·stamp

Disclaimer

Find updated terms and conditions for use on AdaTimeStamp.io

The content of this paper and the product design is in draft form. AmsterdamNode B.V. (owner of AdaTimeStamp and Ada's Timeline) reserves the right to change and make any corrections as it sees fit without limitations. The AdaTimeStamp team is taking an empirical and iterative approach to its community-influenced product delivery and technical development to better understand limitations, evaluate tradeoffs, and fine-tune parameters in order to converge to an optimal system. None of this content should be used to make any form of financial, tax, or legal decisions.

The project's aim is to be community driven with initial digital 'Ada-Time-Stamp' owners being able to suggest features and contribute to the development of the digital space. There has been no VC funding at this stage. Initial sales of NFTs bearing artwork and a set of unique 'time-stamps' are sold as collectible NFTs (only) to those wishing to participate in the development of this project and not for speculative purposes.

No future value is guaranteed or implied, and all participants are reminded that cryptocurrency investments are volatile in nature. All buyers accept that these digital collectibles are not being sold as a security. Equally, all buyers agree they will consult the laws of their country prior to purchasing a AdaTimeStamp NFT. Only purchase if in accordance with local laws.

Those looking for short terms gains are urged not to participate AdaTimeStamp sales now or in the future. For the avoidance of doubt, this is a very long-term project with a view that AdaTimeStamps can be used to customize a shared timeline, participate in it's governance, and share in the real-world positive impact generated by the project.

We strongly advise all to do their own research with respect to the risks associated with this project. Please consult your own local regulations. You are responsible for your own taxes, liabilities, and all related risks when visiting our website.