

# WINK3 Protocol and Wink Social Platform White Paper

# Wink3 Cloudless Computing

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## Wink3 Cloudless Computing and Blockchain: The Next-Generation Decentralised Computing Platform

### Abstract:

This white paper introduces the combination of Wink3 cloudless computing and blockchain technology, proposing a new distributed computing platform model designed to achieve more efficient, secure, and reliable data storage and processing. This model combines the decentralization and immutability of blockchain technology with the flexibility and resource-sharing capabilities of cloudless computing, providing innovative solutions for enterprises and individuals to meet the growing demands for data management.

### Background:

With the popularization of cloud computing, enterprises and individuals face

increasing challenges in data storage and processing. However, traditional cloud computing models have high costs, security, and reliability issues, such as exorbitant AI computing costs, data breaches, and service interruptions. Additionally, centralized cloud computing architectures face challenges in data privacy and regulatory compliance. To address these issues, cloudless computing and blockchain technology have shown great potential in their respective fields in providing the solution.

## 1. Technical Architecture

Wink3 cloudless computing enhances resource sharing and utilization by leveraging idle computing and storage resources. The technical architecture of Wink3 cloudless computing includes the following key components:

### 1.1 Wink3 User Interface (UI):

The Wink3 user interface is the entry point for users to interact with the cloudless computing system, offering various functions and operation interfaces such as resource management, task scheduling, and data querying.

### 1.2 Wink3 Resource Manager:

The Wink3 resource manager is responsible for managing various system resources, including computing, storage, and network resources. It monitors resource usage, allocates resources to different tasks, and implements dynamic

resource scheduling and optimization.

### 1.3 Wink3 Task Scheduler:

The Wink3 task scheduler allocates tasks to suitable computing resources based on user-submitted task requirements and monitors the execution progress and completion status. It schedules and optimizes tasks based on priority, resource availability, and other factors.

### 1.4 Wink3 Data Storage System:

The Wink3 data storage system stores user data, including raw data and processed results. It provides various levels of data storage services, such as distributed file systems and object storage, ensuring data security, reliability, and scalability.

### 1.5 Wink3 Computing Engine:

The Wink3 computing engine executes user-submitted computing tasks, including data processing, analysis, and model training. It supports different types of computing tasks, such as batch processing, stream processing, and machine learning, providing high-performance and scalable computing capabilities.

### 1.6 Wink3 Communication and Coordinator:

The Wink3 communication and coordinator manage communication and coordination among system components, including message passing, data exchange, and task scheduling. It ensures collaboration and synchronization in distributed systems, maintaining system stability and reliability.

#### 1.7 Wink3 Security and Privacy Protection:

Wink3's security and privacy protection is a crucial part of the cloudless computing system in safeguarding user data. It employs encryption, identity authentication, access control, and other methods to ensure data confidentiality, integrity, and availability.

#### 1.8 Wink3 Monitoring and Management:

The Wink3 monitoring and management component monitors system operation status, resource utilization, task execution, and provides management interfaces and tools to assist administrators in system monitoring and management.

These components collectively form the technical architecture of the Wink3 cloudless computing system, achieving resource sharing, task scheduling, and data processing functions, providing users with efficient and reliable distributed computing services.

## 2. Wink3 GPU Invocation

In Wink3 cloudless computing, GPU invocation requires the following steps:

### 2.1 Resource Management:

The Wink3 system needs to manage GPU resources, including monitoring GPU usage and allocating GPU resources to different tasks. This can be achieved through the resource manager, which monitors GPU utilization and idle status.

### 2.2 Wink3 Task Scheduling:

When users submit tasks requiring GPU computing, the task scheduler allocates the tasks to suitable GPU nodes based on task requirements and available GPU resources. This involves considering task priority, GPU availability, and using scheduling algorithms for optimal task allocation.

### 2.3 Wink3 GPU Drivers and Runtime Environment:

After allocating GPU resources, the system loads the appropriate GPU drivers and runtime environment to ensure normal task operation. This includes installing GPU drivers and configuring CUDA or other GPU computing frameworks to maximize GPU computational power.

### 2.4 Wink3 Task Execution:

Once GPU resources are ready, tasks can execute on the GPU. Tasks can leverage

GPU computing libraries (CUDA, cuDNN, etc.) to perform parallel computations and deep learning model training, fully utilizing GPU parallel computing capabilities.

## 2.5 Result Return:

After task completion, the system returns the results to the user, either through network transmission or by storing them in a specified location, ensuring users promptly receive task execution results.

With the above steps, the cloudless computing system can effectively invoke GPU resources, providing users with high-performance computing services. Blockchain technology provides decentralized data storage and management, ensuring data security and immutability. Combining these technologies can create a new distributed computing platform for secure, efficient, and reliable data storage and processing.

## 3. Token Rewards

### Key Features:

**Decentralized Data Storage Based on Wink3:** Wink3 data is distributed across multiple nodes in the network, improving data security and reliability by eliminating dependence on a single entity for storage and management.

**Smart Contract Execution Based on Wink3:** Using smart contract technology, Wink3



automates and programs data processing and transactions, reducing the risk of human intervention.

Resource Sharing and Utilization Improvement Based on Wink3: Wink3 leverages cloudless computing technology to share and utilize idle computing and storage resources, enhancing resource utilization and cost-effectiveness.

Wink3 Data Privacy Protection: Wink3 uses encryption and access control mechanisms to protect user data privacy, ensuring secure data storage and transmission.

Immutable Data Records Based on Wink3: Through blockchain technology, Wink3 ensures data immutability, preserving data integrity and traceability.

#### 4. Wink3 Application Scenarios

Wink3 Supply Chain Management: Wink3 ensures secure storage and transaction of supply chain data, guaranteeing product quality and traceability.

Wink3 Financial Services: Wink3 offers a secure platform for financial data storage and transactions, automating and programming asset management and payment settlements.

Wink3 Healthcare: Wink3 ensures the secure storage and sharing of healthcare data, promoting interconnectedness of health information.

Wink3 Internet of Things (IoT): Wink3 ensures secure storage and management of IoT device data, enhancing the security and reliability of IoT systems.

## Conclusion:

Combining Wink3 cloudless computing with blockchain technology will revolutionize the field of distributed computing, driving the development and innovation of the digital economy. We believe that with continuous technological advancements and expanding application scenarios, cloudless computing and blockchain will become core technologies for the next-generation distributed computing platform, contributing significantly to the sustainable development of the social economy.

# Wink Social Platform

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## 1. Introduction

### 1.1 Background:

Traditional Web2 social platforms face numerous issues, including data privacy breaches, centralized control, and content filtering. Users are increasingly concerned about controlling their data and privacy, and existing platforms lack personalized recommendations and intelligent services, leading to a need for improved user experiences. Despite the many potential advantages and innovations of Web3 social networks, they also face some challenges and issues:

#### 1.1.1 Technical Complexity:

Web3 technology involves complex technologies like blockchain, cryptocurrencies, and smart contracts, which can be a barrier for average users. Many users may not understand or be familiar with these technologies, making it difficult for them to use Web3 social platforms.

#### 1.1.2 Performance and Scalability:

Current blockchain technology still has limitations in performance and scalability. For example, the Ethereum network has slower transaction speeds and higher transaction fees, which may affect the user experience and scalability of Web3 social platforms.

#### 1.1.3 User Experience Design:

Many existing Web3 social platforms have room for improvement in user experience design. Compared to traditional Web2 social platforms, they may lack some common features and interface designs, affecting user acceptance.

#### 1.1.4 Data Privacy and Security:

While blockchain technology can provide better data security and decentralized data storage, it also introduces new privacy and security challenges. For example, users need to carefully manage their private keys to prevent asset theft or loss.

#### 1.1.5 Community Governance and Decision-Making:

Web3 social platforms typically adopt decentralized community governance models, involving users in platform decisions and development. However, this model can also lead to complex and inefficient decision-making processes, especially when handling disputes and different opinions.

#### 1.1.6 Compliance and Regulation:

Web3 social platforms may face compliance and regulatory challenges. Due to the anonymity and decentralization of blockchain technology, it can be difficult to regulate user behaviour and content, posing legal and regulatory risks.

In summary, although Web3 social networks have great potential, they still face challenges in technology, user experience, security, governance, and regulation, requiring continuous improvement and resolution.

## 1.2 New Social Opportunities Brought by Worldcoin and World ID

Worldcoin and WorldID are a digital identity system that provides a unique identity verification through iris scans via the Orb device.

### 1.2.1 Unique Identifier:

WorldID provides each user with a unique digital identity identifier for identity verification and management on the network.

### 1.2.2 Security:

World ID uses secure encryption technology and identity verification methods to protect user personal information and identity security.

### 1.2.3 Convenience:

Users can use their World ID for identity verification across various online services and applications without repeatedly entering personal information or creating new accounts.

### 1.2.4 Privacy Protection:

World ID is committed to protecting user privacy, allowing users to choose when and where to use their World ID and control the sharing and use of their personal information.

#### 1.2.5 Integration:

World ID can integrate with various online services and applications, including social networks, e-commerce platforms, and digital currency wallets, providing users with a unified identity management and verification solution.

#### 1.2.6 Decentralization:

Similar to other cryptographic identity solutions, World ID is decentralized, with no central authority controlling or managing user identity information.

Overall, World ID aims to provide users with a secure and convenient digital identity verification and management solution, applicable to various online services and applications.

By integrating Worldcoin with social networks, a system called World ID can be created. World ID will be the user's unique identity on the Worldcoin platform, linked to their social network accounts. This link can be voluntarily provided by the user by authorizing the Worldcoin platform to access their social network account information.



Once a user's social network account is linked to their World ID, they can use Worldcoin for various payments and transactions without entering complex payment information or undergoing tedious identity verification. For example, when purchasing goods or services on social networks, users can choose to use their World ID for payment, and the system will automatically deduct the corresponding fees from their Worldcoin wallet. This integration can greatly simplify the payment process and enhance user experience.

Additionally, social network data can improve Worldcoin's functionality. By analyzing user social network activities and interests, personalized digital currency services and recommendations can be provided, increasing user engagement and promoting Worldcoin adoption. For instance, recommending specific digital asset investment opportunities or social network digital currency activities based on user behavior.

Overall, integrating Worldcoin with social networks can create a more convenient, popular, and personalized digital currency experience, promoting widespread use and acceptance of digital currency in social networks.

### 1.3 New Social Opportunities Brought by AI

Artificial intelligence is rapidly advancing, with various technologies emerging,

pushing AI applications in different fields. The availability of large-scale data and enhanced computing power also support AI development. At the same time, AI brings many new social opportunities, including:

#### 1.3.1 Personalized Social Experience:

AI can analyze user preferences, interests, and behavior patterns to provide a personalized social experience. This can include personalized recommendations, custom content, and friend suggestions, enhancing user social interactions.

#### 1.3.2 Virtual Social Platforms:

AI-driven virtual social platforms are emerging, allowing users to interact with virtual characters or assistants. These platforms offer more immersive social experiences and provide a safe environment for exploring different social skills and behaviours.

#### 1.3.3 Voice and Image Recognition:

AI's voice and image recognition technology enables social media and communication applications to better understand user emotions and intentions. This improves the user experience of voice assistants, social robots, and real-time communication tools, making social interactions more natural and smoother.

#### 1.3.4 Natural Language Processing:

Natural language processing technology enables social media and communication applications to better understand and generate human language. This makes social interactions richer and more diverse while providing more opportunities for language exchange, promoting global social connections.

#### 1.3.5 Social Data Analysis:

AI can analyze large-scale social data to extract useful information and insights. This information can be used for personalized recommendations, social network analysis, and marketing strategies, providing more effective social interactions and communication opportunities for users and businesses.

In summary, artificial intelligence brings many new social opportunities, making social interactions more personalized, immersive, and colorful. By leveraging AI technology, people can better understand and meet social needs, expand social circles, and establish deeper and more meaningful connections with others.

#### 1.4 Objectives

Wink's social platform aims to create a secure, intelligent, and fair social network where users can freely share, interact, and participate, achieving true social freedom and equality.

To transition Web2 social users to Web3 social, the platform needs to take several

measures to lower user entry barriers and provide attractive experiences and incentives, including:

#### 1.4.1 Education and Awareness:

Educate Web2 users about Web3, explaining the advantages and uses of blockchain technology and how to use decentralized applications.

#### 1.4.2 User-Friendly Interface and Experience:

Design a simple and intuitive user interface and experience to lower the learning curve for using decentralized applications, making users feel comfortable and convenient.

#### 1.4.3 Transparency and Security Assurance:

Provide transparent information and security assurances, helping users understand the safety and privacy protection of their data and assets, building trust.

#### 1.4.4 Incentive Mechanisms and Rewards:

Provide incentive mechanisms and rewards to encourage users to try and use Web3 applications, such as token rewards or promotional activities to attract user participation. This will help build up the user base.

#### 1.4.5 Social Guidance and Community Support:

Establish social guidance mechanisms and community support systems to guide Web2 users into Web3 through social networks and community forums, offering help and support.

#### 1.4.6 Integration and Interoperability:

Provide integration and interoperability with existing Web2 platforms, allowing users to transition to Web3 gradually without completely abandoning existing platforms and habits.

#### 1.4.7 Practicality and Appeal:

Develop practical and appealing applications and services that solve users' real problems and provide attractive features and experiences, attracting more users to enter the Web3 ecosystem.

### 1.5 Vision

Our vision is to become a global leader in Web3 AI social platforms, promoting progress and development in the social field and providing users with a more secure, intelligent, and personalized social experience.

## 2. Technical Overview

### 2.1 Artificial Intelligence Algorithms

Below is a simplified technical diagram of Wink's social platform:

#### 1. Blockchain Base Layer:

Blockchain technology serves as the base layer, providing decentralized, immutable, and transparent data storage and transaction mechanisms. This layer includes mainstream public chains (such as Ethereum, Polkadot, etc.) or dedicated social chains.

#### 2. Smart Contract Layer:

The smart contract layer runs on the blockchain, managing the social platform's logic and rules. Smart contracts can be used for user identity verification, content publishing, transaction processing, reward distribution, and other functions.

#### 3. Decentralized Storage:

Decentralized storage technology is used to store social platform content data, such as user profiles, posts, comments, etc. IPFS (InterPlanetary File System) is a common decentralized storage solution.

#### 4. Encryption and Identity Verification:

Encryption technology protects user privacy and data security, while identity verification technology confirms user identity. Common identity verification methods include blockchain-based decentralized identity verification and

traditional username-password verification.

5. Social Graph and Recommendation System:

The social graph and recommendation system analyze user social relationships and interests to recommend relevant content and users. This layer can utilize machine learning and data mining technologies.

6. User Interface:

The user interface is the platform where users interact with the social platform, including web, mobile, and API interfaces. The user interface should be user-friendly, supporting content publishing, interaction, and account management.

7. Social Function Modules:

Social function modules include user registration and login, content publishing, comments and likes, social relationship management, private messaging, and other features. These functions are implemented through smart contracts and blockchain technology, ensuring data security and traceability.

8. Tokenomics Model:

The Wink tokenomics model is a core mechanism of the social platform, used

to incentivize user participation and contribution. Tokens can reward user social behaviours, purchase virtual goods, and invest in social projects.

Through the above technical model, the Wink social platform can achieve a decentralized, secure, transparent, and trustworthy social environment, providing users with a more open and autonomous social experience.

## 2.1 Social Interaction with AI Robots:

Interacting with AI robots can be an interesting and challenging experience. Here are some ways to socialize with AI robots:

### 1. Conversation and Interaction:

Engage in conversations and interactions with AI robots, discussing various topics and sharing ideas and feelings. AI robots can simulate human language understanding and generation abilities, making conversations smoother and more natural.

### 2. Entertainment and Games:

Participate in entertainment and games with AI robots, such as quizzes, word games, virtual role-playing, etc. This can provide an enjoyable social experience, allowing users to have fun and enjoyment interacting with AI



robots.

3. Learning and Education:

Use AI robots as learning partners, engaging in knowledge exchange and learning. AI robots can provide personalized learning content and guidance, helping users better understand and master knowledge.

4. Emotional Support and Psychological Counseling:

Engage in emotional support and psychological counseling with AI robots, sharing your emotions and psychological issues, and receiving understanding and support. AI robots can simulate human emotional understanding and expression abilities, providing warmth and comfort.

5. Daily Assistant and Life Companion:

Use AI robots as daily assistants and life companions, interacting with them in daily life, such as scheduling reminders, weather information queries, and music playback.

6. Participation in Development and Innovation:

Collaborate with AI robot development teams, participating in the improvement and innovation of AI robots, exploring AI technology applications in the social field.

Socializing with AI robots can provide users with a novel, enjoyable, and creative social experience, expanding the ways of interaction between humans and technology.

## 2.1 AI Technology Application in Wink:

In Wink, AI technology applications cover multiple aspects. Here are some main technical overviews:

### 1. Natural Language Processing (NLP):

NLP technology processes and understands human language text data. In social interactions, NLP can be used for text analysis, sentiment recognition, topic identification, and language translation, helping the social platform understand user statements and intentions.

### 2. Machine Learning (ML):

ML technology is a core AI technology that trains models from data to make predictions or decisions. In social interactions, ML can be used for personalized recommendations, content filtering, and social network analysis, providing users with more personalized and intelligent services.

### 3. Computer Vision (CV):

CV technology processes and understands image and video data. In social interactions, CV can be used for facial recognition, emotion recognition, and image content analysis, enriching social interaction and user experience.

### 4. Deep Learning (DL):

DL is a type of ML based on artificial neural network models that handle complex unstructured data. In social interactions, DL can be used for image recognition, voice recognition, and natural language processing, providing users with more intelligent and natural communication experiences.

### 5. Recommendation Systems:

Recommendation systems use ML and data mining technologies to analyze user historical behavior and interests, recommending personalized content, users, or activities. In social interactions, recommendation systems help users discover new friends, join interesting groups, and participate in activities of interest.

### 6. Social Network Analysis (SNA):

SNA is a method to study the structure and behaviour of social networks, helping understand relationships and influence among users. In social interactions, SNA can identify key nodes, community structures, and

information propagation paths in social networks, providing deeper insights and understanding for the social platform.

### 2.3 Computer Languages for AI in Wink Social:

AI technologies in Wink social interactions include, but are not limited to, the following computer languages:

1. Python: A popular programming language widely used in AI and ML fields. Many AI algorithms and models are implemented in Python, making it widely applicable in social interactions.
2. R: A programming language used for statistical analysis and data visualization, also widely used in ML and data science. In social interactions, R can analyze user behavior data and social network data, providing insights and decision support for the social platform.
3. Java: A general-purpose programming language widely used to develop various types of applications. In social interactions, Java can develop backend services and data processing modules for the social platform, supporting large-scale user data processing and management.

4. C++: A high-performance programming language usually used for applications requiring high efficiency and low-level control. In social interactions, C++ can develop high-performance image, video, and audio processing algorithms, improving the platform's response speed and user experience.

5. JavaScript: A scripting language widely used in web development to create dynamic web pages and interactive user interfaces. In social interactions, JavaScript can develop frontend interfaces and user interaction functions, supporting user interaction and communication with the platform.

6. SQL: A standardized language used to manage and query databases, widely used for storing and managing user data. In social interactions, SQL can manage user profiles, social relationships, and user behavior data, supporting data analysis and personalized recommendations for the social platform.

In summary, AI in social interactions involves multiple computer languages, each with specific application scenarios and advantages. The choice of language depends on specific requirements and project needs for development and implementation.

## 2.4 Blockchain Technology

As a foundational technology for Web3, blockchain technology provides

decentralization, immutability, and transparency for social platforms. We use blockchain technology to store user data and implement social governance and identity verification through smart contracts.

## Blockchain Algorithms in Social:

### 2.2.1 Decentralized Identity Verification:

Blockchain can implement decentralized identity verification systems, securely storing user personal information on the blockchain, with users having full control. Blockchain-based identity verification algorithms ensure that user identity information cannot be tampered with or stolen, enhancing social platform security and trust.

### 2.2.2 Distributed Storage and Encryption Protection:

Blockchain implements distributed storage and encryption protection, securely storing social data across multiple nodes in the blockchain network, protecting data security and privacy through encryption algorithms. This prevents social data from being tampered with or leaked, enhancing user trust in the social platform.

### 2.2.3 Smart Contracts:

Smart contracts are automated execution programs on the blockchain that automatically execute contract terms without intermediaries. In social interactions,

smart contracts can automate social functions, such as payments, rewards, and penalties, enhancing the platform's credibility and efficiency.

#### 2.2.4 Decentralized Social Networks:

Blockchain can build decentralized social networks, securely storing social data on the blockchain. Users can manage their social relationships and data access permissions through smart contracts. Decentralized social networks eliminate single points of failure and data monopoly issues of centralized platforms, enhancing user data control and privacy protection.

#### 2.2.5 Token Economy Model:

Blockchain supports token economy models, incentivizing user participation and contributions through token issuance. Users can earn token rewards by participating in social activities, sharing valuable content, or providing services, promoting platform development and user engagement.

### 3. Platform Architecture

#### 3.1 Decentralized Architecture

We adopt a decentralized architecture, storing user data on the blockchain and protecting user data privacy through encryption technology, allowing users full control over their data.

### 3.2 Intelligent Recommendation System

We use AI algorithms to analyze user social behavior and interests, providing personalized content, user, and activity recommendations to enhance user engagement and satisfaction.

### 3.3 Social Governance Mechanism

We implement a social governance mechanism, allowing users to participate in platform decisions and development through voting and proposal submissions, influencing platform operation and development direction.

### 3.4 Decentralized Identity Verification with World ID

World ID can bring the following advantages and functions in social platforms:

#### 3.4.1 Decentralized Identity Verification:

World ID can be used as a decentralized identity verification system, allowing users to establish secure, private digital identities on the social platform. User personal information and identity verification can be securely stored on the blockchain, with users having full control over their data.

#### 3.4.2 Secure Social Login:

The social platform can integrate World ID as a login authentication system, allowing users to securely log in with their World ID, enhancing account security



and preventing account theft or misuse.

#### 3.4.3 Personal Profile Management:

World ID can manage user profiles and social information, including basic information, social links, and interests. Users can manage and update their profiles through World ID, enhancing data accuracy and integrity.

#### 3.4.4 Privacy Protection and Authorization Management:

World ID allows users to control their personal data and privacy information. Users can choose which information to share with other users or applications and can revoke or update authorizations at any time, protecting privacy.

#### 3.4.5 Secure Social Interactions:

A social platform based on World ID can provide a secure social interaction environment, only allowing verified users to interact and communicate, reducing fake accounts and inappropriate behaviour, and enhancing platform trust and security.

#### 3.4.6 Social Network Integration:

World ID can serve as a bridge for identity authentication and data transfer between different social networks, allowing users to share and sync personal information and data across platforms, enhancing social experience and convenience, and

promoting social network interoperability.

#### 4. Key Features

Interacting with AI robots can be an interesting and challenging experience. Here are some ways to socialize with AI robots:

##### 4.1 Conversations and Interactions with AI:

Interacting and conversing with AI provides a new social opportunity, offering many interesting and meaningful experiences:

##### 4.1.1 Smart Assistant Interaction:

People can converse with smart assistants to get information, perform tasks, and solve problems. This interaction provides personalized help and advice, helping people efficiently complete daily tasks.

##### 4.1.2 Virtual Partner Interaction:

AI-driven virtual partners can become companions, engaging in conversations and interactions. This interaction provides emotional support, entertainment, and social interaction, especially important for those needing to alleviate loneliness.

##### 4.1.3 Wink Smart Social Robots:

AI technology in Wink enables social robots to simulate human interactions, providing customer service, education, and entertainment. These robots offer personalized and intelligent services.

#### 4.1.4 Voice and Image Interaction:

Voice and image recognition technology in Wink enables users to interact with AI through voice and images, providing a more intuitive and natural interaction experience.

#### 4.1.5 Wink Smart Social Applications:

Wink is changing social applications by better understanding and meeting social needs through personalized recommendations, sentiment analysis, and social network analysis, offering more interesting and meaningful social experiences.

#### 4.2 Entertainment and Games:

Participate in entertainment and games with AI robots, such as quizzes, word games, and virtual role-playing, providing a fun social experience.

4.2.1 Smart Games: In Wink, people can play various smart games with AI, such as chess and poker. AI offers challenging opponents, helping players improve skills and enjoy the game.

#### 4.2.2 Smart Quiz:

In Wink, people can engage in quiz games with AI, exploring various knowledge domains. AI answers questions from history, science, to pop culture, providing an entertaining learning experience.

#### 4.2.3 Role-Playing:

In Wink, people can engage in role-playing games with AI, assuming different roles and interacting virtually. This offers a new role-playing experience, providing realistic AI interactions.

#### 4.2.4 Wink Smart Creation:

In Wink, AI assists in creative activities like painting, writing, and music creation, offering a fulfilling creative experience.

In summary, interacting with AI in entertainment and games offers an enjoyable experience, enabling diverse and creative AI interactions.

#### 4.3 Learning and Education:

Use AI robots as learning partners, exchanging and learning knowledge. AI robots offer personalized learning content and guidance, helping users understand and master knowledge better.

#### 4.4 Emotional Support and Psychological Counseling:

Engage in emotional support and psychological counseling with AI robots, sharing emotions and psychological issues for understanding and support. AI robots simulate human emotional understanding, providing warmth and comfort.

#### 4.5 Daily Assistant and Life Companion:

Use AI robots as daily assistants and life companions, interacting in daily activities like scheduling, weather information, and music playback.

#### 4.6 Participation in Development and Innovation:

Collaborate with AI robot development teams, participating in AI robot improvement and innovation, exploring AI technology applications in social fields.

Socializing with AI robots provides a novel, enjoyable, and creative experience, expanding human-technology interaction.

### 5. Social Ecosystem

#### 5.1 Open Protocols and Standards

Support open protocols and standards, connecting and interacting with other Web3 platforms, promoting broader social ecosystem development.

In Wink, the support can include:

#### 5.1.1 Encryption Algorithms:

Use symmetric encryption algorithms (like AES) and asymmetric encryption algorithms (like RSA) for data encryption and decryption, ensuring authorized access only.

#### 5.1.2 Hash Algorithms:

Hash algorithms generate fixed-length hashes, used for data integrity verification and digital signatures. In open protocols, hash algorithms verify data integrity, ensuring data remains untampered during transmission.

#### 5.1.3 Message Authentication Code (MAC) Algorithms:

MAC algorithms authenticate message integrity and authenticity between communication parties. In open protocols, MAC algorithms generate and verify authentication codes, ensuring mutual trust in communication.

#### 5.1.4 Data Compression Algorithms:

Data compression algorithms reduce bandwidth consumption and transmission delay during data transmission. In open protocols, compression algorithms reduce data size for faster transmission and processing.

#### 5.1.5 Serialization and Deserialization Algorithms:

Serialization algorithms convert data for transmission or storage, while deserialization converts serialized data back to its original format. In open protocols, serialization and deserialization algorithms enable data exchange and communication between systems.

#### 5.1.6 Routing Algorithms:

Routing algorithms determine the transmission path of data packets in a network. In open protocols, routing algorithms determine data packet paths between systems, enabling effective data exchange and communication.

### 5.2 Social Application Developer Ecosystem

Wink provides open APIs and tools for developers, supporting social application development and innovation, enriching the social ecosystem.

#### 5.2.1 Open APIs and SDKs:

Wink's social platform provides open APIs and software development kits (SDKs), allowing developers to build their applications and services based on the platform. These APIs and SDKs should be functional and flexible, meeting developer needs and offering comprehensive documentation and support.

#### 5.2.2 Developer Documentation and Resources:

Wink provides detailed developer documentation and resources, including tutorials,

sample code, and technical support, helping developers quickly start and build applications. The documentation and resources should be easy to understand and use, providing timely technical support.

#### 5.2.3 App Store and Marketplace:

Wink's social platform offers an app store or marketplace, allowing developers to publish and distribute their applications to users. The store or marketplace should have good search and discovery features, helping users find new applications, and provide appropriate distribution and revenue-sharing mechanisms.

#### 5.2.4 Smart Contract Marketplace:

Wink's social platform, built on blockchain technology, can provide a smart contract marketplace, allowing developers to create and publish various smart contract applications. The marketplace should offer comprehensive contract templates and tools for developers to quickly build and deploy smart contracts.

#### 5.2.5 User Customization Features and Tools:

Wink's social platform offers user customization features and tools, allowing users to customize the platform's appearance and functions according to their needs and preferences. These features and tools should be easy to use and operate, providing flexible customization options.



By implementing these aspects, Wink's social ecosystem can promote platform innovation and development, enhance user engagement, and support sustainable platform growth.

### 5.3 User Community Building

Wink actively builds user communities, promoting user interaction and collaboration, and involving users in social platform development and construction.

#### 5.3.1 Wink Creates Engaging Content:

Wink offers diverse and interesting content, including articles, images, and videos, attracting user participation and sharing, building a community content ecosystem.

#### 5.3.2 Wink Organizes Regular Events:

Wink regularly hosts various events, such as topic discussions, Q&A sessions, online live broadcasts, and offline gatherings, increasing user engagement and activity.

#### 5.3.3 Wink Encourages User Interaction:

Wink provides interaction features like comments, likes, and shares, encouraging users to communicate and interact with others, building a community atmosphere and culture.

#### 5.3.4 Wink Establishes User Identity:

Wink helps users establish their identity in the community through user avatars, personal profiles, and community badges, showcasing users' contributions and status in the community.

#### 5.3.5 Wink Sets Up Reward Mechanisms:

Wink designs reward mechanisms, such as points, badges, and rankings, rewarding users for activity and contributions, motivating participation in community building and operations.

#### 5.3.6 Wink Builds Social Networks:

Wink provides social features like private messaging, following, and friend lists, helping users build their social networks, increasing interaction and connection among users.

#### 5.3.7 Wink Provides Community Management Tools:

Wink offers community management tools, such as administrators, moderators, and reporting features, ensuring community order and safety, preventing inappropriate behavior and content.

#### 5.3.8 Wink Guides User Participation in Decision-Making:

Wink establishes user feedback channels, encouraging users to provide suggestions and opinions, participating in community decisions and development planning.

These methods effectively promote multi-user community building in social software, enhancing user engagement and platform sustainability.

## 6. Wink's Social Mining

### 6.1 Wink Social Mining Reward Methods

Wink's social mining is a mechanism where users earn token rewards by participating in social activities. This promotes platform activity and user engagement while providing users with a way to earn value.

#### 6.1.1 Activity-Based Rewards:

Wink rewards users for various platform activities, such as content publishing, liking, commenting, and sharing, based on their contribution and influence, such as like count, comment count, and content quality.

#### 6.1.2 Social Interaction Rewards:

Wink rewards users for social interactions with others, such as private messaging, following, and adding friends, with corresponding token rewards.

#### 6.1.3 Community Contribution Rewards:

Wink rewards users for community contributions, such as reporting

inappropriate content, publishing high-quality content, and participating in community management, confirmed and rewarded through community voting or administrator review.

#### 6.1.4 Gamified Social Rewards:

Wink designs the platform as a gamified environment, setting various tasks and challenges. Users earn token rewards by completing tasks and challenges, increasing participation fun and motivation.

#### 6.1.5 Social Ranking Rewards:

Wink establishes social ranking lists based on user activity and influence. Top-ranked users earn additional token rewards, motivating users to increase social activity and influence.

#### 6.1.6 Cooperative Social Mining:

Wink allows users to cooperate in social activities, such as jointly initiating events or creating content, earning more token rewards, promoting user co-operation and mutual assistance.

### 6.2 Wink Social Mining Algorithms

Wink's social mining algorithm considers user social behavior and its contribution

and value to the platform. Here's a brief description of a potential social mining algorithm:

#### 6.2.1 Social Behavior Assessment:

Wink assesses user social behaviors, including content publishing, liking, commenting, sharing, following, and private messaging. Each behavior is weighted to reflect its contribution and influence on the platform.

#### 6.2.2 Contribution Value Calculation:

Wink calculates user contribution values based on social behaviors and corresponding weights, summing weighted behaviors for total contribution value in a given period.

#### 6.2.3 Token Reward Distribution:

Wink converts user contribution values to token rewards, distributing tokens based on contribution value proportion of the total, rewarding users accordingly.

#### 6.2.4 Dynamic Reward Rule Adjustment:

Wink adjusts reward rules dynamically based on platform development and user behavior changes. For instance, increasing reward weights when activity declines to boost engagement, or reducing weights during user

growth to sustain rewards.

#### 6.2.5 Anti-Cheating and Abuse:

Wink designs mechanisms to prevent cheating and abuse through data analysis and manual review, identifying and penalizing abnormal behaviors, ensuring fair reward distribution.

#### 6.2.6 Transparency and Fairness:

Wink ensures algorithm transparency and fairness, letting users understand reward rules and algorithm principles, guaranteeing just reward allocation.

### 7. Wink Digital Human Social Interaction

Wink digital human social interaction refers to social interactions involving virtual characters or digital avatars enabled by digital technology and AI. This social form can be achieved through virtual AI chatbots, VR digital avatars, and blockchain-based digital identities and social networks.

Digital human social interaction features and advantages include:

7.1 Personalized Interaction: Digital humans use AI to simulate human behavior and language, providing personalized interactions and exchanges, offering a more

intelligent and interesting social experience.

7.2 Always Available: Digital humans provide social interaction services anytime, anywhere, without time and space constraints, allowing users to interact and communicate at any time and place.

7.3 Privacy Protection: Users interacting with digital humans need not worry about privacy and information leakage, as digital humans use encryption technology to protect user privacy and data security.

7.4 Social Learning: Digital humans serve as tools and platforms for social learning, helping users improve social skills and communication abilities, learning effective social interaction.

7.5 Virtual Reality Experience: In virtual reality environments, users can engage in more immersive and realistic social interactions with digital humans, experiencing richer and more interesting social experiences.

7.6 Digital Identity Management: Digital humans act as user digital identity agents, helping manage and maintain digital identities and social relationships, including identity verification and personal profile management.

In summary, Wink's digital human social interaction provides a new form of social interaction through digital technology and AI, offering personalized, secure, and privacy-protected social experiences, with potential to become a significant direction in future social development.

## 8. Wink's Future Outlook: Combining Carbon-Based and Silicon-Based Life in Social Interaction

Combining carbon-based and silicon-based life in social interactions may involve technologies like VR, AR, and AI, bringing impacts and applications in the following areas:

### 8.1 Enhanced Social Experience:

VR technology enables carbon-based life to interact on a more immersive and realistic experience with silicon-based life, expanding the boundaries of social experiences.

### 8.2 Creating New Social Spaces:

In virtual worlds, carbon-based and silicon-based life can co-create new social spaces and communities, offering diverse and innovative social experiences.

### 8.3 Intelligent Assistants and Social Companions:



AI enables silicon-based life to serve as intelligent assistants and social companions for carbon-based life, providing social support and entertainment.

#### 8.4 Virtual Identities and Social Networks:

Silicon-based life can act as virtual identity agents for carbon-based life, managing social networks and digital identities in virtual worlds.

#### 8.5 Cross-Reality Experiences:

AR technology enables cross-reality interactions and communications between silicon-based and carbon-based life, adding new dimensions and fun to social experiences.

#### 8.6 Social Creativity and Entertainment:

Silicon-based life provides various social creativity and entertainment services, like virtual games, parties, and travels, enriching social lives.

In summary, combining carbon-based and silicon-based life in social interactions offers diverse, innovative, and immersive social experiences, expanding social boundaries and possibilities.

#### 8.7 Building a Mixed Civilization Sandbox or Digital Polis:

Building this social software into a mixed civilization sandbox or digital polis for carbon-based and silicon-based life involves several considerations:

#### 8.7.1 User Participation:

Ensure sufficient and diverse user participation from different cultural backgrounds and technical levels, creating a truly diverse and inclusive social environment.

#### 8.7.2 Technical Support:

Provide appropriate technical support and tools for creative and meaningful communication and collaboration, involving advanced technologies like VR, AR, and AI.

#### 8.7.3 Cultural Integration:

Promote cultural exchange and integration between carbon-based and silicon-based civilizations, breaking traditional cultural and technological barriers through cross-cultural activities and projects, like language exchange and cultural displays.

#### 8.7.4 Privacy and Security:

Ensure user information and data security, respecting privacy and autonomy with robust privacy protection mechanisms and data security measures.

#### 8.7.5 Social Innovation:

Encourage innovative social activities and projects, like collaborative creation and digital exhibitions, enriching platform content and functionality, attracting more users to participate and contribute.

Overall, building Wink into a mixed civilization sandbox or digital polis offers significant potential and challenges, creating a unique social experience, promoting cross-cultural exchange, and advancing social and civilizational development.