Momentmm.xyz Official Documentation

Part I: Introduction & Core Concepts

1. Understanding Momentmm

1.1. What is Momentmm?

Momentmm is a next-generation event ticketing platform architected on Web3 principles to resolve the core issues plaguing the live events industry. The platform's core mission is to restore fairness, transparency, and value to the live event ecosystem by leveraging decentralized technology to forge a direct, unbreakable bond between creators and their communities.[1]

Momentmm is positioned not merely as a superior ticketing utility but as the foundational infrastructure for the next generation of fan-creator relationships. By representing each ticket as a unique Non-Fungible Token (NFT) on a scalable blockchain, Momentmm transforms ephemeral access into perpetual, value-generating community engagement. This architectural shift eliminates counterfeiting, guarantees verifiable ownership, and restores integrity to the entire ticketing lifecycle.[1]

The platform is introduced as a direct response to the systemic failures of the legacy ticketing industry, a market in crisis that has proven technologically incapable of protecting fans and fairly compensating creators. It is enabled by the unique convergence of a deeply flawed incumbent system and India's emergence as a global Web3 superpower, a nation leading the world in grassroots cryptocurrency adoption and fostering a deep ecosystem of developers and digitally native consumers. This context creates an unprecedented market opportunity for a decentralized, Web3-native solution that can achieve mass-market traction.[1]

1.2. The Problem: A Market Under Siege

The Indian event ticketing industry is a story of immense potential shackled by deeply entrenched systemic failures. While the formal market is valued at over USD 3.31 Billion and is projected to grow significantly, this figure fails to account for the enormous "grey market" created by ticket scalping, which siphons billions of dollars in value away from the legitimate ecosystem.[1] This ecosystem is under siege from technological vulnerabilities, regulatory ambiguity, and sophisticated bad actors who exploit these weaknesses for immense profit.[1]

The central pathology of the current system is the "scalping epidemic." This is no longer a fringe activity but a sophisticated, technology-driven operation. The primary weapon is the automated software program, or "bot," which can execute purchases at superhuman speeds. For high-demand events, it is estimated that over 40% of all online ticket purchases are made by these scalper bots, creating a technological asymmetry where genuine fans stand little chance.[1]

The real-world consequences of this systemic failure have been starkly illustrated in recent high-profile events in India. During the 2025 Coldplay tour announcement, an estimated 13 million people attempted to access the official vendor for just 150,000 tickets, causing immediate server crashes. Within minutes of the "sell-out," tickets appeared on unauthorized secondary marketplaces with extreme price inflation. A ticket with a face value of ₹12,500 was listed for over ₹707,000, a markup of over 5,500%. This incident sparked widespread public outrage and prompted a police investigation.[1] A similar pattern emerged for Diljit Dosanjh's 2024 tour, where tickets sold out in six minutes and reappeared on resale sites at markups of over 6,800%, leading to the filing of Public Interest Litigation pleas before the Delhi High Court.[1]

Beyond scalping, the legacy system is plagued by fundamental inefficiencies. The reliance on traditional digital formats like PDF tickets or simple QR codes leaves the system vulnerable to fraud and counterfeiting. A single digital file can be easily duplicated and sold multiple times, leading to scenarios where multiple fans arrive at a venue with the same fraudulent ticket.[1] This is enabled by a "legal and technological vacuum" in India. Legally, ticket scalping operates in a grey area with no specific central legislation prohibiting the practice. Technologically, incumbent Web2 platforms, despite basic countermeasures, are fundamentally outmatched by the sophisticated, AI-powered bots wielded by scalping syndicates.[1] This confluence of failures has cultivated deep and pervasive mistrust among consumers, poisoning the relationship between creators and their communities.[1]

1.3. The Solution: How NFT Ticketing Works

Momentmm's solution is a fundamental architectural shift that leverages Web3 technology to embed fairness and transparency directly into the ticket itself. An NFT ticket is a unique digital asset stored and managed on a blockchain, a decentralized and distributed digital ledger that makes it extremely difficult to alter or manipulate ticket data.[1] Each ticket is a cryptographically unique token, making it impossible to counterfeit or duplicate, with its ownership history transparently recorded on the blockchain for anyone to verify.[4]

This technology represents a fundamental change in the concept of ticket ownership. A traditional ticket, whether physical or a digital QR code, is merely a revocable *license to attend* an event. The user does not truly own it; they hold a permission slip controlled by a centralized platform.[1] An NFT ticket, in contrast, represents

true, verifiable ownership of a digital asset. It is a unique token held in the user's personal, non-custodial digital wallet, giving them complete control.[1] This distinction is the foundation for all subsequent benefits. Because the fan truly owns the asset, it can have a life and utility that extends far beyond the event's conclusion, serving as a digital collectible or a key to future engagement. Furthermore, because the asset is programmable, the rules of its use—such as resale price—are embedded within the asset itself and travel with it, rather than being mere platform policies that are easily circumvented.[1]

The lifecycle of an NFT ticket on the Momentmm platform is designed for security and transparency at every stage [1]:

1. **Minting:** An event organizer creates the event on the Momentmm dashboard and "mints" a series of unique NFTs, one for each ticket. Each NFT contains immutable metadata defining the event details and can be customized with digital art, transforming it into a collectible from its inception.[1]
2. **Sale:** Fans purchase the NFT ticket through the Momentmm marketplace. Upon purchase, the NFT is transferred directly to the fan's personal digital wallet, confirming their sole ownership of the asset.[1]
3. **Authentication:** At the venue, the fan presents a dynamic QR code from their Momentmm app. Staff scan the code, which instantly queries the blockchain to verify that the fan's wallet is the current, legitimate owner of that specific NFT. This process is instantaneous and makes forgery technologically impossible.[1]
4. **Resale:** If a fan cannot attend, they can list their NFT ticket for sale on the integrated Momentmm secondary marketplace. The entire transaction is governed by the rules pre-programmed into the ticket's smart contract by the original event organizer.[1]

This model bypasses the legal and technological vacuum of the old system by creating a self-enforcing ecosystem built on the principles of cryptographic certainty and programmable

logic.[1]

2. The Momentmm Advantage

The architectural innovations of the Momentmm platform culminate in a series of strategic advantages that fundamentally redefine the economic model of the live events industry. The platform moves beyond incremental improvements to create new forms of value and redistribute existing value more equitably among stakeholders.

1. **Eliminating Scalping and Restoring Fair Value:** The most immediate and disruptive advantage is the platform's ability to surgically remove the parasitic scalping economy. By embedding market rules, such as maximum resale price caps, directly into the smart contract of each ticket, the system makes predatory price gouging technologically infeasible within the ecosystem.[1] The billions of dollars in economic value that are currently "leaked" and captured by anonymous scalping syndicates are reclaimed and retained within the legitimate ecosystem. This preserves the intended price for fans and concentrates the financial upside with the event's creators, rebalancing the market's economic structure from an extractive model to a generative one.[1]
2. **Unlocking New, Perpetual Revenue Streams:** The traditional event model is built on a single, terminal revenue event: the primary ticket sale. Momentmm shatters this limitation by introducing powerful, perpetual revenue streams. The concept of automated secondary market royalties allows creators to program a commission (e.g., 5-10%) that is automatically paid to them on *every single subsequent sale* of that ticket, forever.[1] An event that remains culturally relevant can continue to generate revenue for its creators long after the doors have closed, transforming a one-time income source into a long-tail financial asset. Additionally, the digitization of tickets as NFTs opens the door to a new asset class of digital merchandise and collectibles, creating high-margin revenue opportunities with near-zero marginal cost of production.[1]
3. **Deepening the Fan-Creator Connection:** The NFT ticket ceases to be a disposable proof-of-purchase and becomes a "digital key" or "fandom passport" to a verifiable community.[1] The wallet holding a fan's NFT tickets becomes a direct, authenticated line of communication. A creator can airdrop exclusive content, merchandise discounts, or pre-sale access for future events directly to the wallets of past attendees.[1] This capability for direct, targeted engagement disintermediates the social media platforms and email service providers that currently mediate the fan-creator relationship, creating a more intimate and valuable connection. Over time, a user's wallet evolves into a verifiable, on-chain record of their support and attendance history, a powerful new form of social and cultural capital that allows creators to identify and reward their most loyal supporters with unparalleled precision.[1]

The following table provides a clear comparison of the legacy ticketing system versus the Momentmm platform, highlighting the fundamental shift in value, security, and control.

Feature	Legacy System	Momentmm Platform
Ticket Authenticity	Vulnerable to counterfeits (PDF/QR clones)	Guaranteed by Blockchain immutability
Scalping Vulnerability	Extremely High (Bot-driven)	Programmatically Controlled (Price caps)
Secondary Market Control	None; occurs on unregulated 3rd-party sites	Full control via smart contract rules
Creator Royalties	Zero on secondary sales	Automated & Perpetual on every resale
Post-Event Utility	None; ticket becomes worthless	High; becomes a digital collectible & community key
Fan Data Access	Limited & Opaque (Primary buyer only)	Direct & Verifiable (All current owners)
Market Transparency	Low; hidden supply and demand	High; all transactions on a public ledger
Fan Ownership	License to attend	True, verifiable ownership of a digital asset

Part II: Platform Guides for Users

3. For Event Organizers & Creators

This guide provides a comprehensive overview of the Momentmm platform from the perspective of an event organizer or creator. It details the powerful, intuitive tools available to manage events, control markets, and engage with communities.

3.1. Getting Started: Onboarding and Dashboard Overview

The onboarding process for organizers is designed to be streamlined and self-service. It begins with creating an organizer profile on the Momentmm web portal. During this setup, organizers will connect a secure cryptocurrency wallet. This wallet is a critical component of the ecosystem, as it serves as the destination for all revenue generated from primary ticket sales and, crucially, for the automated royalty payments collected from any secondary market transactions.[1]

Upon logging in, the organizer is presented with the main dashboard, which serves as the central command center for all event-related activities. The dashboard is intuitively designed to provide at-a-glance information and easy navigation to the platform's core functionalities. The key sections include:

- **Events:** This is where new events are created and existing events are managed. Organizers can view a list of all their past, current, and upcoming events, and access the specific settings for each one.
- **Analytics:** This section provides access to the real-time data dashboard, offering deep insights into ticket sales, secondary market activity, and audience demographics.[1]
- **Royalties:** A dedicated portal for tracking and managing the revenue earned from secondary market sales. It provides a transparent ledger of all royalty payments received.[1]
- **Community:** This area houses the fan engagement tools, allowing organizers to interact with their audience by viewing on-chain attendee lists and initiating actions like airdrops.[1]

3.2. Event Creation & Ticket Minting

Creating a new event on Momentmm is a straightforward process that grants organizers complete control over their ticketing setup. From the "Events" section of the dashboard, an organizer initiates the creation flow, which involves several key steps:

1. **Defining Event Parameters:** The organizer first inputs the standard event details, such

as the event name, date, time, venue, and a detailed description.[1]

2. **Designing the NFT Ticket:** A key feature of Momentmm is the ability to transform a simple ticket into a piece of digital art and a desirable collectible. Organizers can upload custom artwork, logos, or even short video files to serve as the visual representation of the NFT ticket.[1] This enhances the fan experience and gives the ticket intrinsic value as a digital souvenir from its very inception.
3. **Establishing Pricing Tiers:** The platform supports the creation of multiple ticket types and pricing tiers, just like traditional systems. Organizers can easily define categories such as "Early Bird," "General Admission," "VIP," or any other custom tier, each with its own price and quantity.[1]
4. **Minting the Tickets:** Once all parameters are set, the organizer proceeds to "mint" the tickets. This is the technical process of creating a unique, non-fungible token on the Polygon blockchain for every single ticket available for the event.[1] The Momentmm platform handles the complexities of this blockchain transaction in the background, making it a simple one-click action for the organizer. The result is a series of cryptographically secure digital assets, each representing one verifiable ticket to the event.

3.3. The Rules Engine: Programming Fairness with Smart Contracts

This is the most powerful and revolutionary feature of the Momentmm platform, providing organizers with an intuitive, no-code interface to define the economic rules of their event's ticketing market. These rules are encoded directly into the ticket's smart contract, making them immutable and automatically enforceable by the blockchain itself.[1]

This capability represents a profound power shift in the events industry. In the legacy system, market rules are dictated by the opaque terms of service of a centralized platform and the general ineffectiveness of its anti-bot measures. The event organizer has no meaningful control over the secondary market where a significant portion of their event's value is realized.[1] Momentmm changes this by decentralizing economic policy-making. The platform provides the tools for the organizer to become a micro-regulator for their own event's economy. They can choose to allow a completely free secondary market, a capped and controlled market, or even disallow resales entirely. The platform is no longer the central authority dictating market behavior; it is an infrastructure provider that empowers thousands of individual creators to define and enforce their own economic policies, fostering a truly decentralized creator economy.

Key programmable rules include:

- **Setting Resale Price Caps:** To combat predatory scalping, an organizer can set a

maximum resale price. For example, they can implement a rule that a ticket can never be resold for more than 110% of its original face value.[1] This rule is not a suggestion; it is an unbreakable line of code. Any attempt to list the ticket on the marketplace for a higher price will be automatically rejected by the smart contract, rendering price gouging technologically impossible within the ecosystem.[1]

- **Defining Automated Royalties:** Organizers can program a perpetual royalty to be paid to them from every secondary market transaction. For instance, they can embed a rule that 5% of the sale price of every resale is automatically and instantly distributed to their designated wallet.[1] The system also allows for royalty splits, where the revenue can be allocated to multiple wallets. An organizer could, for example, set a 7% royalty, with 4% going to the event organizer, 2% to the performing artist, and 1% to a designated charity, all handled automatically and transparently by the smart contract.[1]

3.4. Analytics & Fan Insights

The Momentmm platform provides organizers with a live analytics dashboard that offers a transparent, 360-degree view of the entire ticket lifecycle—a capability impossible in the legacy system where secondary sales are opaque.[1] This data empowers organizers to understand the true market dynamics of their events and gain verifiable insights into their audience.

The dashboard provides real-time monitoring of key metrics, including:

- **Primary Sales Velocity:** Track how quickly tickets are selling across different tiers, allowing for dynamic marketing adjustments.
- **Secondary Market Volume:** Monitor the number of tickets being listed and sold on the secondary market, providing a clear signal of ongoing demand.
- **Average Resale Price:** See the average price at which tickets are being resold. Even with a price cap, this data reveals how close to the maximum allowed price the market is trading, indicating true demand levels.[1]

Crucially, because every ticket is a traceable asset on the blockchain, the platform provides a verifiable list of the *current* ticket holders. Unlike traditional systems that only know the initial purchaser, Momentmm allows organizers to see the wallet addresses of every single person who will actually be attending the event.[1] This provides unprecedented, accurate audience data that can be used to tailor future events, understand fan distribution, and build more effective marketing campaigns.

3.5. Building Your Community: Post-Event Engagement Tools

On the Momentmm platform, the end of an event is the beginning of a long-term community relationship. The NFT ticket, now a verified proof of attendance, transforms into a permanent digital link between the creator and the fan.[1] The on-chain record of every attendee functions as a powerful, verifiable Customer Relationship Management (CRM) tool for the Web3 era.

Organizers can use this immutable record to directly engage their most loyal fans through "airdrops"—the process of sending digital assets directly to a list of wallet addresses. This creates a direct communication channel that bypasses the noise of social media algorithms and email spam filters. Step-by-step, an organizer can:

1. Access the "Community" tab on their dashboard for a past event.
2. View the list of all wallet addresses that held a ticket for that event.
3. Initiate an airdrop to this specific group of verified attendees.

The assets airdropped can take many forms, fostering a durable community relationship and rewarding loyalty [1]:

- **Loyalty Tokens:** A unique token that signifies membership in an exclusive fan club.
- **Discount Vouchers:** An NFT that grants a discount on official merchandise.
- **Exclusive Content:** A token that unlocks access to a private recording of the concert or behind-the-scenes footage.
- **Priority Access:** A special link or token that provides pre-sale access for the organizer's next event, ensuring their most dedicated fans get the first opportunity to buy tickets.

4. For Fans & Attendees

This guide is designed for fans and event attendees, explaining how Momentmm transforms the frustrating and insecure process of buying tickets into a simple, secure, and value-enhancing experience.

4.1. Getting Started: Your Secure Digital Wallet

The fan journey begins with the Momentmm mobile application, available for standard mobile operating systems. The app is engineered to abstract away the complexities of blockchain technology, providing a user experience that is as simple and intuitive as any leading Web2

application.[1]

Upon signing up, a secure, non-custodial digital wallet is automatically created for the user and integrated directly within the app.[1] This wallet is the fan's personal vault for all their digital assets acquired on the platform. It will hold their NFT tickets, any digital collectibles they receive, and any loyalty tokens airdropped by creators.

The term "non-custodial" is a critical element of security and ownership. It means that the user, and only the user, has control over their assets. They hold the cryptographic keys to their wallet, ensuring that no one else—not even Momentmm—can access or move their tickets without their permission. This provides true, uncompromisable ownership and control, a fundamental departure from traditional ticketing apps where the user merely holds a revocable license controlled by the platform.[1]

4.2. Navigating the Marketplace: Primary & Secondary Sales

The Momentmm app features a single, unified, and trustworthy marketplace to discover and purchase tickets for upcoming events.[1] The interface is designed for clarity and ease of use, allowing fans to browse events, view details, and select their tickets.

The marketplace clearly distinguishes between two types of sales:

- **Primary Sales:** These are tickets being sold for the first time, directly from the official event organizer.
- **Secondary Sales:** These are authentic tickets being resold by other fans who can no longer attend the event.

When browsing secondary listings, the fan is provided with a level of transparency and security that is absent in the traditional grey market. Each secondary ticket listing clearly displays the ownership history of the ticket on the blockchain and, most importantly, is guaranteed to be priced within the cap set by the original event organizer.[1] This completely eliminates the fear of price gouging and the need to risk using dubious third-party sites.

The checkout process is designed for maximum accessibility and simplicity. The platform supports a full range of familiar fiat payment options, including UPI, credit cards, and debit cards, which are processed seamlessly in the background.[1] For users who prefer to pay with cryptocurrency, that option is also fully supported. This hybrid payment model ensures that anyone can use the platform, regardless of their familiarity with Web3.

4.3. The Event Experience: Verification and Access

Momentmm streamlines the entire event day experience, from ticket transfers to venue entry.

If a fan needs to give a ticket to a friend, the process is no longer an insecure email forward of a PDF file. Instead, it is an instant and secure peer-to-peer transfer within the app. The user simply selects the ticket in their wallet, enters their friend's Momentmm username or wallet address, and confirms the transfer. The NFT ticket is moved from one wallet to the other on the blockchain in seconds, with the ownership change permanently recorded.[1]

Entry to the venue is a simple, three-step process designed for speed and security:

1. **Open the App:** The attendee opens the Momentmm app on their mobile device.
2. **Display the QR Code:** They navigate to their ticket, which displays a dynamic QR code. This code is linked directly to the NFT in their wallet and may change periodically to prevent screenshot fraud.
3. **Get Scanned:** The attendee presents the QR code to venue staff, who scan it with a dedicated application. The scan instantly verifies on the blockchain that the user is the legitimate owner of the ticket, granting them entry.[1]

This cryptographically secure verification process makes ticket duplication and fraud technologically impossible, ensuring a smooth and safe entry experience for all legitimate fans.

4.4. Your Digital Collection: The Fandom Passport

With Momentmm, the ticket's utility does not end when the event concludes; it evolves. After being scanned for entry, the NFT ticket transforms from an access pass into a permanent, digital memento of a cherished experience—a modern-day ticket stub that cannot be lost or damaged.[1]

This digital souvenir can be held in the user's wallet as part of a growing collection, displayed in a digital gallery, or even traded as a collectible if the market for it exists. Over time, the user's Momentmm wallet becomes a verifiable "fandom passport".[1] It serves as an immutable, on-chain record of every event they have attended, every artist they have supported, and every community they have been a part of. This passport establishes their status as a loyal supporter in a way that is provable and permanent.

Furthermore, holding these post-event NFTs can unlock ongoing value. As described in the organizer's guide, creators can use the on-chain record of attendees to airdrop exclusive

rewards, such as special content, merchandise discounts, or priority access to future events.[1] The fandom passport, therefore, is not just a collection of memories; it is a key that unlocks a deeper, more rewarding, and continuous relationship with the creators and communities the fan loves.

Part III: Developer Documentation

5. Technical Architecture

This section provides a technical overview of the Momentmm protocol, its underlying blockchain infrastructure, and the core architectural decisions designed to ensure scalability, security, and a seamless user experience.

5.1. The Momentmm Protocol on Polygon

Momentmm is built on Polygon, a leading Layer-2 scaling solution for Ethereum. This choice is a strategic technical decision designed to meet the demands of a mainstream, high-volume consumer application.[1] While the Ethereum mainnet provides robust security and decentralization, its historically high transaction fees (known as "gas") and lower throughput make it economically and practically unviable for an application that needs to mint and transfer thousands of tickets for a single event.[18]

Polygon addresses these challenges directly, making it the ideal foundation for the Momentmm protocol. The key benefits of building on Polygon include:

- **High Throughput:** Polygon is designed to process a significantly higher number of transactions per second compared to the Ethereum mainnet, ensuring that the platform can handle peak demand during popular ticket drops without network congestion or delays.[15]
- **Low Transaction Fees:** Transaction costs on Polygon are fractions of a cent, which is essential for the economic viability of minting large quantities of NFTs and for enabling low-cost secondary market trades.[1]
- **EVM Compatibility:** Polygon is fully compatible with the Ethereum Virtual Machine

(EVM). This means that smart contracts written for Ethereum can be deployed on Polygon with minimal changes. This compatibility allows Momentmm to leverage the vast ecosystem of Ethereum's developer tools, security standards, and established best practices, ensuring a robust and secure application architecture.[10]

- **Robust Security:** As a commit chain to Ethereum, Polygon benefits from the security of the main Ethereum network while operating as a more scalable parallel chain, providing an optimal balance of security and performance for the platform's needs.[1]

5.2. The Lifecycle of a Momentmm NFT Ticket

From a technical perspective, the lifecycle of a Momentmm ticket involves a series of on-chain and off-chain interactions governed by smart contracts and the platform's backend services. Each ticket is an ERC-721 token, the standard for unique, non-fungible assets on EVM-compatible blockchains.[10]

1. **Minting:** The process is initiated by an organizer via the platform's API. The backend calls the mintTicket function on the main Momentmm smart contract. This function creates a new ERC-721 token with a unique tokenId and assigns its ownership to the organizer's wallet. The token's metadata—containing event details and the URI for the ticket's artwork—is stored immutably on-chain or on a decentralized storage network like IPFS.[1]
2. **Primary Sale:** When a fan purchases a ticket, a multi-step atomic transaction occurs. The fan's payment (whether fiat or crypto) is processed, and upon successful payment confirmation, the platform initiates a safeTransferFrom transaction on the smart contract. This transfers ownership of the specific tokenId from the organizer's wallet to the fan's wallet address. This transaction is recorded permanently on the Polygon blockchain.[1]
3. **Verification:** At the venue, the Momentmm scanner app reads the dynamic QR code presented by the fan. This code contains a signed message from the fan's wallet. The scanner's backend verifies this signature and then makes a read call to the smart contract's ownerOf(tokenId) function. This is a simple, gas-free query to the blockchain that returns the wallet address of the current owner of that specific NFT. If the returned address matches the fan's wallet address, verification is successful.[1]
4. **Secondary Market:** A fan lists their ticket on the marketplace by signing a message that authorizes the marketplace smart contract to transfer their NFT upon a successful sale. When a buyer purchases the ticket, the marketplace contract executes the transaction. It first checks against the getResaleRules function of the original ticket contract to ensure the sale price does not exceed the programmed cap. If valid, it facilitates the transfer of funds to the seller, automatically sends the programmed royalty percentage to the creator's wallet, and executes the safeTransferFrom call to move the NFT to the buyer's wallet.[1]
5. **Post-Event State:** After the event, the NFT remains a standard ERC-721 token in the

fan's wallet. Its state as a "used" ticket is managed off-chain by the Momentmm platform, but the token itself persists on-chain. This allows it to be used in third-party dApps that can read ERC-721 ownership, and it makes the owner's wallet a valid target for future airdrops from the event creator.[1]

5.3. Implementing Gasless Transactions

One of the most significant historical barriers to the mainstream adoption of Web3 applications is the concept of "gas fees." For any on-chain transaction (like buying or transferring an NFT), a user typically needs to pay a fee in the blockchain's native token (e.g., MATIC for Polygon).[1] This introduces considerable friction, as it requires a non-crypto-native user to first acquire a specific cryptocurrency and manage it in their wallet just to perform basic actions.[20]

This single technical hurdle can be a deal-breaker for mass adoption. The Momentmm platform is designed to onboard millions of Indian consumers who are digitally savvy but not necessarily Web3 experts. Therefore, eliminating this friction is not just a convenience feature; it is a critical strategic bridge to "cross the chasm" from a niche crypto product to a mainstream platform for all event-goers.[1]

Momentmm achieves this through the implementation of **meta-transactions**, creating a "gasless" experience for the end-user.[1] The technical flow is as follows:

1. **User Action:** A user wishes to perform an on-chain action, such as transferring a ticket to a friend. Instead of creating and sending a blockchain transaction themselves, their wallet (via the Momentmm app) constructs the transaction data.
2. **Signing:** The user signs this transaction data with their private key. This is a cryptographic signature that proves they have authorized the action, but it does not require any gas or interaction with the blockchain network itself.
3. **Relaying:** The signed transaction data is sent to a trusted third-party relayer, which is operated by the Momentmm platform.
4. **Execution:** The relayer wraps the user's signed transaction data into an actual blockchain transaction and sends it to the smart contract. The relayer pays the required MATIC gas fee for this transaction from its own pool of funds.[21]
5. **Verification:** The smart contract is designed to accept these meta-transactions. It first uses the signature to verify that the transaction was indeed authorized by the user's wallet address. Once verified, it executes the intended action (e.g., the ticket transfer) on behalf of the user.[21]

For the end-user, the experience is seamless and mirrors a Web2 application. They click

"transfer," and the ticket is transferred. They never need to know what a gas fee is or hold MATIC in their wallet, removing a major point of friction and making the platform accessible to a much broader audience.[1]

6. API Reference

This section provides a comprehensive reference for developers looking to interact with the Momentmm backend via its REST API. The structure is designed to be clear and predictable, enabling straightforward integration.

6.1. Authentication

All requests to the Momentmm API must be authenticated. Developers can request an API key from the organizer dashboard. The API key must be included in the header of all requests.

Authorization: Bearer <YOUR_API_KEY>

Requests made without a valid API key will result in a 401 Unauthorized error.

6.2. Endpoints

The following is a list of the primary API endpoints available. Each endpoint description includes the HTTP method, URL, required parameters, and an example response.

Events

- **GET /events**
  - **Description:** Retrieve a list of all events created by the authenticated organizer.
  - **Parameters:** Optional query parameters for pagination (limit, offset).
  - **Example Response:**
    JSON
    {

```
 "data":,
 "has_more": false
}
```

- **GET /events/{id}**
  - **Description:** Retrieve the details of a specific event.
  - **Path Parameter:** id (string) - The unique identifier of the event.
  - **Example Response:**

```
JSON
{
 "eventId": "evt_123",
 "name": "Diljit Dosanjh 'Dil-Luminati' Tour",
 "date": "2026-10-15T19:00:00Z",
 "venue": "Jawaharlal Nehru Stadium, Delhi",
 "total_tickets": 50000,
 "tickets_sold": 48950
}
```

Tickets

- **GET /events/{id}/tickets**
  - **Description:** Retrieve a list of all NFT tickets associated with a specific event, including their current owner.
  - **Path Parameter:** id (string) - The unique identifier of the event.
  - **Example Response:**

```
JSON
{
 "data": [
  {
   "tokenId": "789",
   "owner_address": "0x123...abc",
   "status": "valid"
  }
 ]
}
```

- **GET /users/{wallet_address}/tickets**
  - **Description:** Retrieve a list of all tickets currently owned by a specific user wallet address.

- **Path Parameter:** wallet_address (string) - The user's public wallet address.
- **Example Response:**

```
JSON
{
  "data":
}
```

Secondary Market

- **POST /tickets/{id}/resell**
  - **Description:** List a specific ticket for sale on the secondary marketplace. (Note: This action must be signed by the ticket owner's wallet).
  - **Path Parameter:** id (string) - The tokenId of the ticket.
  - **Body:** { "price": "1500.00", "currency": "INR" }
  - **Example Response:**

```
JSON
{
  "listingId": "list_456",
  "tokenId": "789",
  "status": "listed",
  "price": "1500.00"
}
```

6.3. Error Handling

The API uses standard HTTP status codes to indicate the success or failure of a request.

- **200 OK**: The request was successful.
- **400 Bad Request**: The request was malformed (e.g., missing required parameters).
- **401 Unauthorized**: No valid API key was provided.
- **403 Forbidden**: The API key does not have permission to perform the requested action.
- **404 Not Found**: The requested resource does not exist.
- **500 Internal Server Error**: An unexpected error occurred on the server.

Error responses will include a JSON body with more details:

JSON

```
{
  "error": {
    "type": "invalid_request_error",
    "message": "Missing required parameter: eventId"
  }
}
```

7. Smart Contract Reference

This section provides a high-level overview of the core, audited smart contracts that power the Momentmm protocol. This is intended for advanced developers, partners, and security researchers who wish to understand the on-chain logic. The contracts are written in Solidity and deployed on the Polygon network.

Key Functions

The primary smart contract for a Momentmm event contains several key functions that govern the lifecycle of the NFT tickets.

Write Functions (State-Changing)

- **mintTicket(address to, uint256 tokenId, string memory tokenURI)**
  - **Description:** Creates a new NFT ticket. Can only be called by the event organizer.
  - **Parameters:** to (the initial owner, usually the organizer), tokenId (the unique ID for the new ticket), tokenURI (a link to the ticket's metadata JSON).
- **setResaleRules(uint256 maxPrice, uint8 royaltyFeeBps)**
  - **Description:** Sets the rules for the secondary market. Can only be called by the event organizer.
  - **Parameters:** maxPrice (the maximum resale price in the smallest currency unit),

royaltyFeeBps (the royalty fee in basis points, e.g., 500 for 5%).

- **safeTransferFrom(address from, address to, uint256 tokenId)**
  - **Description:** The standard ERC-721 function to transfer ownership of a ticket.

Read Functions (Non-State-Changing)

- **ownerOf(uint256 tokenId) returns (address)**
  - **Description:** Returns the current owner of a specific ticket. Used for verification at venue entry.
- **getResaleRules() returns (uint256, uint8)**
  - **Description:** Returns the currently configured maximum resale price and royalty fee for tickets from this contract.

Events

The smart contracts emit events for significant on-chain actions. Developers can listen for these events to build real-time applications or tracking systems.

- **event TicketMinted(uint256 indexed tokenId, address indexed owner)**
  - **Emitted when:** A new ticket is created via mintTicket.
- **event Transfer(address indexed from, address indexed to, uint256 indexed tokenId)**
  - **Emitted when:** A ticket changes ownership. This is the standard ERC-721 transfer event.
- **event SecondarySale(uint256 indexed tokenId, address seller, address buyer, uint256 price, uint256 royaltyPaid)**
  - **Emitted when:** A ticket is sold on the official secondary marketplace, detailing the parties, price, and royalty amount.

Part IV: Ecosystem & Resources

8. The MMT Token & Governance

To foster a self-sustaining, decentralized, and community-governed ecosystem, Momentmm proposes the introduction of a native utility token, designated as MMT (Momentmm Token). The MMT token is not designed as a speculative investment but as a functional instrument that grants rights and unlocks utility within the platform, aligning incentives across all participants.[1]

8.1. MMT Utility and Tokenomics

The MMT token will be deeply integrated into the core functions of the Momentmm platform, providing tangible benefits to active participants. Its primary utility functions are designed to encourage participation, reward loyalty, and promote a circular token economy.[1]

- **Decentralized Governance:** MMT will serve as the governance token for the future Momentmm DAO. Holders will be empowered to propose and vote on key platform parameters, such as the fee structure, allocations from the ecosystem development fund, and the prioritization of new features. This ensures that the platform evolves in a direction that benefits its most active users.[1]
- **Staking & Platform Incentives:** Users will be able to "stake" (lock up) their MMT tokens within the platform to access a range of benefits. Staking could provide users with discounts on platform transaction fees for buying or selling tickets. A tiered staking system could also be implemented to grant loyal users priority access to high-demand ticket drops, rewarding long-term commitment to the ecosystem.[1]
- **Native Payment & Fee Reduction:** While the platform will maintain robust support for fiat currencies and major cryptocurrencies to ensure maximum accessibility, MMT will be usable as a native payment method. Transactions conducted using MMT may be eligible for additional fee reductions, incentivizing its use within the platform.[1]

The total supply of MMT will be fixed, ensuring a non-inflationary model. The proposed initial allocation is designed to support long-term growth and community engagement [1]:

- **Ecosystem & Community Fund (40%):** For user incentives, marketing, liquidity provisions, and developer grants.
- **Core Team & Advisors (20%):** Subject to a multi-year vesting schedule to ensure long-term alignment.
- **Treasury & Operational Reserves (15%):** For ongoing operational expenses, ensuring platform viability.
- **Strategic Partners & Early Backers (15%):** For early investors and strategic partners.
- **Public Sale / Liquidity Generation (10%):** To ensure broad distribution and establish

initial liquidity.

8.2. The Path to Decentralized Governance (DAO)

The long-term vision for Momentmm is to transition towards a Decentralized Autonomous Organization (DAO) model. This represents a commitment to the core principles of Web3, placing control and ownership in the hands of the community that uses and adds value to the platform.[1]

The transition will be a phased process, beginning with the introduction of the MMT governance token. Initially, token holders may vote on specific, pre-defined platform parameters. Over time, as the framework matures, the scope of governance will expand to cover more significant aspects of the protocol's operation and development.

The Ecosystem Fund, which holds the largest allocation of tokens, will be instrumental in this transition. It will be used to fund a grant program that incentivizes and supports third-party developers who wish to build new applications and experiences on top of the open Momentmm ticketing protocol. This will foster a vibrant ecosystem of innovation around the core platform, with its direction ultimately guided by the MMT token holders through the Momentmm DAO.[1]

9. Support

This section provides resources for help, official guidelines, and community channels to ensure all users have the support they need.

9.1. Frequently Asked Questions (FAQ)

A comprehensive FAQ section is available to provide immediate answers to common questions from event organizers, fans, and developers. The FAQ covers topics such as:

- **For Organizers:** How to set up an event, how royalties work, what are the platform fees?
- **For Fans:** How to create a wallet, is it safe, how to resell a ticket, what happens if I lose my phone?
- **For Developers:** How to get an API key, what are the rate limits, are the smart contracts

audited?

9.2. Branding Guidelines

For partners, media, and developers integrating with Momentmm, official branding guidelines are provided. This includes access to official logos in various formats, color palettes, and clear usage guidelines to ensure brand consistency across the ecosystem.

9.3. Contact & Community Channels

For direct support or to engage with the community, users can access the following channels:

- **Official Support Desk:** For technical issues and direct inquiries.
- **Discord Server:** The primary community hub for real-time discussion with the team and other users, including dedicated channels for organizers, developers, and fans.
- **Telegram:** For official announcements and community updates.
- **Social Media:** Follow official channels on Twitter and other platforms for the latest news and event highlights.

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