KASPERSKY: DailyHelper

This proposal presents a blockchain-powered decentralized application for peer-to-peer everyday task assistance with transparent reputation and reward mechanisms. It aims to bridge the gap between informal community help and centralized service apps by offering a trustworthy, tamper-proof platform that tracks contributions, validates tasks, and incentivizes mutual aid.

Detailed Proposal

Project Title: Decentralized Peer-to-Peer Everyday Task Assistance Platform

Theme: Web3: Blockchain and Decentralised Apps

Core Problem:

There is currently no single trustworthy and transparent platform for individuals to request or offer help with everyday chores such as cooking, heavy lifting, tutoring, or running errands. Existing solutions are either informal neighbor networks or commercial apps focused on specialized tasks with high commissions and opaque review systems. This results in inefficiencies, mistrust, and lack of inclusivity.

Objective:

To build a decentralized application (dApp) leveraging blockchain technology to create a community-driven marketplace where users can:

- Request help with daily chores,
- Volunteer to assist or get paid,
- Have all interactions and reputations transparently and immutably recorded on a blockchain to ensure trust and fairness.

Proposed Features & Workflow

User Roles:

 Admin: Controls user database, mines blocks (records transactions and help history with timestamps), manages platform governance including blacklisting malicious users. • User: Can either request help or volunteer to assist others. Users can view available requests in a common marketplace.

User Login & Interaction:

- Request Help: User creates a help request with fields such as task description, time, location, price (including free volunteer option), skill set needed, and any special instructions.
- Offer Help: Users can browse or search open requests and volunteer to help. Upon agreement, the task is matched.

Blockchain Integration:

- Every task and completion event is recorded as a transaction on the blockchain, creating a permanent, tamper-proof, time-stamped ledger of who helped whom and when.
- Smart contracts validate task completion, enabling verified reputation scores to be updated only after confirmation, removing fake or biased reviews.
- Payments or rewards can be facilitated through tokens or crypto, ensuring direct and fair compensation without intermediaries.

Reputation System:

- Reputation scores are calculated based on validated task completions stored on-chain.
- Admin and community can blacklist or flag accounts for malicious behavior.

Decentralization:

- No central authority controls the reputation or transaction ledger except the admin who represents a distributed consensus node to maintain block mining and integrity (can be further decentralized in future iterations).
- Transparency is ensured as all task and review data is accessible on-chain.

Implementation Overview

Frontend:

• User-friendly web interface with login, task request form, task marketplace, and profile/reputation dashboard.

• Separate Admin panel for user management, task oversight, and blockchain block mining controls.

Smart Contracts:

- Contracts to manage task requests, proposals, acceptance, completion validation, reputation updates, and token payments.
- Enforcement of rules to prevent fake feedback and ensure reviews only post confirmed completion.

Blockchain Network:

- Private or permissioned blockchain where the admin node mines blocks recording all transactions.
- Consider Ethereum-compatible networks or Hyperledger Fabric for flexibility in smart contract execution.

Database & Storage:

• Distributed storage for detailed task metadata and user profiles linked via blockchain transaction hashes for immutability references.

Expected Benefits

- Transparent and fair reputation system encouraging genuine community help.
- Elimination of fake or biased reviews through smart contract validation.
- Lower transaction fees by cutting out intermediaries.
- Encourages hyperlocal, casual helpers to get recognized and rewarded.
- Creates a trusted, decentralized alternative to commercial gig apps.

Extras

Token/Credit System:

- **Time Tokens**: Earn tokens for helping others (e.g., 1 hour of help = 1 token), which you can spend when you need help
- **Skill-based weighting**: More specialized tasks (plumbing, electrical work) could earn more tokens than basic tasks
- Token transferability: Allow users to gift tokens to others or donate to community members in need

Smart Contract Features:

- **Escrow mechanism**: Tokens held in smart contract until both parties confirm task completion
- **Automatic dispute resolution**: Multi-signature validation where neutral community members vote on disputes
- **Recurring task automation**: Set up weekly/monthly help arrangements that execute automatically

Trust & Reputation:

- **Reputation score**: Built from completed tasks, reliability, and peer validations (all on-chain)
- **Skill verification badges**: Community-verified credentials for specific skills (NFT-based badges)
- **Trust circles**: Create private groups (family, apartment complex, neighborhood) with higher trust levels

Community Features:

- SOS/Urgent help requests: Priority notifications for emergencies
- Task marketplace: Browse available helpers or open requests in your area
- **Skill matching algorithm**: Automatically suggest best-fit helpers based on past experience
- **Community pools**: Group projects where multiple people contribute (neighborhood cleanup, community meals)

Incentive Mechanisms:

- Newcomer bonuses: Free starter tokens to encourage participation
- Streak rewards: Extra tokens for consistent helping over time

• **Community challenges**: Monthly goals with bonus rewards (e.g., "50 hours of community help this month")

Privacy & Safety:

- **Anonymous task posting**: Request help without revealing identity until match is made
- Location privacy: Show general area, not exact address until confirmed
- Background verification option: Optional identity verification for sensitive tasks
- Insurance/liability tracking: Record safety protocols followed

Cross-chain Integration:

- Multi-chain support: Work across different blockchains for flexibility
- **Fiat on/off ramps**: Convert tokens to real currency if needed (for professional services)
- Integration with existing Web3 wallets: MetaMask, WalletConnect compatibility

Governance (DAO features):

- **Community voting**: Token holders vote on platform rules, dispute resolutions, token economics
- **Proposal system**: Users suggest new features or policy changes
- Treasury management: Community fund for helping members in crisis

Analytics & Transparency:

- **Public dashboard**: See community impact (total hours helped, active users, etc.)
- Personal contribution history: Your complete helping record
- Carbon footprint tracking: If tasks reduce travel/consumption

Interoperability:

- Calendar integration: Sync availability and scheduled help sessions
- Social proof: Share verified helping achievements on other platforms
- **Referral system**: Earn tokens for bringing new users to the platform