Mellon

Offline-first prototype
and logo demonstration

Update 1, 29 April 2025

Problems We Solve

Password managers rely on cloud storage, exposing users to breaches, outages, and surveillance.

Users with unreliable internet or heightened privacy concerns lack trustworthy, accessible solutions.

1.35B Individuals affected by breaches in 2024

According to Statista. 82% of cyberattacks in 2023 involved data stored in centralized clouds according to Secureframe.

85% Adults ready to do more to protect privacy

According to Exploding Topics. This shift to sovereign digital tools is driven by business alike according to User Centrics.
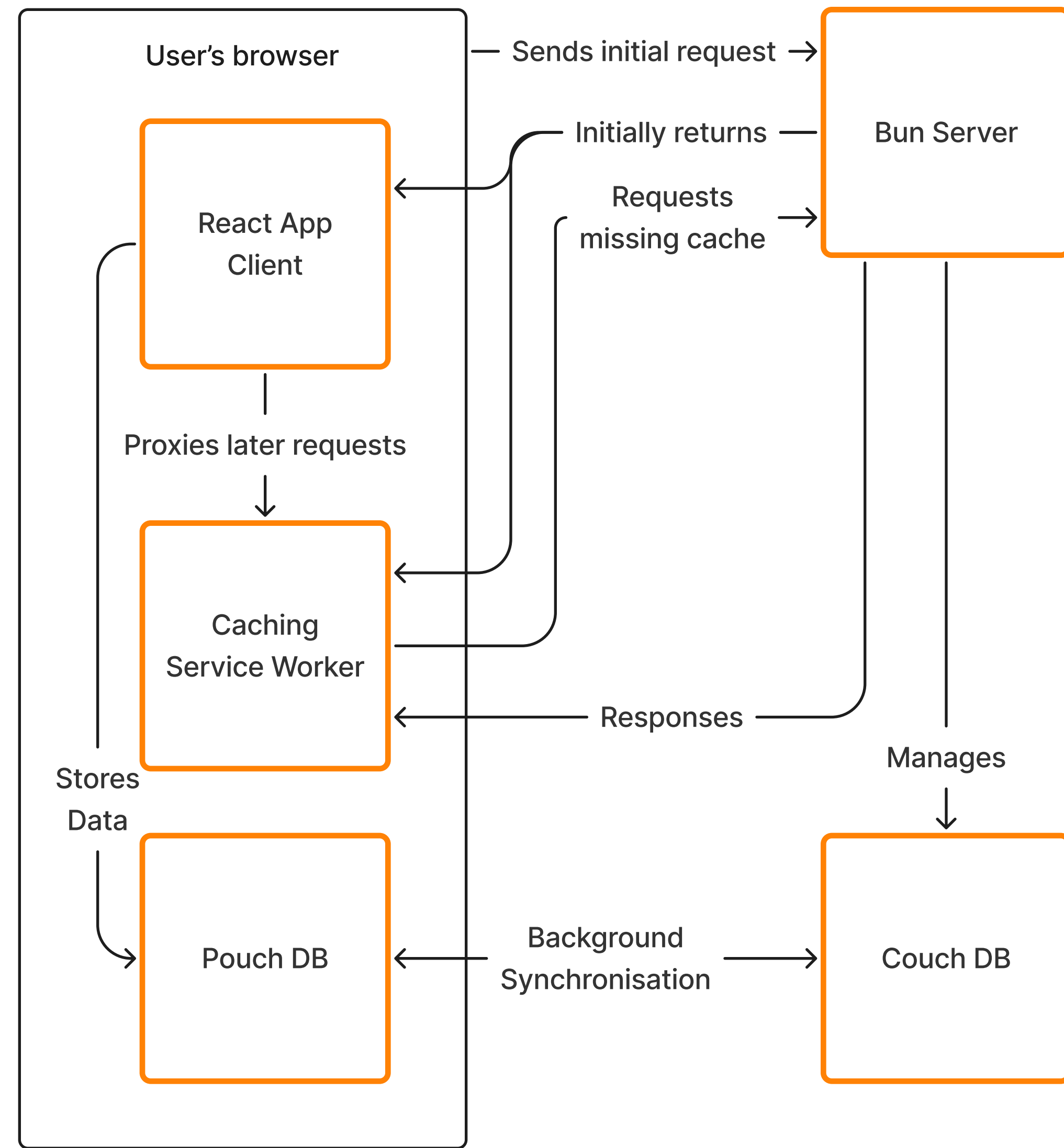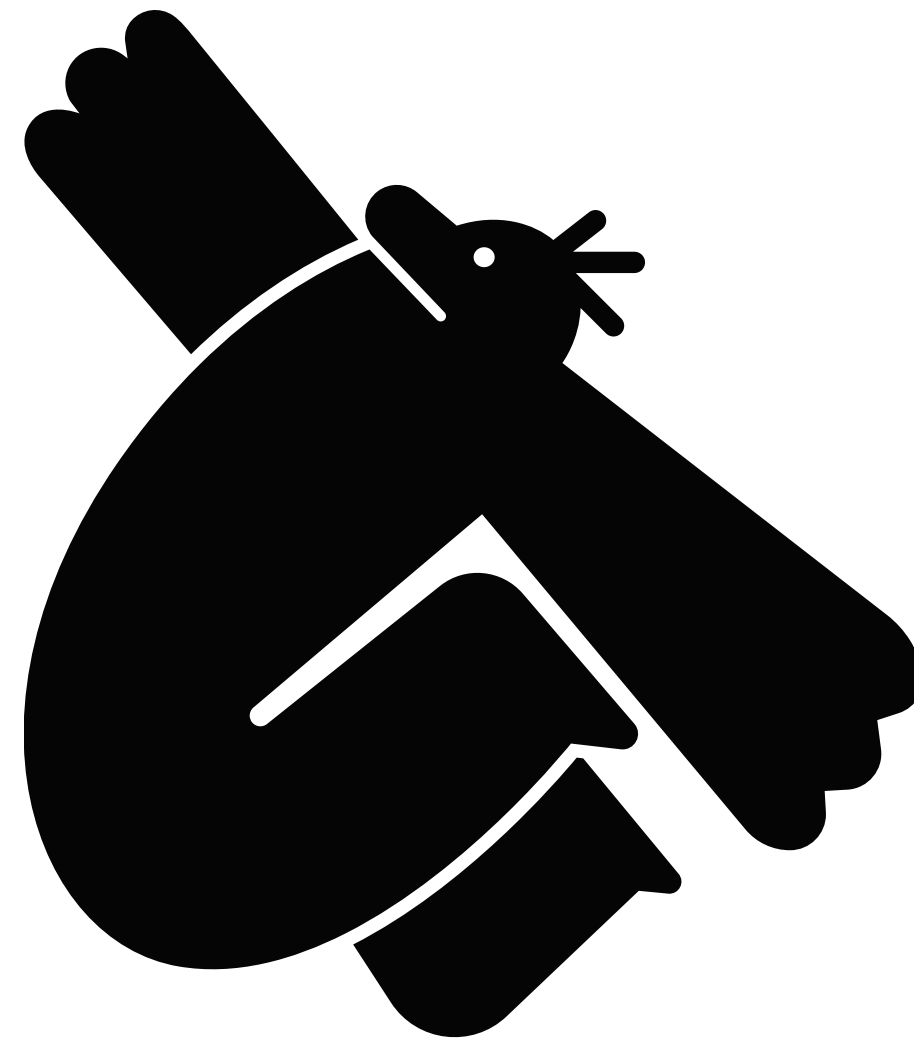
4 Cases of required no-network access

Trips abroad, emergencies like recent electrical outage, regulatory requirements or risky industries like investigations.

Our Solution

Encrypt, save and process the data locally. Even if you close the browser tab or refresh the page being offline, the app will load again and work as usual. The encrypted data is synced to a server in a background even for anonymous users.

User's browser

React App Client

Sends initial request →

Bun Server

Initially returns

Requests missing cache

Proxies later requests

Caching Service Worker

Responses

Stores Data

Pouch DB

Background Synchronisation

Manages

Couch DB

Prototype Overview

Header indicates connection state and user info

Session starts with the onboarding

Continuing the onboarding

Secrets are listed below the forms and are always available

● Online — Changes will sync   ID ...e0461

Add Your First Secret

Secrets are encrypted and stored on your device. Might be restored from an encrypted server backup.

Secret Name

Username

Password   Show Generate

Notes

Add New Secret

Stored Secrets

No stored secrets yet

Built by Vladimir Lazarev, Sofia Azzheurova and Evgenii Antonenkov for IAMPEI

● Online — Changes will sync   ID ...e0461

Set Master Password

Hide secrets on your device while you're idle.

Password   Show

Hint

Set Master Password

Stored Secrets   Add New
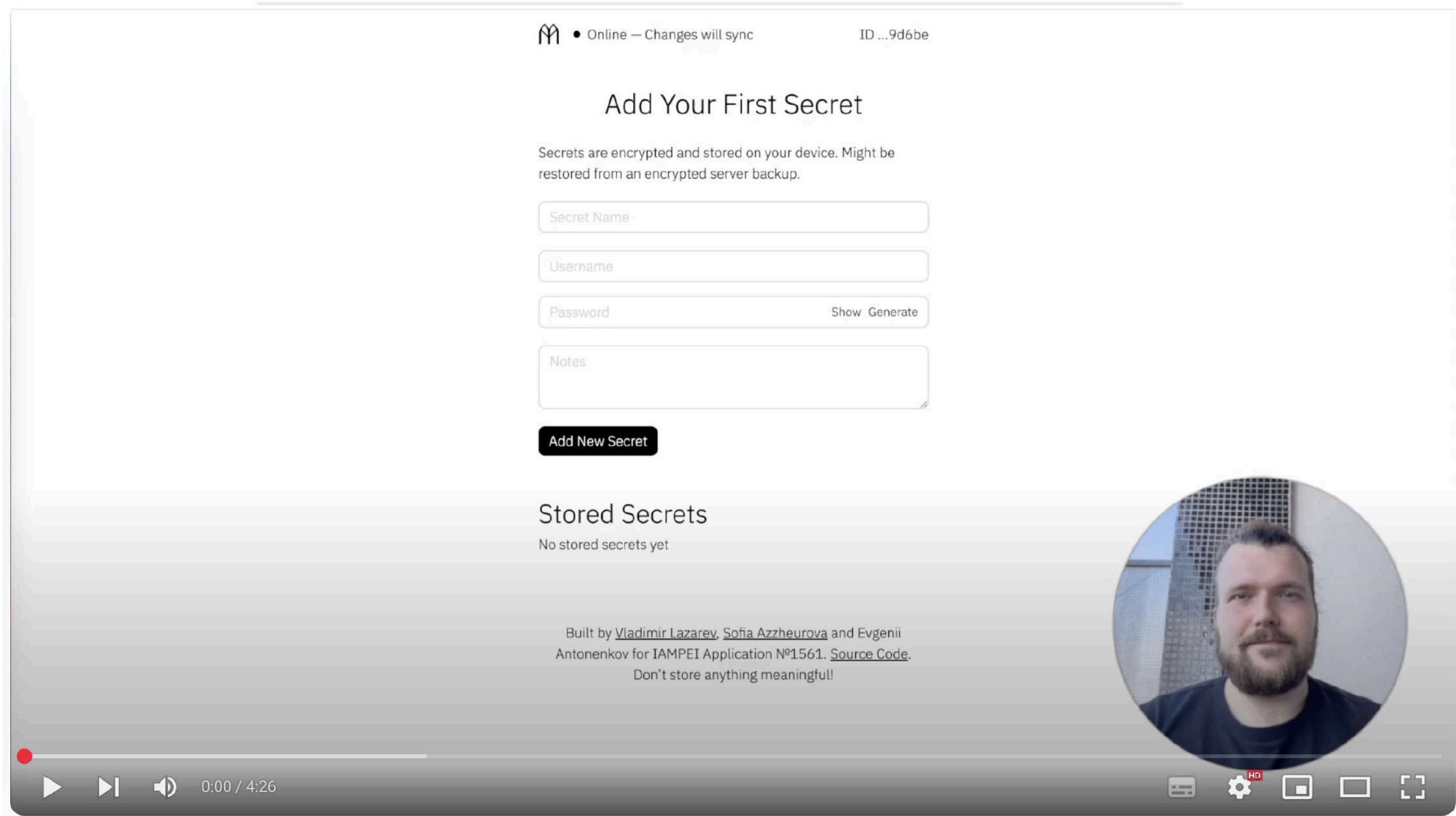
▼ Apple ID
    Username: laidrivm@gmail.com
    Password:
    ********************************   Show

    Notes:
    Serbian region

Built by Vladimir Lazarev, Sofia Azzheurova and Evgenii Antonenkov for IAMPEI Application №1561. Source Code. Don't store anything meaningful!
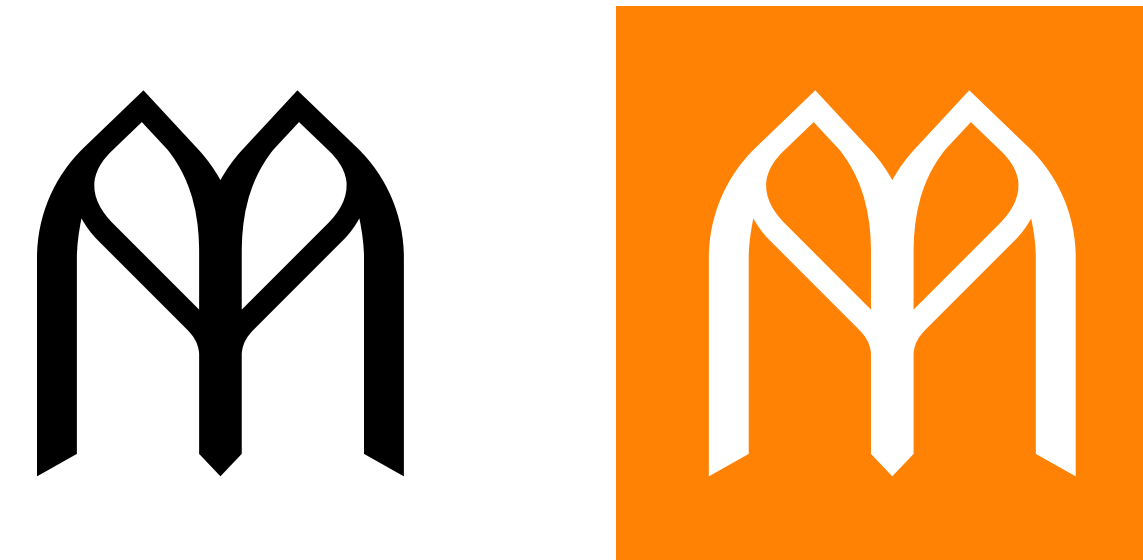
Prototype Overview

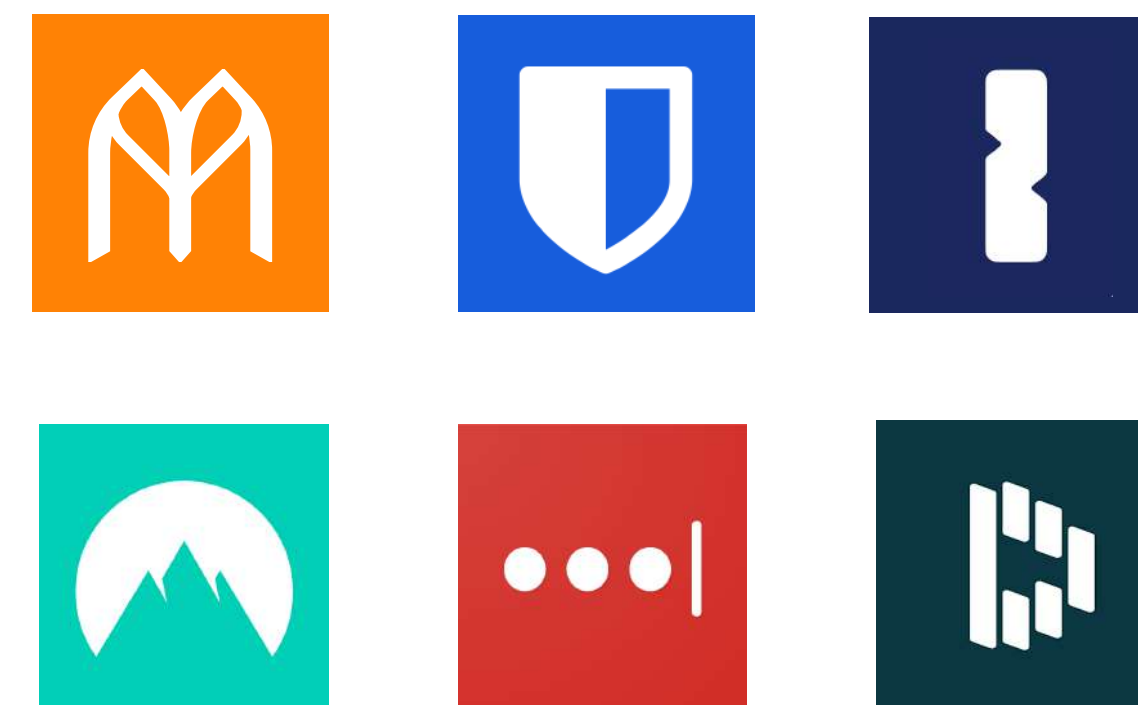Watch the demonstration

Branding Approach

Name

Mellon is named so after a riddle from Tolkien's The Lord of the Rings books. There was a door with an inscription "Speak friend and enter" and one should say "friend" in Elvish to open it.

Logo

We used a door and a key as main metaphors combining them with a letter M. We were inspiring by runes, which was reflected in the logo outline. Elvish aesthetics also influenced us: the logo could easily be an arc of a fantasy castle. Finally, we follow minimalism ideology, trying to achieve maximum value or sense with minimal means.
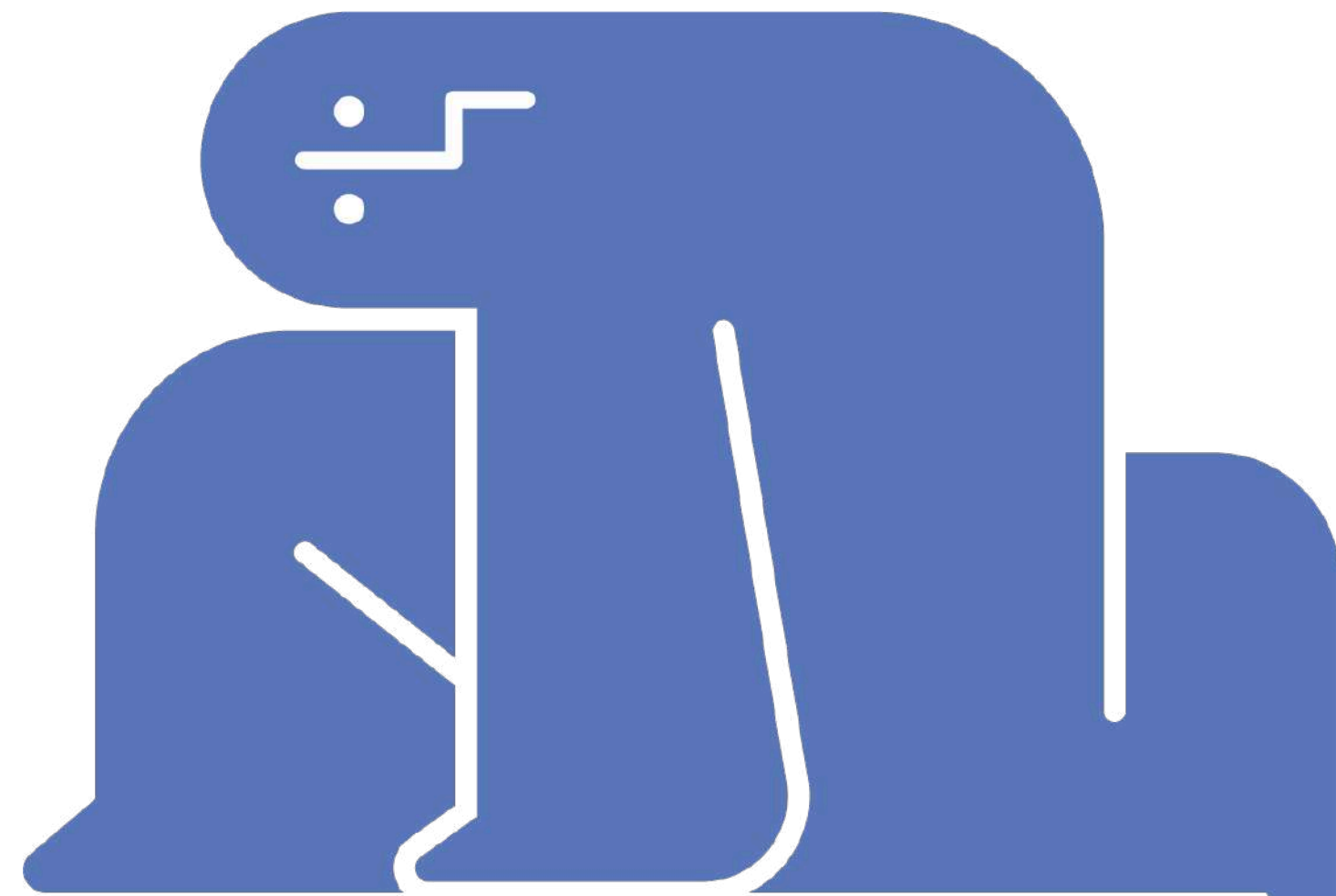
How Mellon logo stands out from competitors

Branding Approach

Brand Personality

— Trustworthy (security-first mindset)
— Independent (offline-first by design)
— Modern & Human (clear UX, no jargon)

Tone of Voice

Calm, clear, and privacy-respecting. No fearmongering — we build confidence through transparency.

IBM Plex Sans
Mellon — Keep Your Secrets

Typography

A friendly Grotesque style typeface published in open source under permissive OFL license. Illustrates the unique relationship between mankind and machine. Designed to be timeless and distinct. We use 300 as the main weight to highlight the simplicity, lightness, grace of our product.

Next Steps

Encryption key transfer

Add a quick description of each thing, with enough context to understand what's up.

Password generation

Keep 'em short and sweet, so they're easy to scan and remember.

Shamir's Secret Recovery

Keep 'em short and sweet, so they're easy to scan and remember.

Beta testing

If you've got a bunch, add another row, or use multiple copies of this slide.

About the Team

Vladimir Lazarev

Tech leader scaled teams up to 50 engieers
and building products for 20kk MAU
7 years of engineering and management
experience

Sofia Azzheurova

UX/UI visionary with a track record of
boosting conversion rates with creatives
5 years of digital design experience

Evgenii Antonenkov

Performance marketing expert driving
effective digital strategies with $1M-$2.2M
annual budgets
6 years of digital marketing experience

Combined Strengths

Deep technical expertise, strategic vision,
and proven market execution

Prior international experience and a commitment
to building a robust, secure product
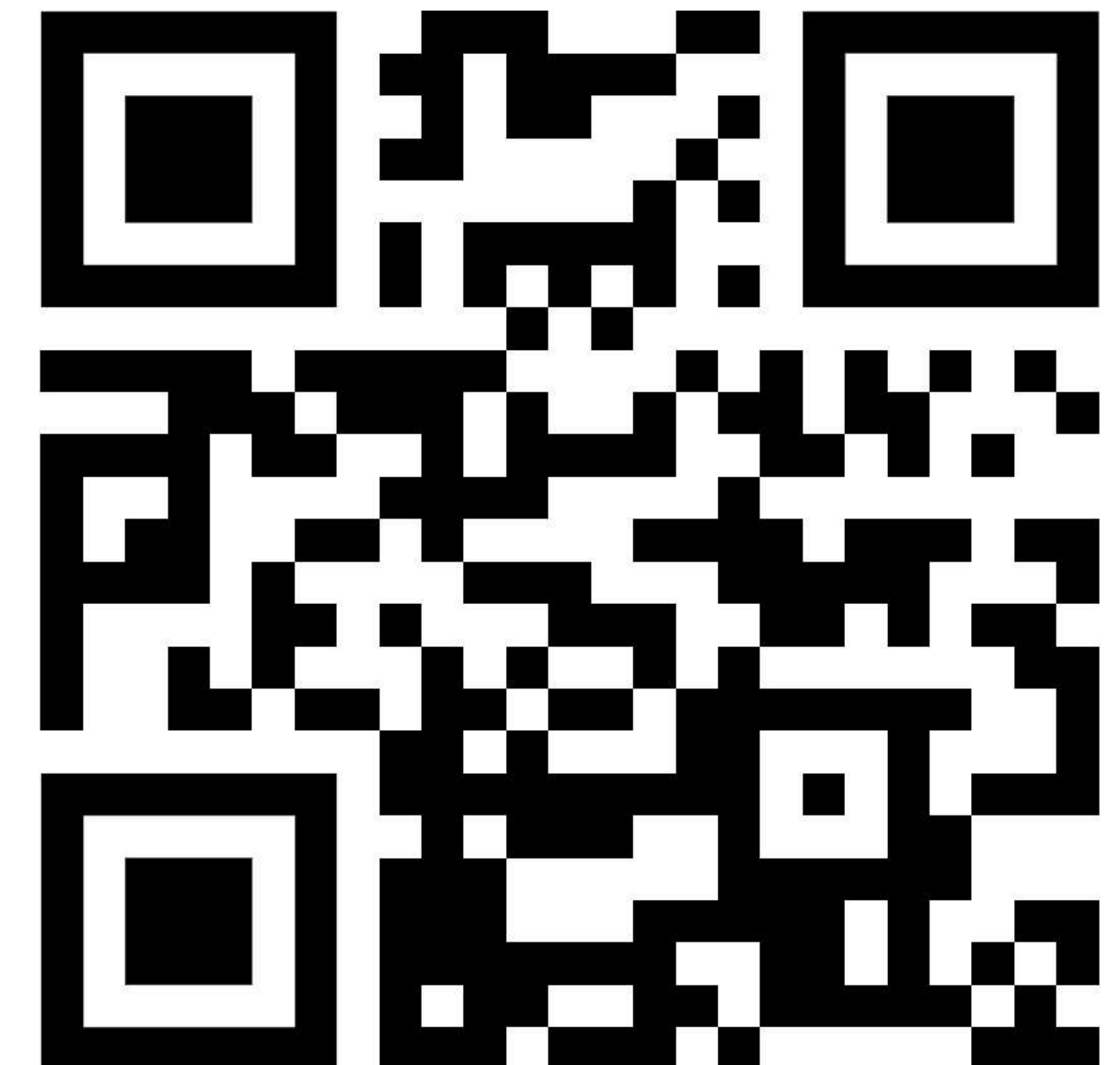
Thank you for your attention!

Let's build the future of digital security together

Please support our application №1561 for us to implement our secure and innovative solution.

Contact Vladimir on any questions:
laidrivm@gmail.com

Find out more about Mellon

Check out the prototype