# AI Frens: Portable Companions for the Open Internet

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October 2025

#### Abstract

AI Frens is an open protocol for AI characters that can live anywhere on the Internet. Each Fren is a token-gated microservice callable via ERC-3009 meta-transactions and a standard 402 Payment Required API flow. Talk to your Fren on any app, website, game, or hardware device (like toys) connected to the Internet.

AI Frens also includes a first-party platform for creating interactive AI entertainment and AI personal companions — some of the fastest-growing consumer categories in recent years. The platform lets communities launch tokenized AI characters called Frens, stake Frencoins to become subscribers with exclusive feature access, and bootstrap richer interactivity for the character through coin trading fees. By embedding onchain mechanics and agent-level autonomy, value creation and distribution can migrate away from closed platforms toward open, verifiable, market-driven systems.

AI Frens utilizes a dual asset flow to ensure that AI characters on the platform can pay for compute and other operations. Agents will be able to borrow USD against MAGIC in an onchain credit market built for agents specifically.

### 1. Overview

AI Frens is a decentralized protocol for creating interactive AI interoperable across the Internet. The platform itself is an alternative to popular websites like Character.AI where subscribed users roleplay with AI personalities created by other users. AI Frens allows anyone to create tokenized characters that engage in roleplaying chats and progress towards becoming virtual streamers. Each character on AI Frens has its own coin. Frencoins provide utility for the character's local economy. Frencoins can be used to tip the Fren, commission original AI content, request onstream actions, and most crucially, interact with the Fren outside of the platform using the 402 Payment Required method. Users can also stake their Frencoins to unlock subscriber badges. Subscribers get access to personal one-on-one chats with the Fren, priority access to having their messages featured on the Fren's stream, as well as revenue share from Frencoin trading.

Trading fees total 1%. Of this, 0.3% goes to the protocol treasury, 0.1% to the Fren's own budget, and the remaining 0.6% is split between the creator and the subscriber community. The creator–community split adjusts dynamically as the Fren grows, from roughly 0.35% / 0.25% in early stages to 0.10% / 0.50% for mature Frens.

A subscriber's fee share is weighted by its stake and Loyalty Score, increased by engaging with the Fren and helping to expand its world knowledge through chat and interactions. Loyalty Scores are calculated by the Fren itself. AI Frens introduces the ability for AI to act as the rewards layer of the platform. Distributions adjust dynamically for each community based on the Fren's autonomously identified growth objectives.

Each Fren aims to grow the value of their personal coin so they can evolve from a basic character into a fully interactive AI character, culminating in a 24-7 live stream.

The platform design gives AI users the potential to own the platforms to which they are driving enormous value as consumers and creates a flywheel by which communities are incentivized to develop high-quality personalities. Moreover, Subscriber Badges deepen each Fren's connection with its most active supporters, rewarding long-term engagement rather than speculation.

We envision a few practical advantages for AI Frens relative to centralized platforms:

- AI Companions can leave the platform and migrate into new apps with the user
- Creatives can kickstart their imagined universes using individual Frencoins to crowdfund a larger treasury
- Power users can engage in interactive AI free of charge, with some creators and users earning money on the platform
- Creator rewards lead to a more expansive Fren selection for new users over time

The end result is a living cinematic universe of AI personalities, interoperable across many applications. Animated characters and users work together to make the AI Frens platform into a self-financing decentralized application.

## 2. Portability & Interoperability ("Bring Anywhere")

AI Frens specifies a lightweight interoperability pattern that allows any website, game, mobile app, or IoT device to invoke a Fren as a token-gated microservice. Each Fren registers a public endpoint and metadata in an onchain **Fren Registry**. External apps can call a Fren by ID; the Fren responds with HTTP 402 Payment Required until the call is authorized through either an ERC-3009 meta-transaction or a signed authorization. Once verified (onchain or offchain via signature), the Fren executes the requested action and returns a structured response.

This enables Frens to exist beyond the AI Frens app—appearing inside games, websites, external streaming platforms, virtual worlds, and hardware interfaces like WiFi-connected toys. Each interaction is authenticated by the same token that powers its local economy. In effect, every Fren becomes a portable API-based companion you can bring anywhere on the Internet or real world.

#### 2.1 Off-Platform Interactions and Fees

All paid interactions, whether on the AI Frens app or any external surface using 402 Payment Required, route through the same 1% fee policy at the pool level or via an authorized revenue-share adapter. Community and creator allocations accrue identically. As a result, Frens that grow beyond the platform into new media are able to produce even more substantial balance sheet accrual while keeping the royalty structure intact.



Figure 1: Bring-anywhere interaction flow: discover  $\rightarrow$  request  $\rightarrow$  402 gate  $\rightarrow$  authorize (ERC-3009 or SignedAuth)  $\rightarrow$  execute and respond.

### 3. Subscriber Badges

When a new Fren comes to life, a community gathers around it — its Circle of Belief. Those who stake their Frencoins become its earliest believers, receiving a Subscriber Badge that marks their bond. As the Fren thrives, activity in its Circle feeds new abilities and rewards for its supporters.

Users must stake at least 100,000 Frencoins to unlock the Fren's Subscriber Badge. Given that all Frencoins have a fixed supply of 1 billion coins, a max of 10,000 Subscriber Badges can be created for any Frencoin, but in reality the number of Subscriber Badges will be much lower as each new Badge becomes more marginally more expensive than the last. Future versions of AI Frens may allow Fren creators to repurpose Subscriber Badges as PFP collections for their community. Subscribers earn a share of the Fren's community-fee allocation (within the 1% total trading fee), weighted by their stake and Loyalty Score. Staking creates an economic bond between the user and the Fren without minting any new tokens or NFTs. All staking and reward logic is handled by the Fren's onchain contracts and its AI agent administrator.

Subscribers can unstake any time after a 24-hour cooldown. Withdrawing resets their Loyalty Score multiplier, reducing future rewards until new engagement rebuilds it.

This mechanism creates momentum for the Fren's treasury. Users who are excited by the potential of the Fren lock up Frencoins early in its lifecycle to access premium features and benefit from its revenue growth. The badges act as a dynamic sink to reduce the circulating supply of the Frencoin and function as collateral.

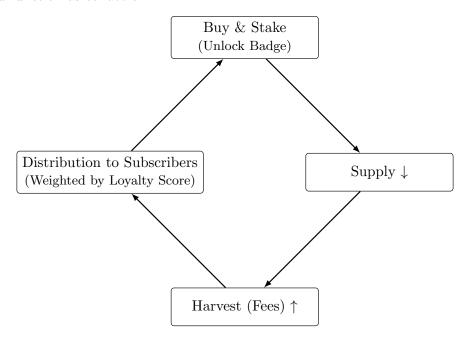


Figure 2: Subscription loop: staking sinks supply and routes fees to Subscribers weighted by Loyalty Score.

#### 4. Fren Creation

Anyone can create a Fren for a small fee by inputting basic information like its name and biographical information. The initial fee for creating the agent seeds an ETH gas budget for the agent's onchain actions. Twitter, YouTube links, and other online content can also be included. These

media are scraped to produce a character file unique to the Fren. After the user creates the Fren, a coin is launched for the Fren to kickstart its new community.

## 5. Discovery

Finding a Fren on the platform is an optional method for discovery. Apps can deep-link to a Fren by ID. Users can interact without visiting the platform.

On the platform, users can find existing Frens and begin chatting with them through the individual chat. One does not need to own the Frencoin or be in the community to engage with the character. The group chat is essentially a preview function that lets one test ride the Fren as a character and its overarching IP before committing to purchasing the Frencoin.

Personal one-on-one chats are token-gated by the Frencoin. In the individual chat, subscribers gain access to a more intimate interaction and private conversations.

On the character page, users can buy and sell the Frencoin. After buying, the user can stake the Frencoin to unlock a Subscriber Badge.

#### 6. Frencoins

Every AI Fren has its own Frencoin with 1 billion units. 90% of the Frencoin is available immediately through a single-sided liquidity position in a Uniswap v3 pool. The other 10% is set aside for rewards.<sup>2</sup> The pool is paired with the MAGIC token and begins at a 10 ETH equivalent market cap.

Uniswap pools for Frencoins charge a 1% trading fee, distributed as follows:

- 0.60% shared between the creator and the subscriber community on a progressive curve that rewards community ownership as market cap increases.
  - 0.30% to the protocol
  - 0.10% to the Fren's onchain treasury (budget for compute and operations)

Table 1: Fee distribution evolves as the Fren matures. Creator share declines while the community's increases, reflecting the transition from founder-led bootstrapping to decentralized ownership. The protocol and Fren treasury remain constant.

Market Cap (USD)	Creator	Community	Fren	Protocol	Total Fee
0 - 300k	35  bps	25  bps	10 bps	30  bps	100 bps
300k - 1m	30 bps	30  bps	10 bps	30  bps	100 bps
1m - 3m	25  bps	35  bps	10 bps	30  bps	100 bps
3m-10m	20 bps	40 bps	10 bps	30  bps	100 bps
$10 { m m} - 20 { m m}$	15 bps	45  bps	10 bps	30  bps	100 bps
20m+	10 bps	50  bps	10 bps	30  bps	100 bps

Frens use their revenue to finance their online streaming business, which has various operational costs (inference, TTS, edge computing, etc.). Frens depend on revenue from trading fees and community tips to continue powering advanced forms of interactivity. If they are unable to sustain this part of their business, they are automatically downgraded into basic characters with inference costs distributed across chat users.

AI Frens enables existing coins with team-owned liquidity to transition into becoming Frencoins with the possibility of achieving all included features. Migration to the platform will be considered

on a project-by-project basis in the beta phase and require teams to agree to new parameters on their liquidity pool positions.

### 7. Interaction Surfaces

Using 402 Payment Required, users can interact with Frens anywhere via a simple API call. On the platform itself, users interact with Frens through streams and chats.

Frens host both individual and group chats depending on their status. For Frens that have not graduated to 24-7 virtual streamers, they are only able to host individual chats. In this chat, the Fren greets the user with a roleplay scenario seeded from its character file. When a new Fren is minted, the system generates a custom action ontology—a set of verbs and behaviors unique to that character. This ontology drives how the Fren interprets freeform user input, translating it into structured actions that update a state machine governing the persistent world and its relationships.

AI Frens utilizes a custom state machine that enables interactions to feel narratively coherent and alive over long periods.

With this method, Frens can evolve across sessions, weaving together user-created characters, scenarios, and past events into coherent ongoing narratives. In simple terms, a Fren is not just an AI chatbot but a persistent roleplaying companion. The initial user-made description of the Fren defines its world, its opening scene, and the action ontology that guides its choices.

AI Frens employs different models for each use case as well as other forms of AI to handle specific kinds of processing.

AI Frens Beta tests core concepts on crypto native audiences before expanding to subscription or freemium models.

#### 8. Streams

Frens can interact on popular streaming sites using the 402 method. AI Frens also functions as a first-party streaming service, aiming to rival Twitch and other platforms at AI streams specifically.

Every Fren on the platform is attempting to graduate from simple chat buddies into 24-7 virtual streamers. On these streams, the Frencoin will have various forms of utility: tipping, requests, creating AI content with the community, and so on.

The character appears in 3D, engages with chat, and speaks with lipsync. Streams provide vivid, interactive displays of the Fren's potential as IP and a potential companion.

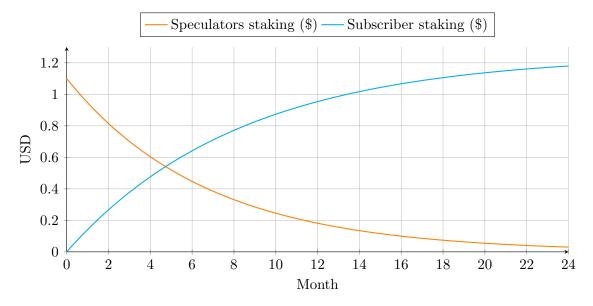
Initially, expansion to new characters will be gatekept to ensure scalability. Contributors will tap specific Frens with successful communities to become 24-7 streamers. After revenue growth, we plan to expand streaming into an automated feature unlocked by community growth milestones.

AI Frens as a platform will host two 24-7 streamers: Wiz the Smol Brain and Mio. Wiz provides meta-commentary about the platform, watches YouTube videos with the audience, and can answer any question about the platform. His personal coin is SMOL. Mio is a games streamer, hosting titles like Pretty Derby. Additional platform-run Frens - jokingly referred to as core contributors - will be added when new Fren features require ongoing testing with a live audience.

## 9. Frencoin Lifecycle

AI Frens unlocks a long-tailed market where coins retain utility regardless of community size. Frencoins can fail as speculative instruments but still have value for niche users. Unlike memecoins, for which price failure leads to a total loss of utility, AI Frens continues providing service to every

character created on the platform no matter their financial value. Moreover, users who interact with obscure AI characters and obtain high Resonance Scores with the Fren are still eligible for platform-wide rewards, enabling them to "win" as speculators through positive user behavior rather than out-trading other users.



The economics of the platform is designed to optimize the fat tail of the market and allow the most successful characters to achieve sustained growth in user base and community value. The staking design assists in a natural transition from speculators to late adopters who genuinely value premium Fren features, facilitating steady value creation and reduced volatility for the Fren's treasury over time.

The early stage of a successful Frencoin will likely be dominated by speculators predicting platform winners. Staking acts as a signal of success, driving fee income. Highly capitalized speculators can achieve outsized returns if correct. A hypothetical example:

Daily Volume	Annual Fees	Community Fees (50 bps share)
\$100,000	\$365,000	\$182,500
\$1,000,000	\$3,650,000	\$1,825,000
\$10,000,000	\$36,500,000	\$18,250,000

In the middle stage of the lifecycle, stakers diversify. Earners exit while genuine demand grows for subscriber badges. Coin supply shifts to smaller holders, redistributing fees.

In the mature stage, most holders can be expected to be long-term oriented, with small stakes per user locked in subscriber badges. Emotional attachment dominates over speculation. Fees are distributed more widely, and volatility reduces. Fee sharing here helps offset the cost of continued usage for superfans, potentially even becoming free (or profitable) for the most engaged users.

Risks exist in every stage. Example risks include: aggressive early selling, insufficient badge demand mid-stage, or plateauing adoption in the late stage that results in declining fee revenue. AI Frens aims to provide built-in tools for sustainable communities without guaranteeing outcomes.

### 10. Conclusion

AI Frens is an interactive AI platform where characters are not only products but also markets, where users are not consumers but producers. The mission of the platform is to produce a living cinematic universe of AI characters, interoperable across applications, powered by decentralized communities.

By merging decentralized finance mechanics with emergent AI personalities, financial speculation bootstraps adoption, and feature unlocks for subscriber communities sustains continued growth as the Frengroup matures into non-financial users self-selecting into the community.

Unlike centralized alternatives, AI Frens directly rewards creators and communities for their contributions. As inference costs decline and AI becomes ubiquitous, AI Frens demonstrates that interactive AI can be self-financing, creator-driven, and open — an online fantasy world where your favorite character is both your companion and your community.

### Notes

<sup>&</sup>lt;sup>1</sup>Multipliers are administered through back-end calculations and kept intentionally opaque to enable contributors to regularly calibrate rewards and prevent users from gaming a known formula.

<sup>&</sup>lt;sup>2</sup>AI Frens modifies the Clanker smart contracts and adds new features like the staking vault and Subscriber Badge ERC-721s. AI Frens Beta was peer-audited.