



THREETUBE

Decentralized Streaming Platform

Dappers

Muskan

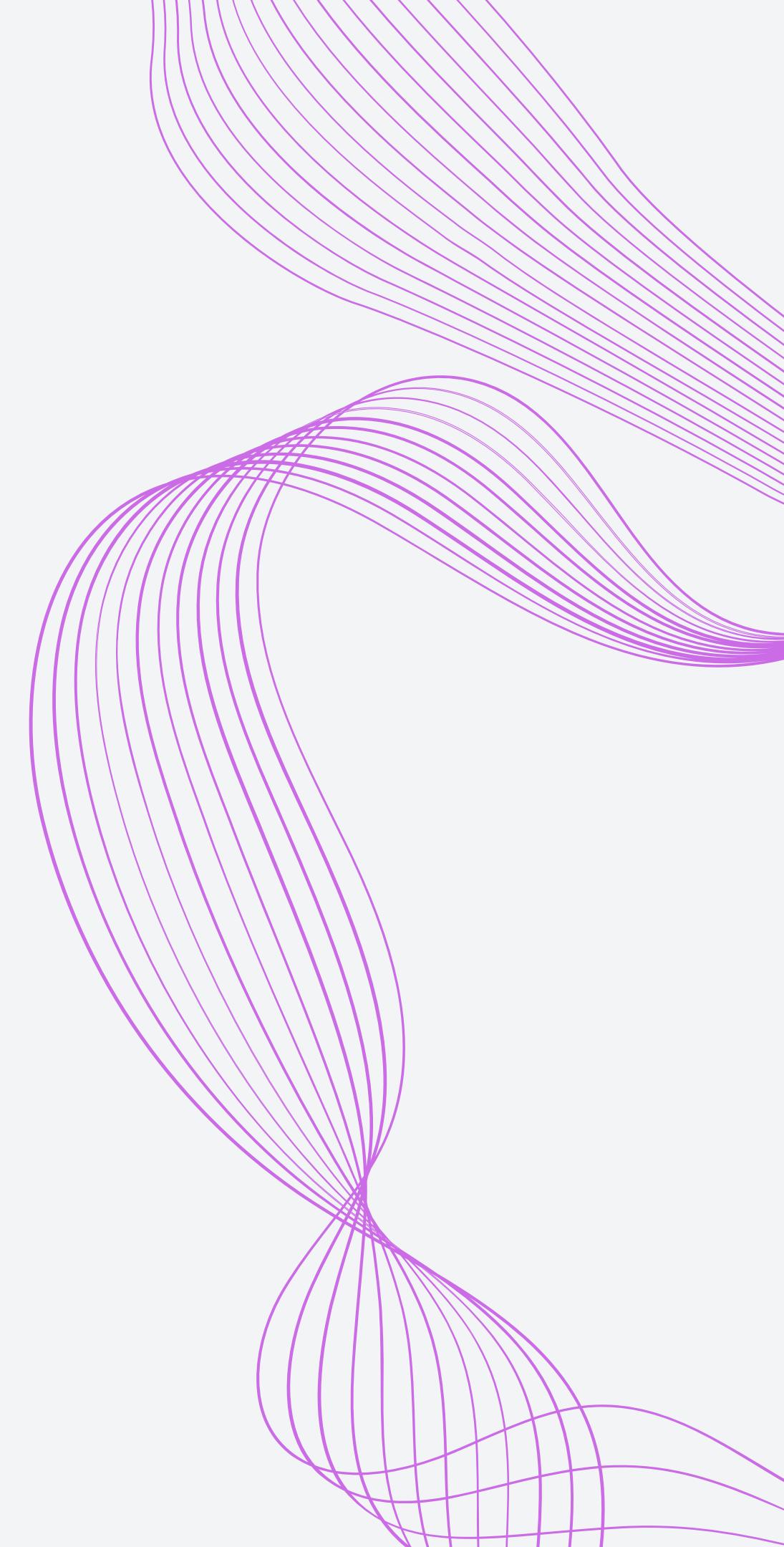
Srinjoy Ghosh

Kritika Shree

Tannya Singh

CONTENT

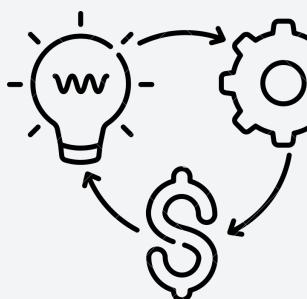
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INTRODUCTION

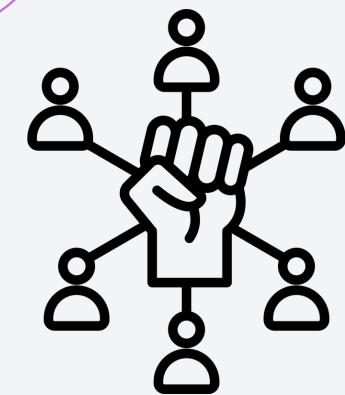
PURPOSE

ThreeTube is a decentralized streaming platform that redefines media content ownership, empowering both creators and viewers. Built on blockchain technology, it prioritizes content security, user control, and fair monetization, while fostering a unique, engaging experience centered around community participation and rewards.



MISSION

- **Empowering Content Ownership:** Leveraging blockchain to ensure creators retain rights and control, and viewers enjoy seamless, ad-rewarded or ad-free content.
- **Monetization for All:** Enabling creators to monetize their work directly, whether through token tipping, NFT sales, or premium subscriptions.
- **Viewer-Driven Engagement:** Viewers gain value through token-based rewards, ad-skipping options, and the opportunity to support creators directly.



INTRODUCTION

PURPOSE

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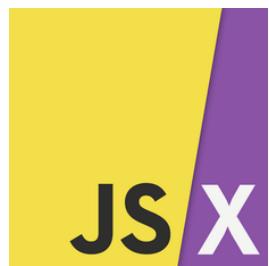
MISSION

Our mission is to establish a platform where creators can truly own and monetize their work, while viewers experience ad-free, high-quality content in an engaging, community-driven environment. Through an innovative revenue model, ThreeTube leverages token-based interactions and NFT ownership to enhance user experience and provide sustainable earning opportunities for creators.

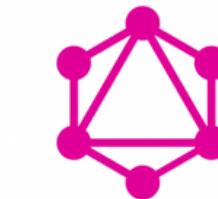
TECH STACKS



React

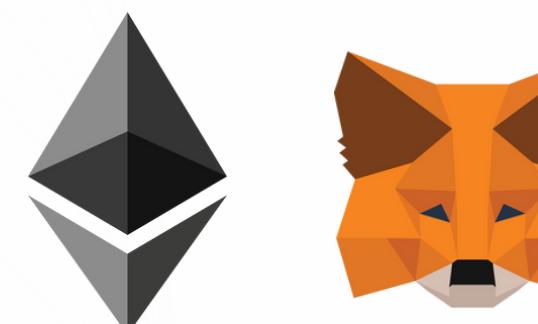


tailwindcss



GraphQL

FRONTEND



BLOCKCHAIN



websockets



FFmpeg



Ganache

UTILITIES

BACKEND

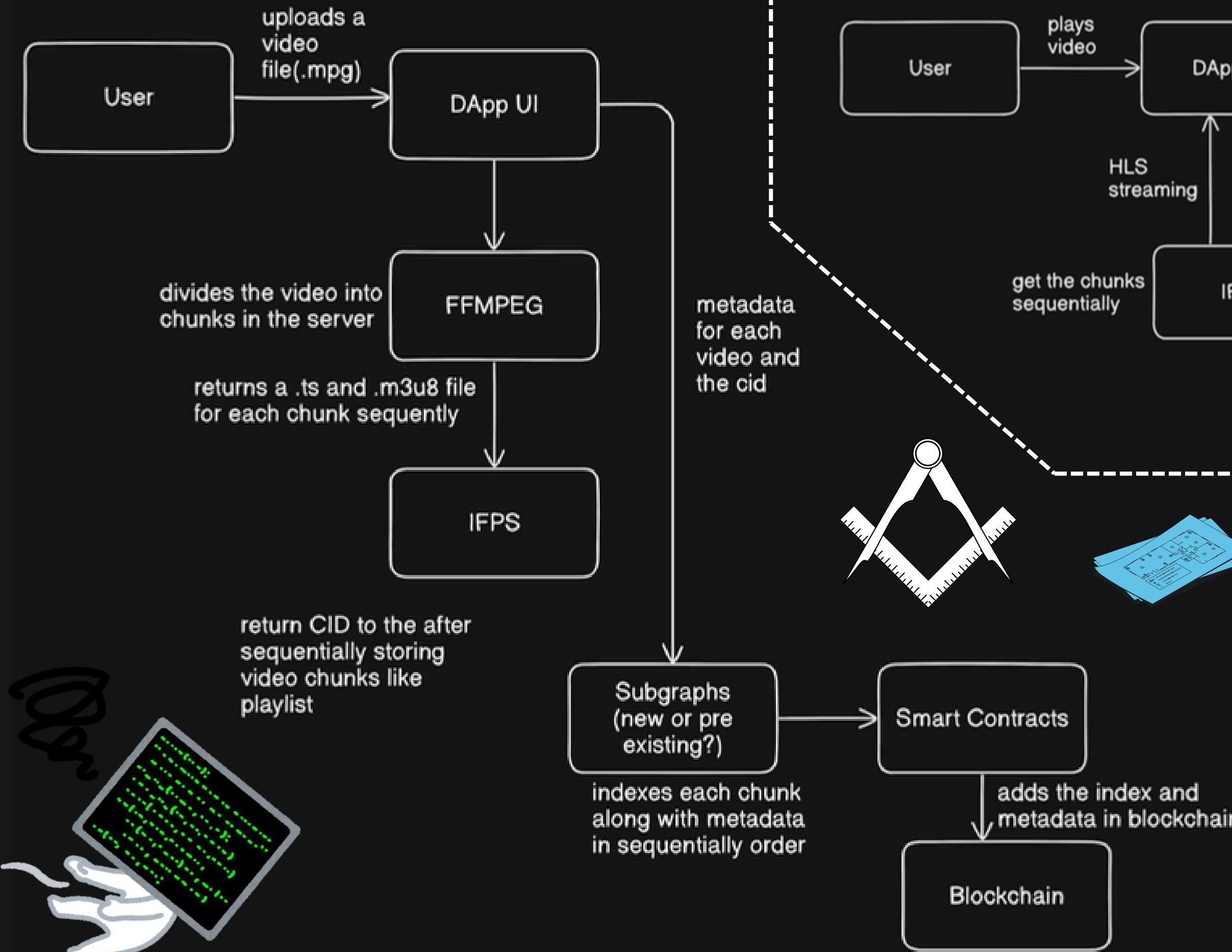


Pinata

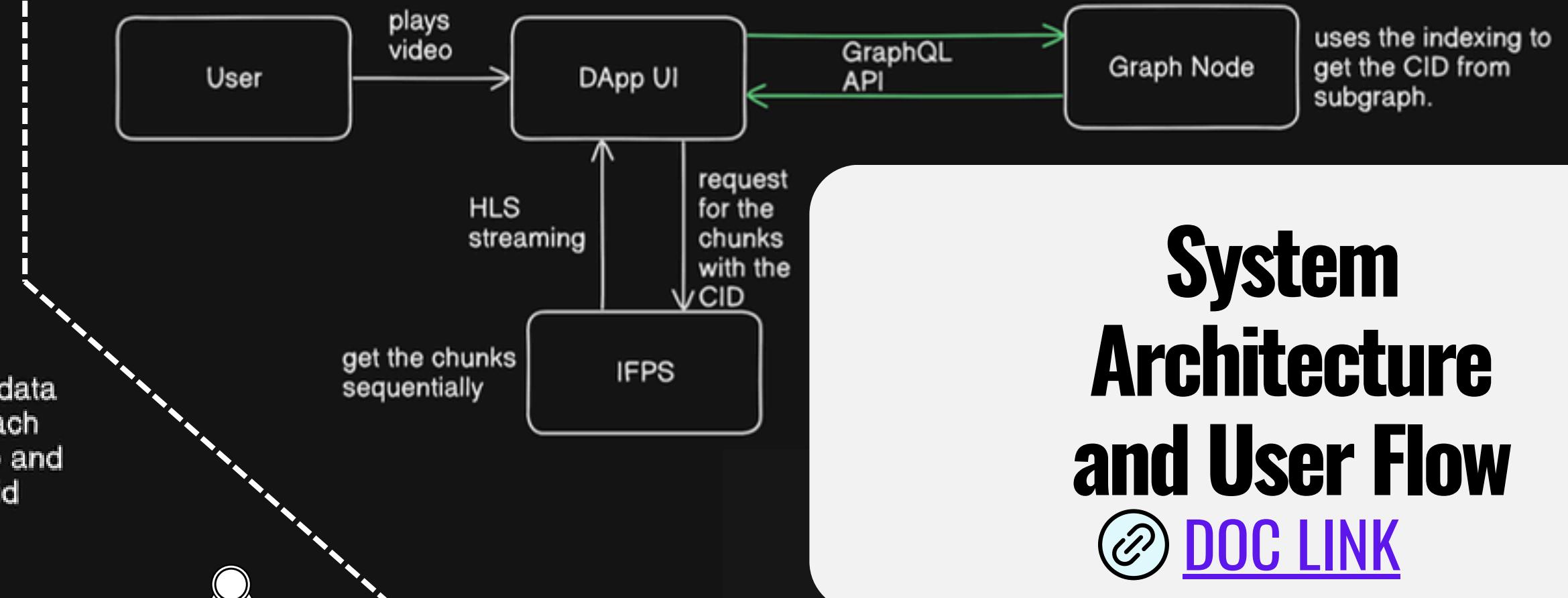


STORAGE

Video Upload

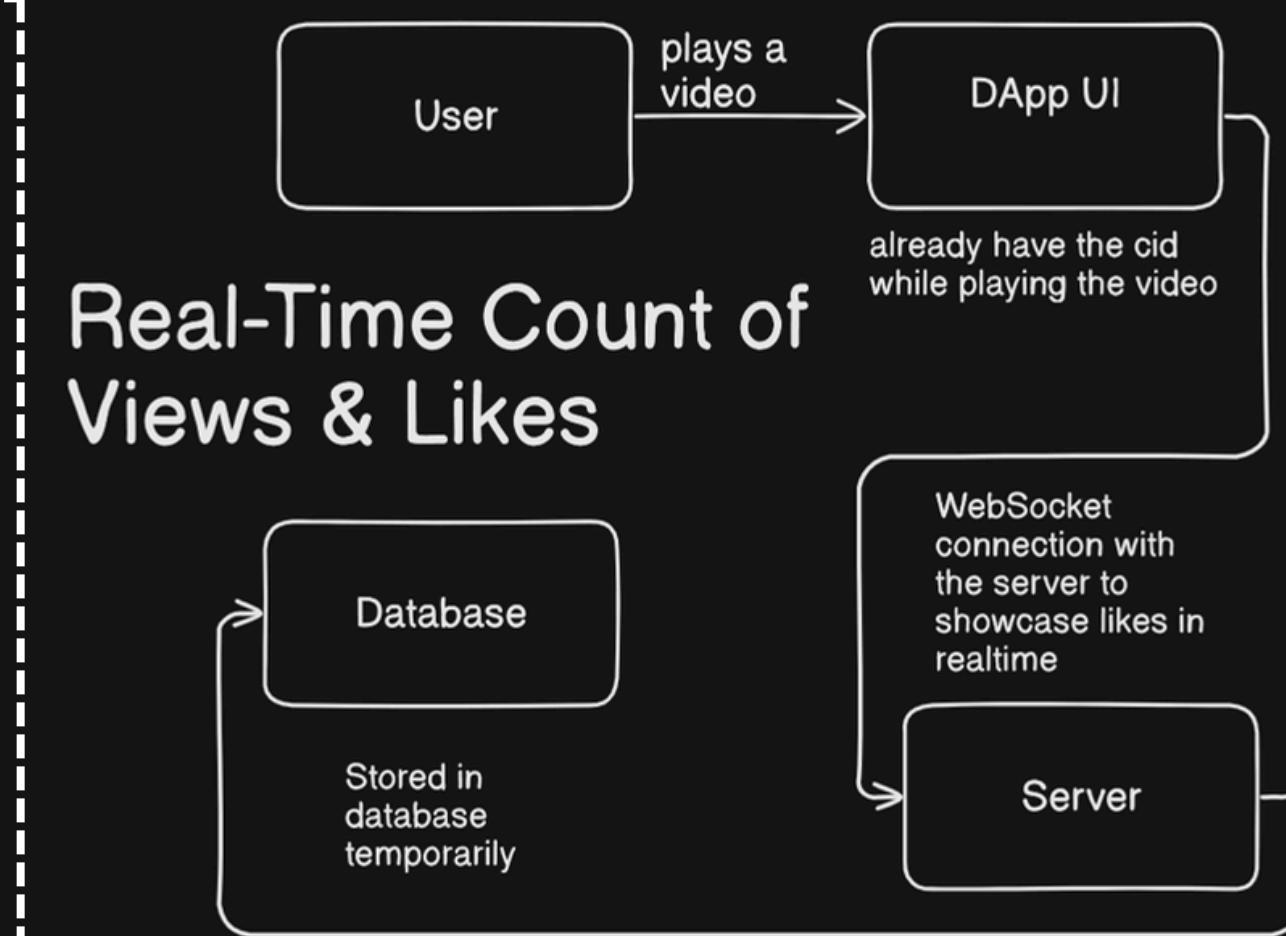


Video Streaming



System Architecture and User Flow

 [DOC LINK](#)



Real-Time Count of Views & Likes

WHY THREETUBE NOT YOUTUBE?

	YouTube	ThreeTube
True Content Ownership	Creators upload content to YouTube but don't fully own it. YouTube has the power to demonetize, restrict, or remove content based on policy shifts or censorship pressures.	A community-driven moderation system. In this setup, content could still be owned by the creator, but flagged content might require community verification or decentralized governance voting (via tokens) to evaluate its suitability. This approach could strike a balance between creator freedom and maintaining safe, high-quality content.
Transparent Revenue & Engagement	Ad revenue distribution on YouTube is opaque, with creators often facing unpredictable monetization policies. Audience engagement metrics like likes or views can be delayed or skewed.	Leveraging blockchain for transparent revenue sharing and tipping allows creators to see exactly how their earnings are generated. Real-time, blockchain-based metrics ensure that views, likes, and other engagement data are authentic, transparent, and instantly reflected.
Direct Support & Ad-Free Options	Revenue comes largely from ads, with limited options for ad-free experiences except via paid subscriptions like YouTube Premium.	Users can tip creators directly with tokens and enjoy an ad-free experience. By implementing token-based tipping or ad-skipping options, ThreeTube introduces an alternative to forced ads, providing users more control over their viewing experience and allowing creators to earn directly from their audience.

WHY THREETUBE NOT YOUTUBE?

	YouTube	ThreeTube
Censorship Resistance & Freedom of Expression	As a centralized platform, YouTube is subject to governmental and corporate pressures to remove or block content, which can limit the diversity of voices.	Decentralized storage on IPFS and blockchain-based control make ThreeTube more censorship-resistant, empowering users to access diverse content without the risk of it being taken down or altered due to external pressures.
Cross-Platform Aggregation for Broader Reach	Content is restricted to its ecosystem, with limited integration options for decentralized platforms.	Using The Graph Protocol, ThreeTube could aggregate content from multiple decentralized sources, providing users with a broader array of content while allowing creators to reach audiences across platforms.
Enhanced Privacy & Control Over Data	Gathers extensive user data for targeted ads and personalized content, often compromising privacy.	Employs wallet-based authentication (e.g., MetaMask) to give users control over their data without tracking. It can implement a local recommendation system that generates personalized suggestions based on a user's viewing history stored locally, ensuring tailored content while prioritizing privacy.

BENEFITS FOR CONTENT CREATORS

OWNERSHIP AND CONTROL OVER CONTENT



- ThreeTube's decentralized model allows creators to own their content without the platform controlling distribution or revenue, unlike on YouTube where content can be demonetized or removed without warning.
- Creators can protect their intellectual property by storing it on decentralized platforms like IPFS, preventing unauthorized access or censorship.

DIRECT EARNINGS AND TRANSPARENT REVENUE

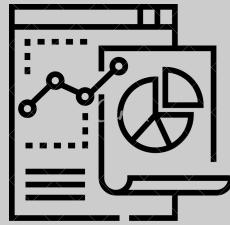


- Creators earn revenue directly through tokens via tipping, ad-skipping fees, and subscription shares, offering multiple monetization streams.
- With wallet-based authentication and blockchain integration, creators receive transparent, real-time updates on views and earnings, ensuring fair compensation without hidden deductions.

COMMUNITY SUPPORT WITH TOKEN-BASED TIPPING

- Viewers can support creators directly by tipping tokens, fostering a community-driven economy. This reduces reliance on ads and allows creators to generate revenue directly from their audience.

DETAILED ANALYTICS AND DATA VISUALIZATION



- ThreeTube offers advanced analytics on viewer engagement and trends, helping creators understand audience behavior and optimize their content.
- Creators can subscribe to premium insights to track performance metrics, providing them tools for strategic growth.

NFT AND EXCLUSIVE CONTENT MARKETPLACE



- Creators can turn unique content into NFTs or offer exclusive, token-gated content to fans, opening up new ways to monetize and engage with loyal viewers.

Greater Privacy and Decentralized Identity

With decentralized identity (DID) and wallet-based login, viewers can interact securely without compromising their data privacy, unlike on traditional platforms where user data is often shared or sold.

Ad-Free Experience with Token-Based Ad-Skipping

ThreeTube offers viewers the ability to skip ads using tokens, providing an ad-free experience without needing to pay for a premium subscription as on YouTube.

Transparent and Fair Content Discovery

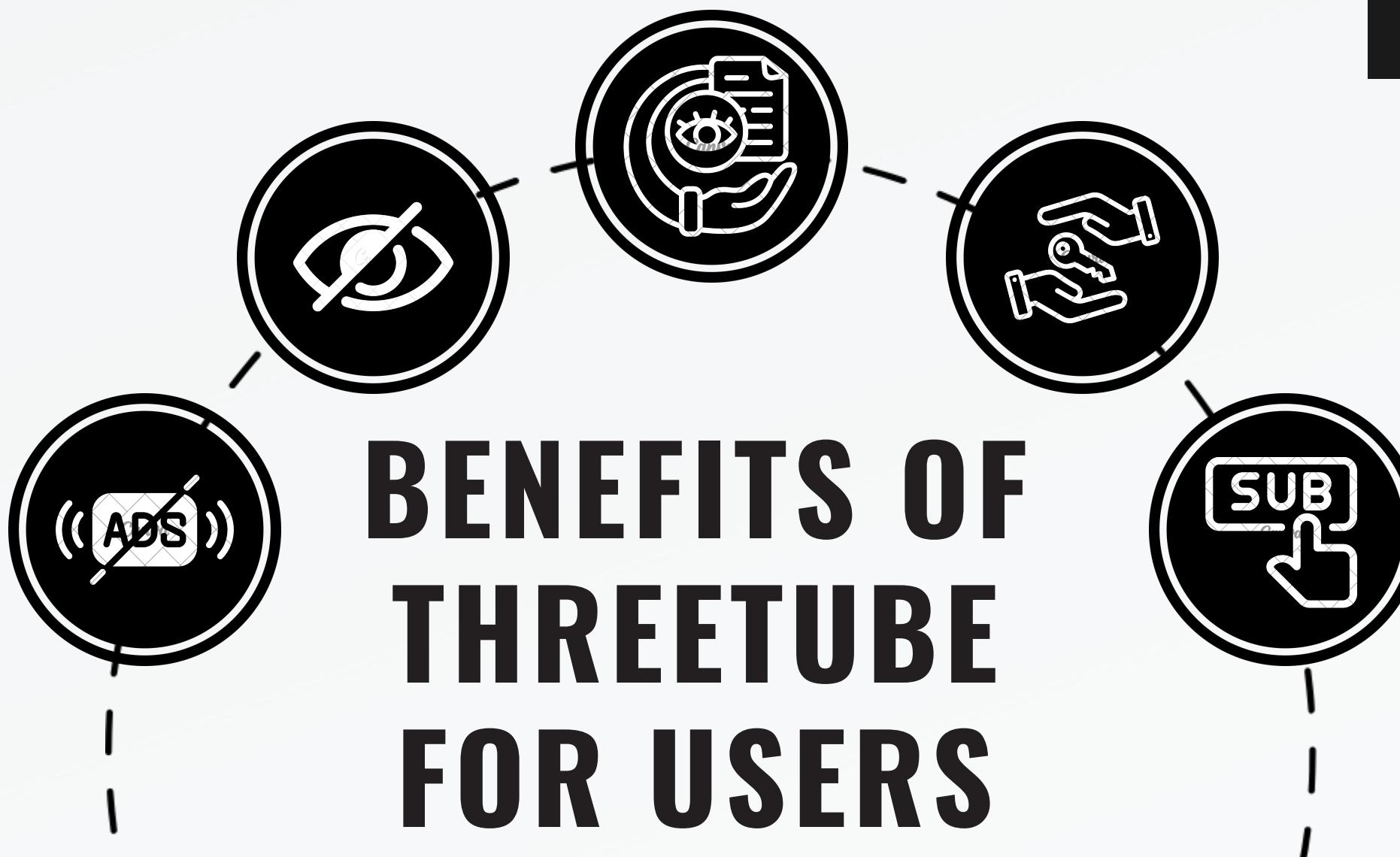
ThreeTube's decentralized indexing allows viewers to discover content without biased algorithms. This transparency appeals to users seeking unbiased, diverse content rather than being directed toward ads-driven, high-traffic videos.

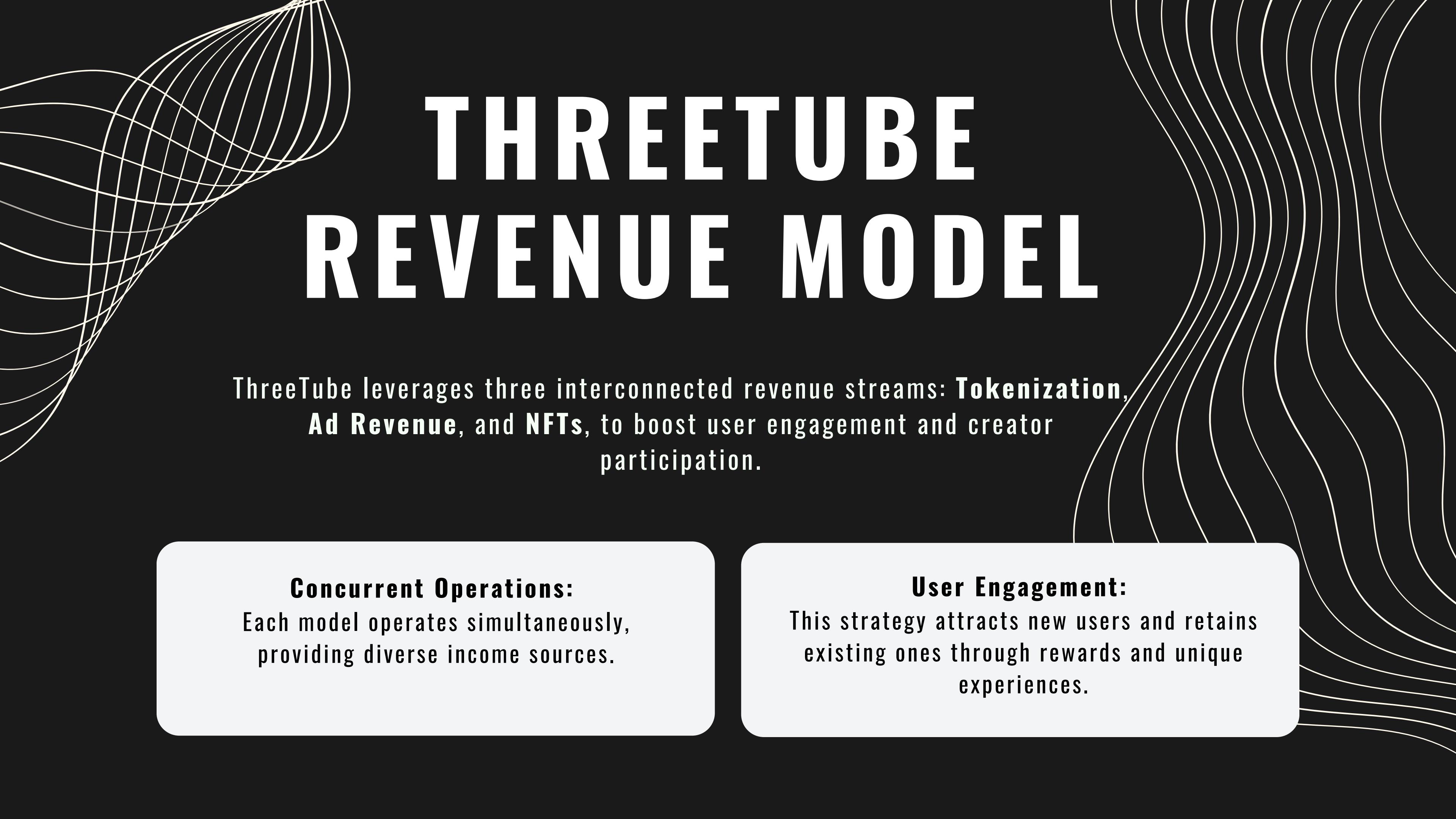
Supportive Ecosystem for Content Ownership

Viewers can engage with content that creators truly own, supporting a platform built around creative freedom and community, rather than corporate control.

Free Initial Tokens and Cost-Effective Subscriptions

New viewers receive free tokens to experience tipping, ad-skipping, and premium features, encouraging them to explore ThreeTube. The introductory subscription cost is lower than YouTube Premium, offering an affordable entry to premium features without long-term commitment.





THREETUBE REVENUE MODEL

ThreeTube leverages three interconnected revenue streams: **Tokenization**, **Ad Revenue**, and **NFTs**, to boost user engagement and creator participation.

Concurrent Operations:

Each model operates simultaneously, providing diverse income sources.

User Engagement:

This strategy attracts new users and retains existing ones through rewards and unique experiences.

TOKENIZATION

Subscription Plans for Premium Features:

Third Payment (Subscription): After using free tokens and purchasing low-cost tokens, users can subscribe to a premium plan.

- **Tiered Subscription Options:** Offer various subscription levels (e.g., basic, standard, premium) that cater to different user needs and budgets.
- **Included Tokens:** Each subscription plan includes a monthly allocation of tokens (e.g., 50 tokens for basic, 100 tokens for standard) as part of the package.

Free Tokens for New Users:

Upon signing up, new users receive a set number of free tokens to encourage initial engagement and exploration of the platform.

Low-Cost Purchased Tokens:

After utilizing the free tokens, users can purchase additional tokens at a low cost. This maintains affordability for casual users who may not want to commit to a subscription right away.

Token Distribution Events:

Incentivized Engagement: Organize events where users can earn tokens through activities such as:

- Watching a certain number of videos.
- Engaging with content by liking, sharing, or commenting.
- Participating in community events or challenges.

Referral Program: Users can earn tokens by referring friends to the platform, rewarding both the referrer and the new user with tokens.



TOKENIZATION

Token Usage and Top-Up:

- Users can use their tokens for various features, such as tipping content creators or skipping ads.
- If users exhaust their monthly token allocation included in the subscription, they can easily purchase additional tokens to maintain access.
- **Top-Up Option:** Provide a seamless way for users to top up their token balance directly through the app or website.



Continuous Token Distribution:

- Implement a system for ongoing token distribution based on user activity, such as:
 - **Monthly Engagement Rewards:** Users receive bonus tokens for consistently engaging with the platform over the month.
 - **Milestone Rewards:** Award tokens when users reach certain milestones (e.g., watching 100 videos, creating 10 playlists).

Incentives for Long-Term Engagement:

- Offer discounts or bonus tokens for users who choose longer-term subscription commitments (e.g., discounts for yearly subscriptions).
- Regularly engage users with special promotions or events that reward token use, further encouraging participation and retention.

Partnership with Mobile Service Providers

- **Model:** ThreeTube partners with mobile service providers to bundle subscriptions with mobile plans or offer special discounts, helping ThreeTube reach a wider audience and simplify the subscription process for users.
- **Benefit:** By tapping into mobile providers' large user bases, ThreeTube expands its reach and provides users with easy access to subscriptions.

AD-BASED

User Engagement and Retention

- **Interactive Ads:** By incorporating ads that require user interaction (like quizzes, polls, or games), you can significantly boost user engagement. This not only keeps users on the platform longer but also makes them more receptive to ads, leading to higher view rates and improved retention.
- **Ad Rewards:** Offering tokens or other incentives for ad engagement encourages users to participate actively rather than skipping ads. This increases the overall value of ad placements and enhances user loyalty.

Monetization of Content

- **Token Integration:** Users earn tokens for engaging with ads, creating a circular economy within the platform. This not only incentivizes ad viewing but also encourages users to spend their tokens on premium content or features, driving additional revenue.
- **Custom Ad Campaigns:** Allowing advertisers to tailor their ads to specific audiences ensures that the ads are relevant, increasing the likelihood of conversions and making the platform attractive to a wider range of advertisers.

Robust Analytics for Advertisers

- **Performance Metrics:** Providing detailed analytics helps advertisers understand how their ads are performing. Advertisers are more likely to invest in platforms where they can see tangible results from their campaigns, increasing overall ad spending.
- **Enhanced ROI:** The ability to customize campaigns and target specific demographics increases the return on investment (ROI) for advertisers, making ThreeTube a more attractive option compared to traditional platforms.



AD-BASED

Competitive Advantage

- **Decentralized Model:** As a decentralized platform, ThreeTube can position itself as a user-centric alternative to traditional streaming services like YouTube. This can attract both content creators and advertisers who are seeking to engage with audiences in new and innovative ways.
- **Community Building:** The reward-based ad system fosters a sense of community among users, encouraging them to interact not just with ads but also with each other. This can create a loyal user base that prefers ThreeTube over competitors.



Adaptability to Market Trends

- **Feedback Loop:** The analytics gathered from user interactions with ads can be used to refine ad offerings continuously. This adaptability can keep the platform relevant and in tune with user preferences and market trends.

Scalability

- **Ad Revenue Growth:** As the platform grows, the combination of user engagement, analytics, and customization creates a scalable model. Increased users lead to more ad impressions, which can exponentially grow ad revenue.
- **Diverse Revenue Streams:** Integrating various ad formats—such as video ads, interactive ads, and sponsored content—can diversify income sources and reduce dependency on any single revenue stream.

NFT MARKETPLACE

Benefits:

- **Diversified Income:** Adds an additional revenue stream beyond ads and subscriptions, enhancing financial stability.
- **Attracts Creators:** Offers new monetization opportunities, drawing more creators to the platform and enriching content variety.
- **Community Engagement:** Enables users to buy, sell, and trade NFTs, fostering interaction within the platform.
- **Brand Loyalty:** Exclusive content ownership increases user loyalty and engagement.

Concept:

- **Tokenization:** Creators can convert their content (videos, music, artwork) into NFTs, ensuring uniqueness and exclusivity.
- **Provenance:** Each NFT includes blockchain-embedded metadata for ownership and authenticity.

Revenue Model:

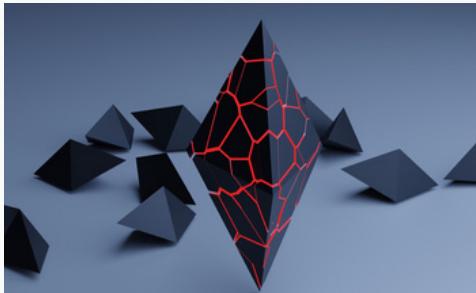
- **Transaction Fees:** ThreeTube collects a percentage (5-10%) from each NFT sale, providing direct revenue.
- **Secondary Sales:** The platform earns a share from subsequent resales, creating ongoing revenue as content appreciates in value.

User Experience:

- **Enhanced Engagement:** NFT purchases can grant users perks like early access to content or exclusive interactions with creators.
- **Social Status:** Owning unique NFTs serves as a status symbol, encouraging active participation.

Technical Aspects:

- **Smart Contracts:** Built on Ethereum or compatible platforms, automating transaction processes.
- **User-Friendly Interface:** An intuitive design to facilitate easy browsing, purchasing, and selling of NFTs.



COMPARISON OF REVENUE MODELS: YOUTUBE VS. THREETUBE

Assumptions:

- Total User Base: 2.5 billion for both platforms.
- Token Usage and Pricing:
 - Daily Token Usage per User: 6 tokens.
 - Token Price: ₹10
- Growth Rate for ThreeTube: 15% annual growth in key revenue streams.
- Percentage of Paying Users:
 - Year 1 for ThreeTube: 5% (125 million).
 - Year 5 for ThreeTube: 7% (175 million).



Overview

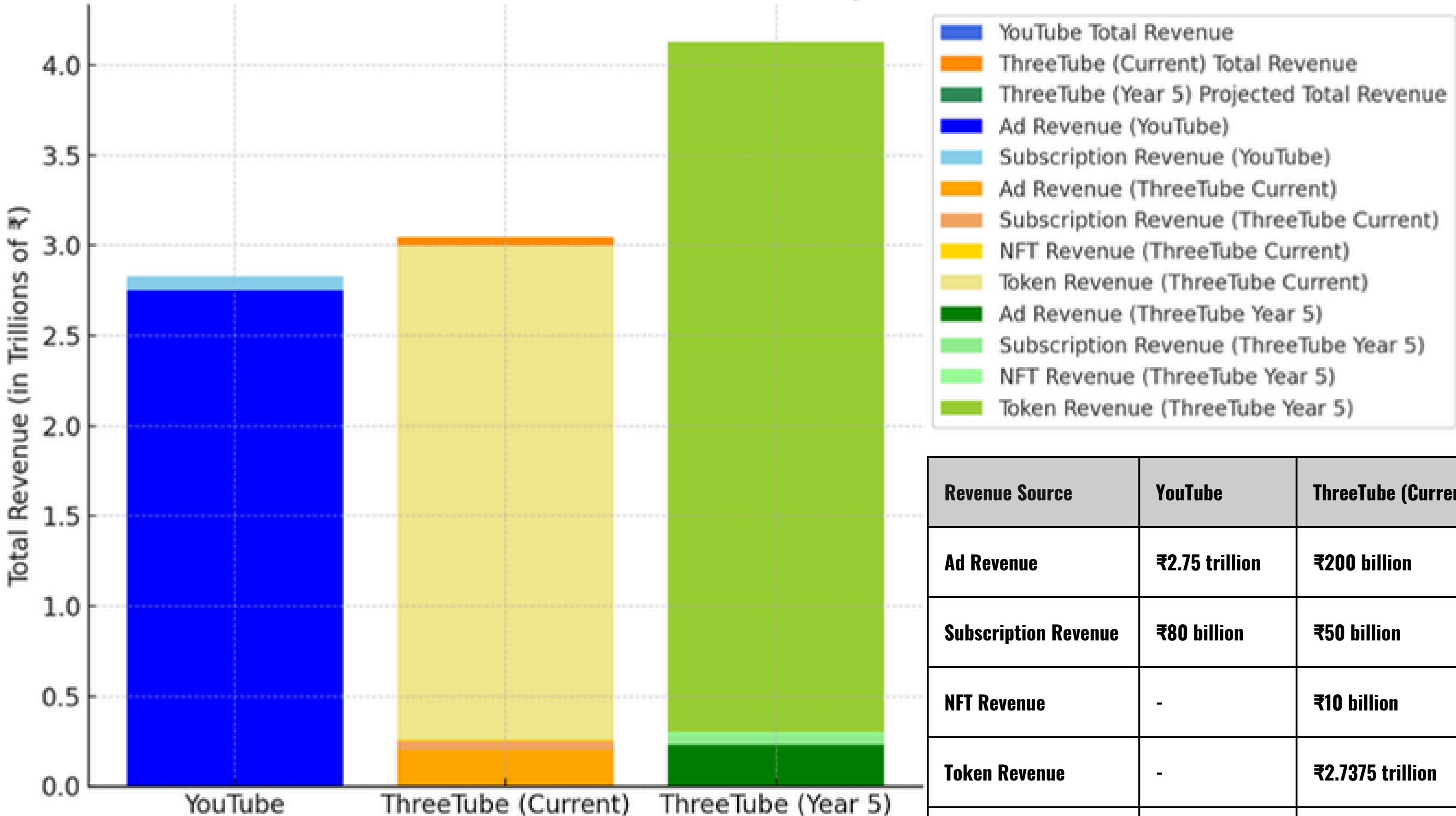
This report compares the revenue potential of YouTube and ThreeTube, a hypothetical platform, over a five-year period. The analysis focuses on user demographics, revenue streams, and growth projections.

Revenue Calculations:

1. Paying Users:
 - YouTube: Estimated at 2-5% (using 3% for comparison).
 - ThreeTube (Year 1): 125 million (5%).
 - ThreeTube (Year 5): 175 million (7%).
2. Daily Revenue from Tokens:
 - ThreeTube (Year 1): Daily Revenue = $125 \text{ million} \times 6 \times 10 = ₹7.5 \text{ billion}$
 - ThreeTube (Year 5): Daily Revenue = $175 \text{ million} \times 6 \times 10 = ₹10.5 \text{ billion}$
3. Annual Revenue from Tokens:
 - ThreeTube (Year 1): Annual Revenue = $₹7.5 \text{ billion} \times 365 = ₹2.7375 \text{ trillion}$
 - ThreeTube (Year 5): Annual Revenue = $₹10.5 \text{ billion} \times 365 = ₹3.8325 \text{ trillion}$



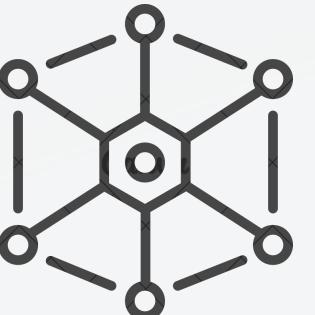
Estimated Total Annual Revenue and Breakdown by Source



Revenue Source	YouTube	ThreeTube (Current)	ThreeTube (Year 5)
Ad Revenue	₹2.75 trillion	₹200 billion	₹230 billion
Subscription Revenue	₹80 billion	₹50 billion	₹57.5 billion
NFT Revenue	-	₹10 billion	₹11.5 billion
Token Revenue	-	₹2.7375 trillion	₹3.8325 trillion
Total Annual Revenue	₹2.83 trillion	₹3.0475 trillion	₹4.131 trillion

Decentralized Storage

IPFS-Powered: Secure, decentralized storage ensures that all media is safely stored across a network, protecting content from censorship and central control.



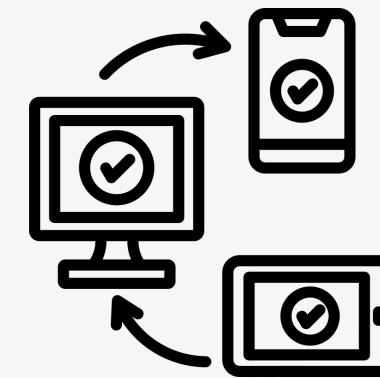
FEATURES

User-Controlled Ads

Ad Rewards or Skipping Options: Viewers can choose to watch skippable ads to earn tokens or use tokens to skip ads altogether, making ads optional and user-friendly.



Cross-Platform Accessibility



Seamless Access:

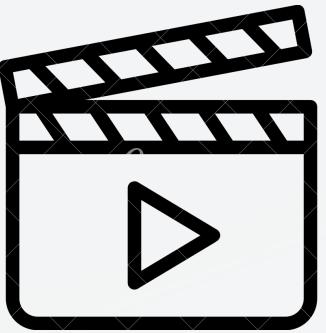
Available on both mobile and desktop platforms, with wallet-based authentication, allowing users to log in securely from anywhere.

Wallet-Based Authentication

MetaMask wallet login secures user access and transactions, ensuring only verified users can interact on the platform. This method simplifies sign-ups and maintains high security.



FFMPEG Video Segmentation

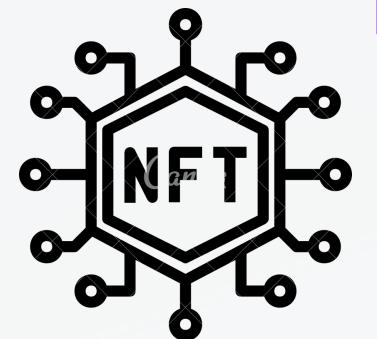


FFMPEG segments videos into smaller chunks for smoother playback and efficient storage. This process improves load times and makes content distribution more reliable.

FEATURES

Blockchain-Based Metadata

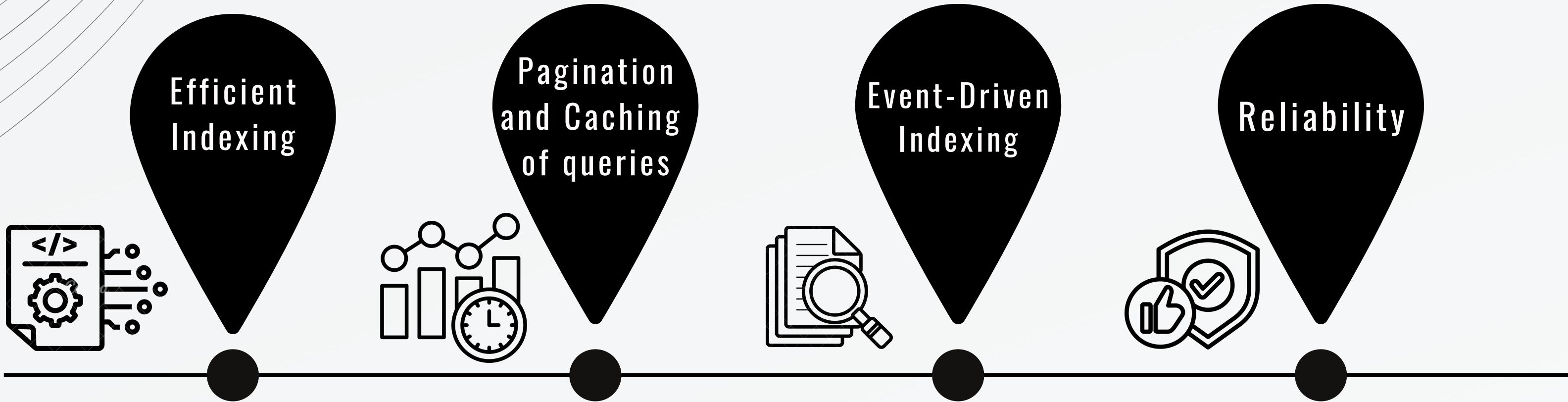
Metadata for each video is stored and indexed on the blockchain, offering transparent tracking of ownership and content details. This adds an extra layer of security and ensures data authenticity for users.



NFT Marketplace for Exclusive Content

Creators can tokenize videos as NFTs, giving users the chance to own exclusive content. The NFT marketplace generates new revenue for creators through sales and secondary trades.

HOW THE GRAPH ENHANCES THREETUBE



Video metadata (title, description, tags) and the Likes are stored on IPFS and indexed by The Graph for quick access. So are the NFT's minted by Creators can be fetched quickly by indexing.

Pagination has been implemented for smooth and optimized video rendering, allowing users to browse content without overwhelming the interface. Caching has been implemented in Apollo Client to streamline data fetching

The Subgraph listens for specific events emitted by the smart contract, allowing real-time indexing of relevant data as it's added or updated on-chain, avoiding any unnecessary data handling

Decentralized data indexing ensures transparency and no single-point failure for retrieving user data.

LINK TO DEMO VIDEO OF THE PROTOTYPE



LINK TO THE GITHUB REPO



SYSTEM ARCHITECTURE
AND DATA FLOW
DOCUMENTATION LINK

THANK YOU

From Team Dappers

