FINOS

Fintech Open Source Foundation

Antitrust Policy

All project meetings are subject to the Linux Foundation Antitrust Policy.
The following topics must not be discussed:

- Price-sensitive information
- Actual or projected changes in production, output, capacity or inventories
- Matters relating to bids, prospective bids, or bid policies
- Matters relating to actual or potential individual suppliers that might influence the business conduct of firms toward such suppliers
- Matters relating to actual or potential customers that might have the effect of influencing the business conduct of firms toward such customers
- Current or projected costs of procurement, development or manufacture of any product
- Market shares for any product or for all products
- Confidential or otherwise sensitive business plans or strategy

If you have questions, please contact legal@finos.org

FINOS

Fintech Open Source Foundation

Meeting Notice

- FINOS Project leads are responsible for observing the FINOS guidelines for running project meetings. Project maintainers can find additional resources in the FINOS Maintainers Cheatsheet.
- All participants in FINOS project meetings are subject to the LF Antitrust Policy, the FINOS Community Code of Conduct and all other FINOS policies.
- FINOS meetings involve participation by industry competitors, and it is the intention of FINOS and the Linux Foundation to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable US state, federal or foreign antitrust and competition laws. Please contact legal@finos.org with any questions.
- FINOS project meetings may be recorded for use solely by the FINOS team for administration purposes. In very limited instances, and with explicit approval, recordings may be made more widely available.

FINOS

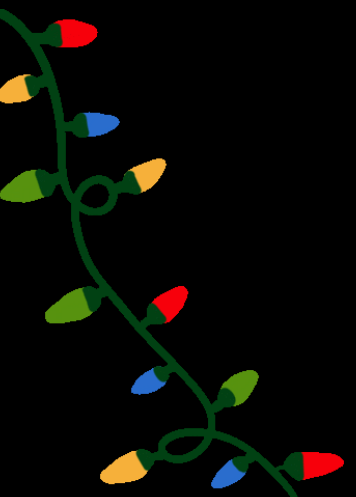
Zenith

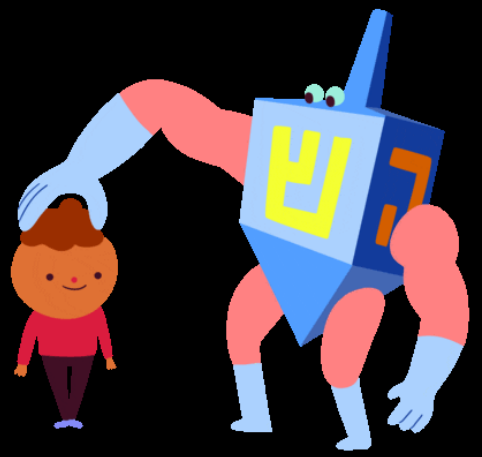
HAPPY HOLIDAYS

Emerging Technology
Special Interest Group

Dec 14th, 2023

We use a lot of QR Codes
Get your phone ready!





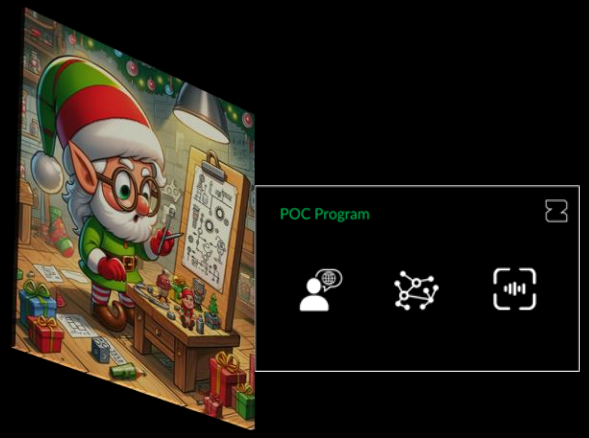
Please add your attendance to:
https://github.com/finos/zenith/issues/116

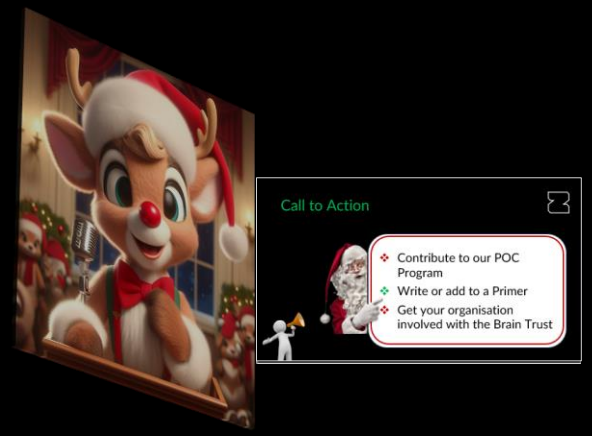
Agenda

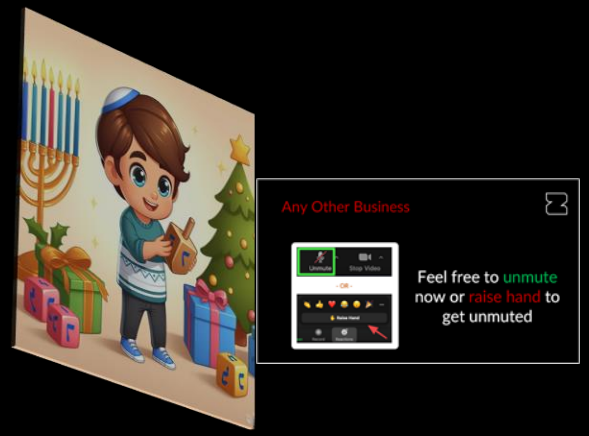
- Announcements
- POC Program
- Any Other Admin
- Call to Action
- Any Other Business
- Thanks & Close-Out

Zenith SIG Advent Calendar

Zenith SIG Advent Calendar







Announcements

- Upcoming Events
- Blogs
- New Primers
- 2023 Achievements

Upcoming Events

Why: Meet other companies taking part in the Open Source community & discuss your own journey with like-minded people.

Key Talk: AI Software Development Lifecycle on Kubernetes by Andrew Martin of ControlPlane

Where: London, LSEG, 10 Paternoster Square
When: Jan 25th, 2024

Upcoming Events

Why: It's the UK's open technology conference

Key Point: FINOS have a booth there!

Where: The Brewery, London
When: Feb 6th, 2024

Upcoming Events

Why: 2 day hybrid hackathon to transform autism treatment

Key Point: Meet other FSI Developers and do some good by tackling real-world use cases provided by families to create some long lasting good for the community

Where: 1 Manhattan West, NYC & Virtual
When: Apr 3rd to 4th, 2024

Blogs

Amazon introduces new Quantum Chip

Quantum Technology

TCL announces RayNeo Air 2

Spatial Computing

Azure Quantum Elements

Quantum Technology

If you want to blog, email us at zenith-leadership@lists.finos.org

New Primers

Decentralised Ledger Technology (DLT)

Introduction to DLT

Distributed Ledger Technology (DLT) represents a groundbreaking approach to record-keeping and transaction management. Unlike traditional centralized systems, DLT operates on a decentralized network of computers, enabling secure, transparent, and tamper-resistant data storage. With its foundations in decentralization, security, and immutability, DLT offers a powerful tool for enhancing transparency and trust in a wide range of applications, including financial services. This primer will explore the fundamentals, history, and tools of DLT, empowering executives in the financial sector to harness its potential for innovation and operational efficiency.

Spatial Computing

Introduction to Spatial Computing

A brief history of Spatial Computing

Types of Reality & their Use Cases

Applicability in Financial Services

Tools & Development Platforms

Challenges & Considerations

Introduction to Spatial Computing

Definition & Overview

Spatial Computing and Mixed Reality (MR) Technology are at the forefront of merging the digital and physical worlds to create immersive and interactive experiences. These technologies are transforming the way we perceive and interact with the environment, offering exciting possibilities for various industries, including financial services.

DLT: Glossary

A

- **Airdrop** (noun, verb): a marketing technique in which crypto projects send their native tokens directly to the wallets of their users in an effort to increase awareness and adoption.
- **Alpha** (noun): valuable or insider information, usually regarding the value of digital assets like cryptocurrencies and NFTs; a measure of the return on an investment over and above the return offered by the market or other benchmark.
- **Altcoin** (noun): initially used to refer to any cryptocurrency that wasn't Bitcoin, altcoin may now refer to any new cryptocurrency with a relatively small market cap.
- **Alts** (noun): short for altcoins.
- **Ape** (noun, verb): someone who invests heavily into a cryptocurrency or stock, or the act of doing so. This is sometimes a reaction to hype and FOMO, or done without much knowledge of the asset. It should be noted, though, that this is generally a self-assigned term and does not carry a negative connotation.
- **ATH -**** All Time High** (noun): the highest price an asset has ever had.
- **ATL - All Time Low** (noun): the lowest price an asset has ever had.
- **AR - Augmented Reality** (noun): a form of spatial computing that combines elements of virtual reality with physical reality. Currently, this is done through either wearable technology that overlays an interface onto a real-world image capture similar to a car heads up display or using glasses. Alternatively, this can also be achieved through a smartphone or computer screen (e.g., the AR features of Pokémon GO!)
- **Avatar** (noun): A digital representation of a human being or other entity in a virtual environment

2023 Achievements

10

Community Calls

(except this one!)

Average Audience

26

- 7 Community SIG calls

Date	Participants
29-Jun	32
13-Jul	28
27-Jul	24
10-Aug	20
24-Aug	32
28-Sep	24
26-Oct	22

- Brain Trusts

(FINOS Members Only)

Date	Participants
14-Sep	39
14-Oct	16
09-Nov	12

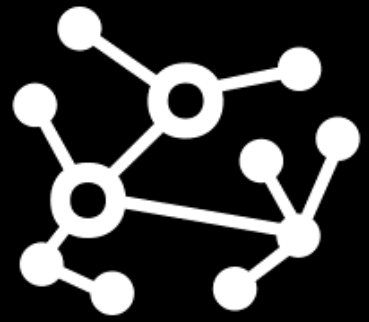
19

Blogs Published

2

Podcasts Produced

POC Program



POC Program

Finance LLM
Databricks

Web3/DLT Sandbox
Hedera

Real-Time Voice Processing
for Automation
Zenith Community

Finance LLM
Open Data Repository

Finance LLM
Regulatory Automation

Finance LLM
Open Data Repository

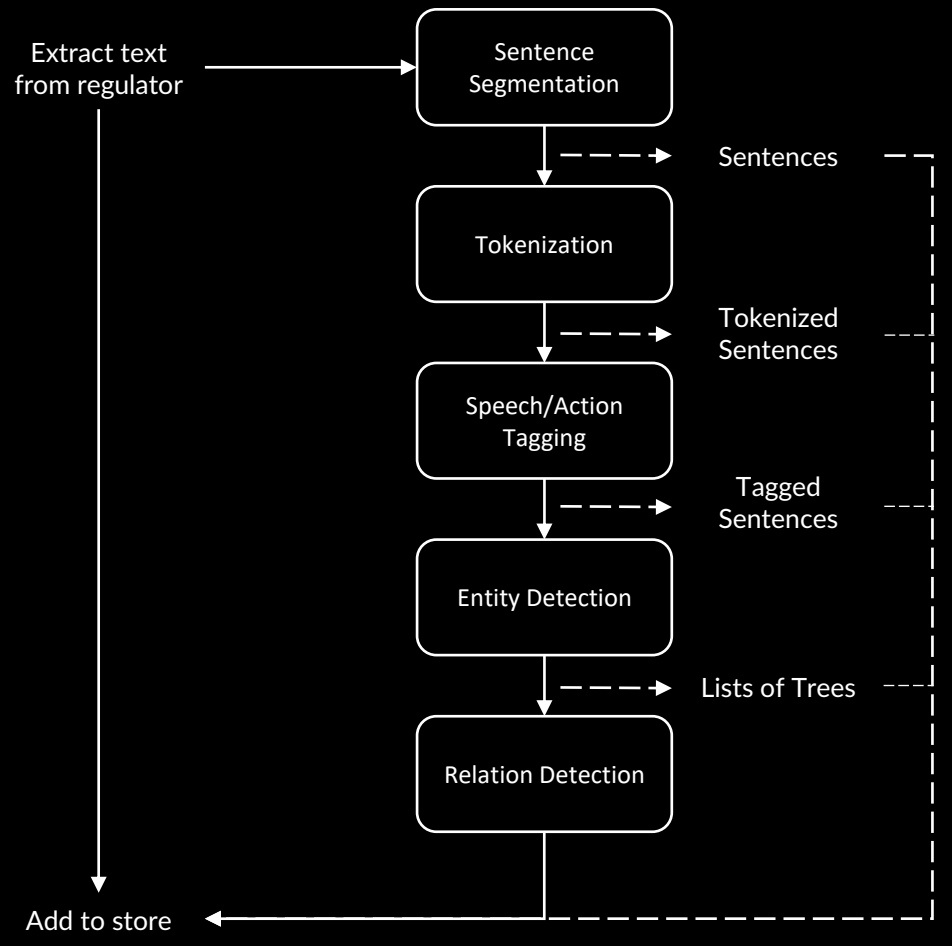
Goal:

To create an open-source repository of persisting data for machine learning training. This repository should be free from licensing concerns and maintain ethical standards.

Initially, this data pool will be seeded with regulatory data that is already in the public domain. Our aims are to demonstrate the value of consolidated, industrial data for mutual development benefit, free from license risks.

Ask:

1. Data collection of relevant regulatory data sources
2. Assistance on architecture, purification &c foundational training considerations
3. Investment with relation to storage & processing



Finance LLM
Regulatory Automation

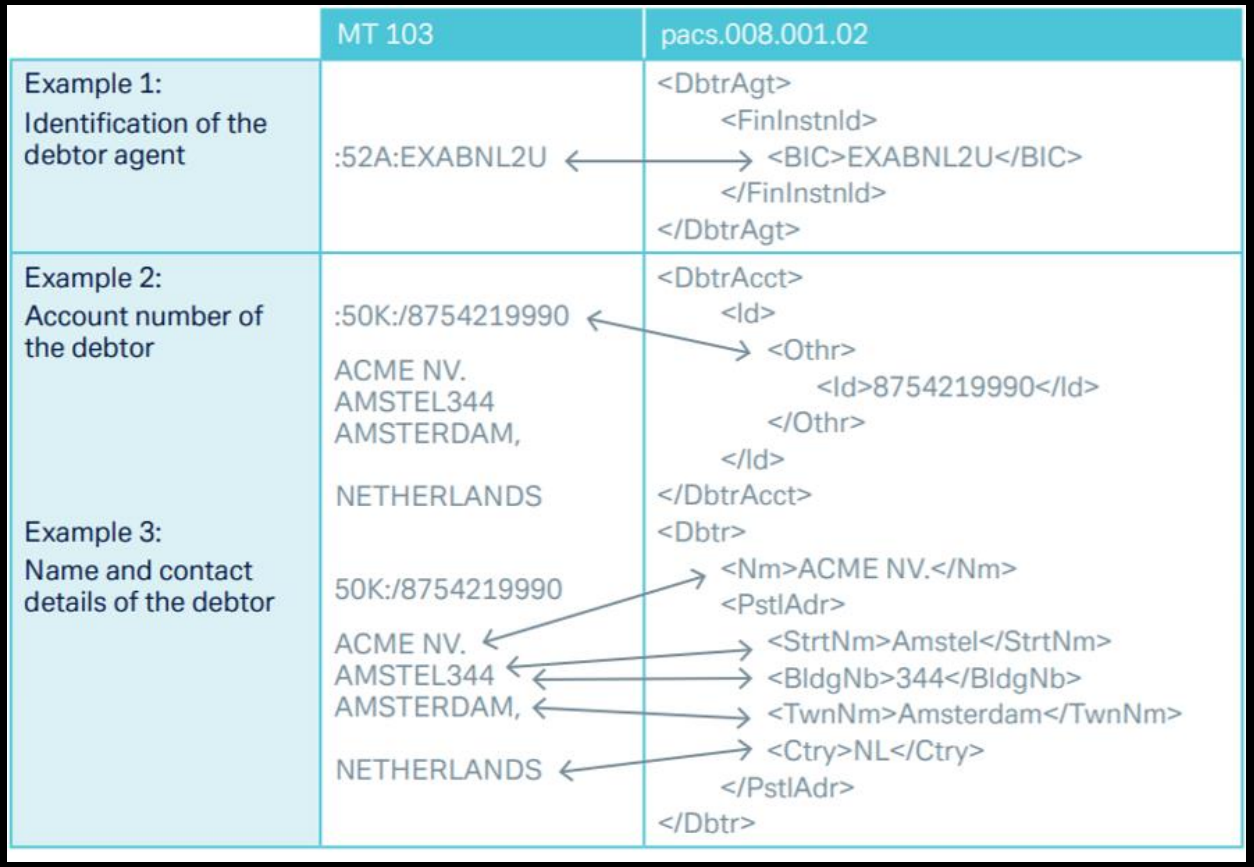
Goal:

To leverage a Finance-trained LLM towards practical automation efforts. Our first project will be to produce outputs relevant to the upgrades required on messaging within the SWIFT system in line with ISO20022 standards.

Through this, we want to develop ways to handle future standards automation

Ask:

1. Connection with ISO20022 expertise within member organisations & relevant developers
2. Assistance on the development & training of rules, aggregation and associated models
3. Access to processors or processing time on Cloud infrastructure



Web3/DLT Sandbox
Hedera

Goal:

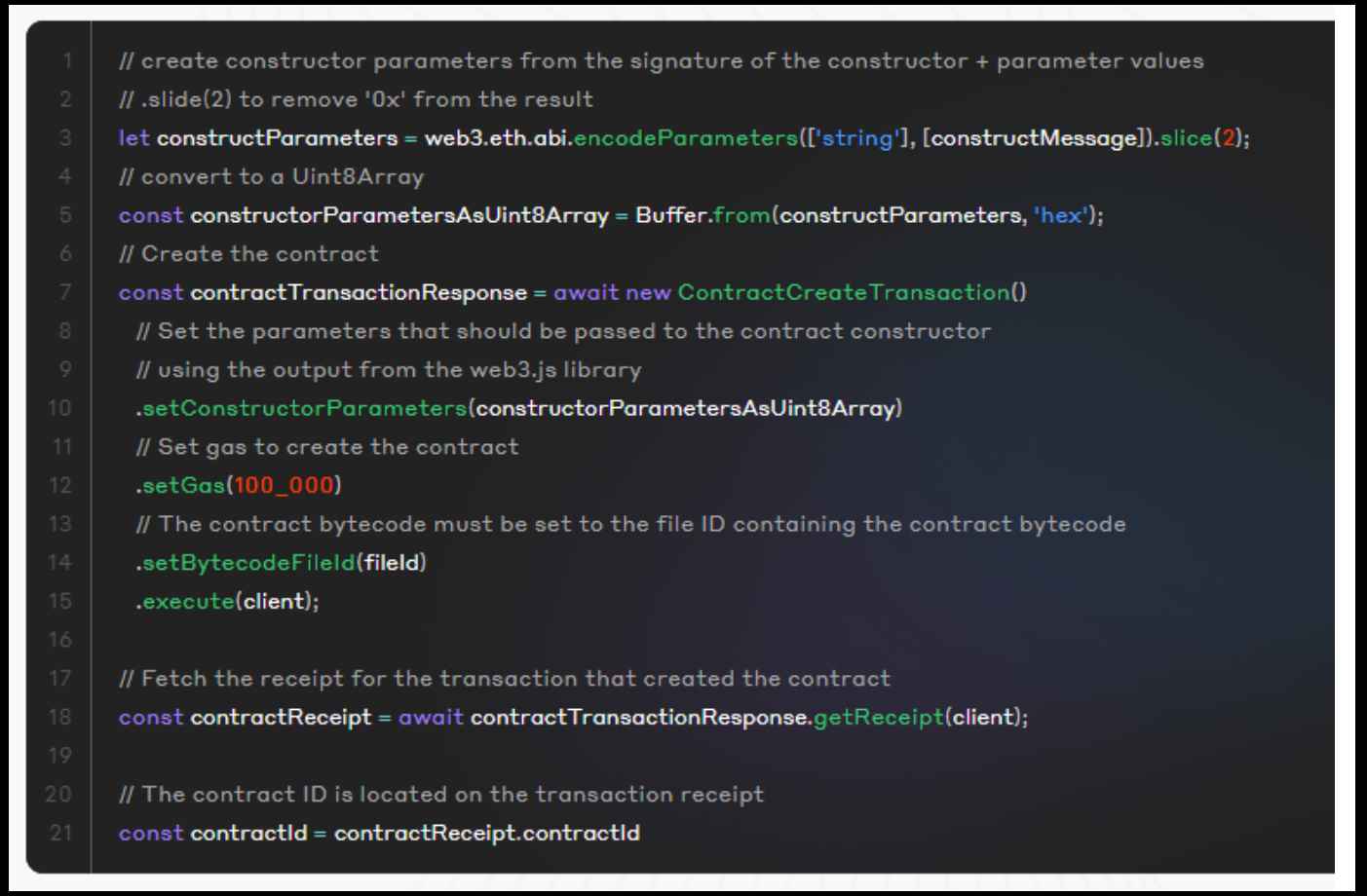
To democratize access to a Web3/Decentralised Ledger sandbox via Hedera's platforms.

This should enable us to start deepening our primers with more "hands on" demonstrations, while enabling our community to explore ideas for future POCs.

We also wish to use this sandbox as a way to act as an intermediary for FINOS members to engage with regulators on the conversation around DLT-based regulation and best practices.

Ask:

1. Community "asks" of what a Sandbox design would needs to entail
2. Initial groups willing to work with Zenith & Hedera as we flesh out this capability



```
// create constructor parameters from the signature of the constructor + parameter values
// .slide(2) to remove '0x' from the result
let constructParameters = web3.eth.abi.encodeParameters(['string'], [constructMessage]).slice(2);
// convert to a Uint8Array
const constructorParametersAsUint8Array = Buffer.from(constructParameters, 'hex');
// Create the contract
const contractTransactionResponse = await new ContractCreateTransaction()
  // Set the parameters that should be passed to the contract constructor
  // using the output from the web3.js library
  .setConstructorParameters(constructorParametersAsUint8Array)
  // Set gas to create the contract
  .setGas(100_000)
  // The contract bytecode must be set to the file ID containing the contract bytecode
  .setBytecodeFileId(fileId)
  .execute(client);

// Fetch the receipt for the transaction that created the contract
const contractReceipt = await contractTransactionResponse.getReceipt(client);

// The contract ID is located on the transaction receipt
const contractId = contractReceipt.contractId
```

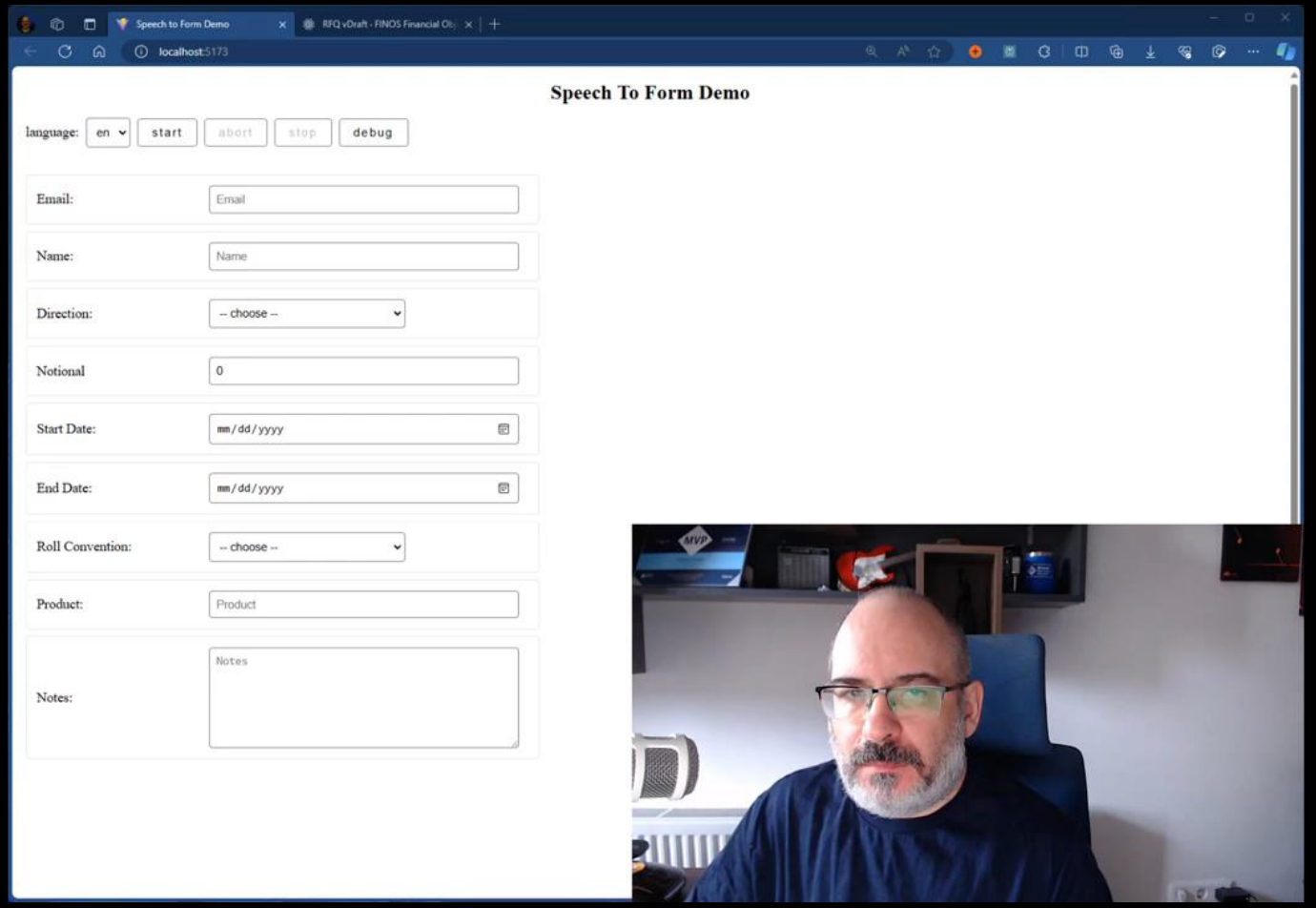
Real-Time Voice Processing
for Automation
Zenith Community

Goal:

To create an open-source framework for real-time voice processing that can interface with FINOS' low code and interoperability solutions

Ask:

1. Additional support from the FINOS community to improve the research into financial sector-focused data
2. Assistance on implementation
3. Additional investment from FINOS & Community to scale the project



Any Other Admin

Register your attendance!

Any Other Admin

Did you know?

FINOS offers Qualifications

BETA! FINOS Financial Services Certified Open Source Developer (FSOSD)

This exam certification is for developers contributing to open source projects while working in financial institutions internationally.

Includes

- Online
- Certification Valid for 3 Years
- Includes 12 Month Exam Eligibility
- One Retake
- Multiple Choice Exam
- Duration of Exam 90 minutes

Experience Level: Beginner

Domains & Competencies

Ethics and Behavior	10%
Open Source Licensing	18%
Consuming Open Source	26%
Contributing to Open Source	28%
Regulatory Impact on Open Source	18%

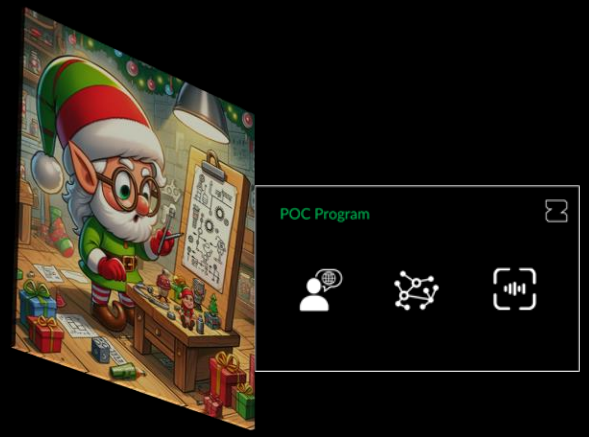
Call to Action

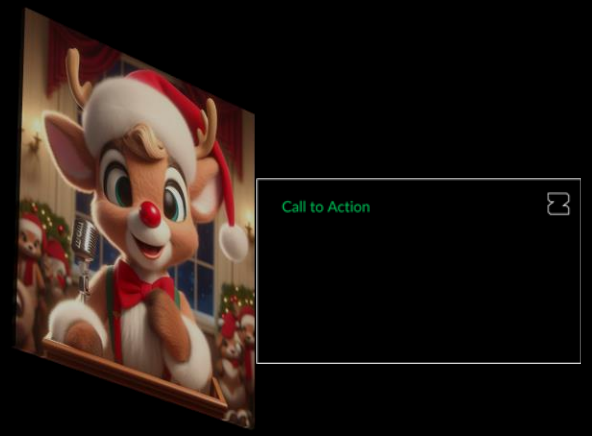
- Contribute to our POC Program
- Write or add to a Primer
- Get your organisation involved with the Brain Trust

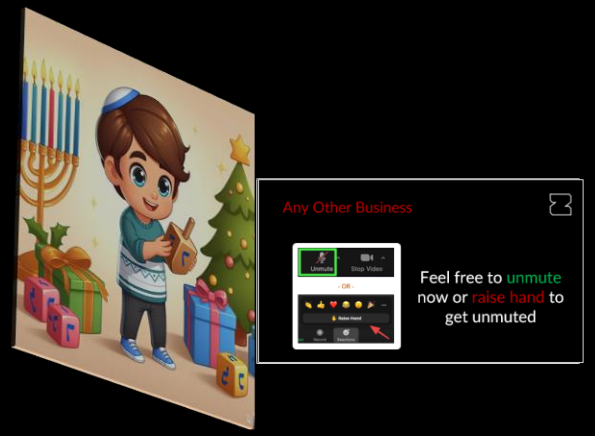
Call to Action

Log off	Decorate a cookie	New Years Party!	Open Presents	See some snow
Go to the Xmas Party	Read a Book	Catch up on sleep	Last minute shopping!	Over eat
Mistletoe Smooches	Hear a Christmas Carol	FREE SPACE	Listen to Christmas Music	Awkward convos
Send out cards	Get Comfy	Get an ugly sweater	Watch a Christmas Movie	Wear a Santa Hat
Open an advent calendar	See Family	Bake!	Hear Auld Lang Syne	Decorate the House

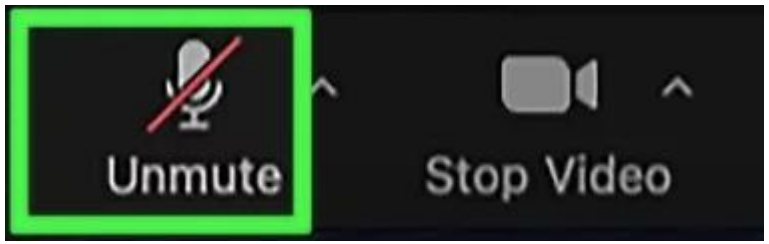
Zenith SIG Advent Calendar



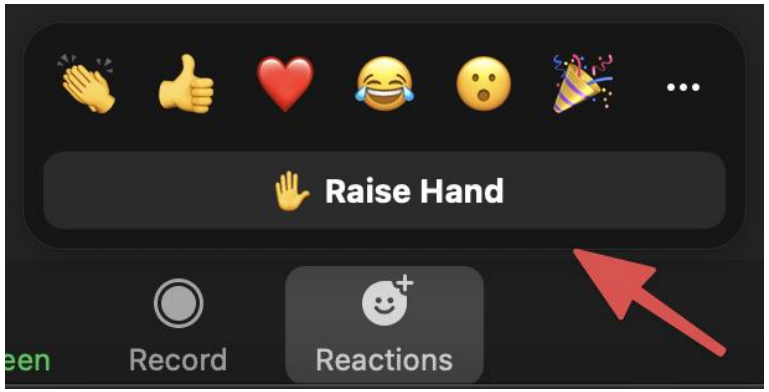




Any Other Business



- OR -



Feel free to unmute now or raise hand to get unmuted

Join the discussion at

zenith.finos.org

HAPPY HOLIDAYS

FINOS