

# Engineering A Dance-Based Wellness Platform For Pediatric Anxiety And Depression

Customer

Dr. Mooves

Country

United States

Industry

Healthcare



## ABOUT THE CLIENT



Dr. Mooves A&D is the first dance-based wellness app designed to help children aged 5–12 manage subclinical anxiety and depression. Powered by patented motion-tracking technology and AI-driven performance analysis, the platform transforms guided dance routines into structured cognitive skill-building experiences. It also combines entertainment, neuroscience, and real-time performance tracking to make emotional development engaging, measurable, and accessible for families.

## BUSINESS SITUATION

Dr. Mooves had developed proprietary motion-tracking technology capable of analyzing over 70 bio-points in real time to measure movement precision and cognitive engagement. The vision was to translate this patented capability into a secure digital platform that could support children in building cognitive skills such as inhibitory control, working memory, and attention switching through guided dance experiences.

To bring this vision to life, the team required a healthcare-focused technology partner capable of:

1. Designing a child-first digital experience

2. Architecting a scalable backend infrastructure

3. Building a secure dual-reward financial system (real cash or cryptocurrency)

4. Enabling real-time performance tracking and analytics

5. Ensure HIPAA compliance and auditability from day one

6. Developing a configurable administrative control layer

## THE SOLUTION

Following discovery workshops with the Dr. Mooves team, Unthinkable structured the engagement across the full software development lifecycle, from product strategy and UI design to backend architecture and deployment. Our approach focused on preserving the integrity of the proprietary motion-tracking engine while building the digital systems needed to scale the platform.

### Product Discovery & Architecture Planning

During the discovery phase, we defined user personas for children aged 5–12 and their parents. We mapped engagement flows covering dance sessions, performance tracking, and rewards.

The team established reward logic and performance thresholds aligned with motion-tracking outputs. We designed a secure payout architecture and defined administrative oversight requirements for operational control.

We architected the system to scale with future growth.





## UI/UX Design To Create A Child-Centric Digital Experience

One of the primary focus areas of the engagement was designing the user interface from scratch.

We built a child-centric, intuitive experience featuring character-led navigation, motion-overlay guidance for accurate body positioning, performance result screens with improvement scoring, reward visualization dashboards, and clear progress tracking indicators.

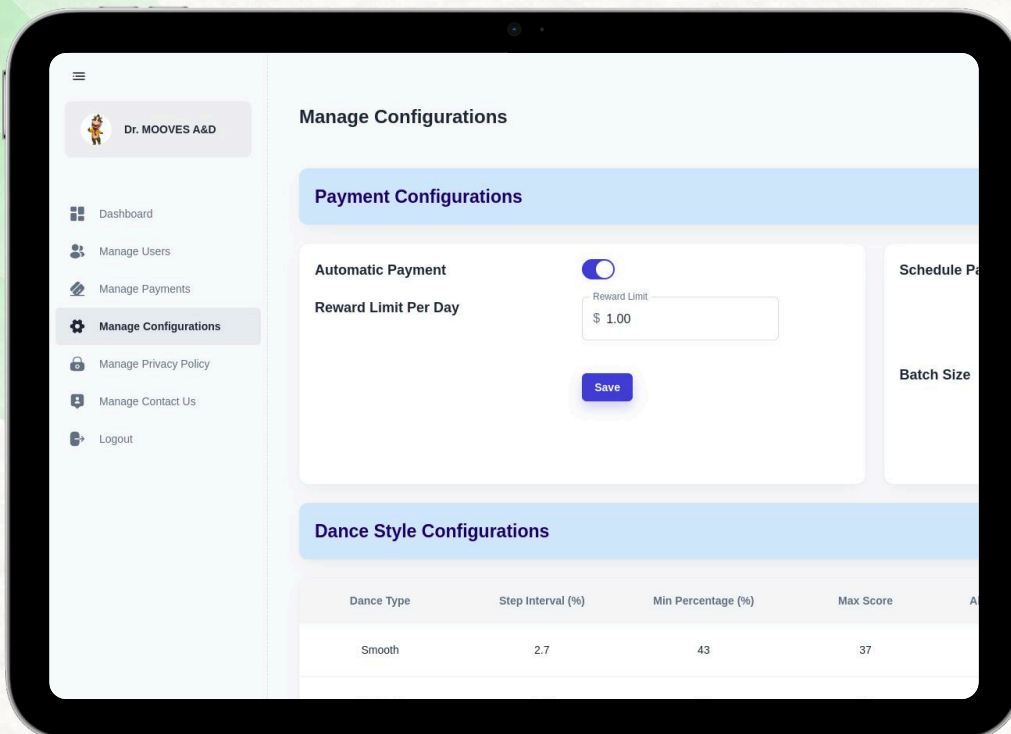
We optimized animations, transitions, and visual cues to maintain engagement without cognitive overload, ensuring the interface supports both the platform's playful identity and structured cognitive skill development.

## Core Platform Engineering

Unthinkable developed the full backend infrastructure to operationalize the platform, integrating the proprietary motion-tracking engine and enabling real-time performance data processing.

We aligned AI-driven effort scoring with reward logic, implemented secure user data handling, and architected a modular system designed for future scalability.

The system translates movement data into measurable performance outcomes that feed directly into reward and progress tracking mechanisms.



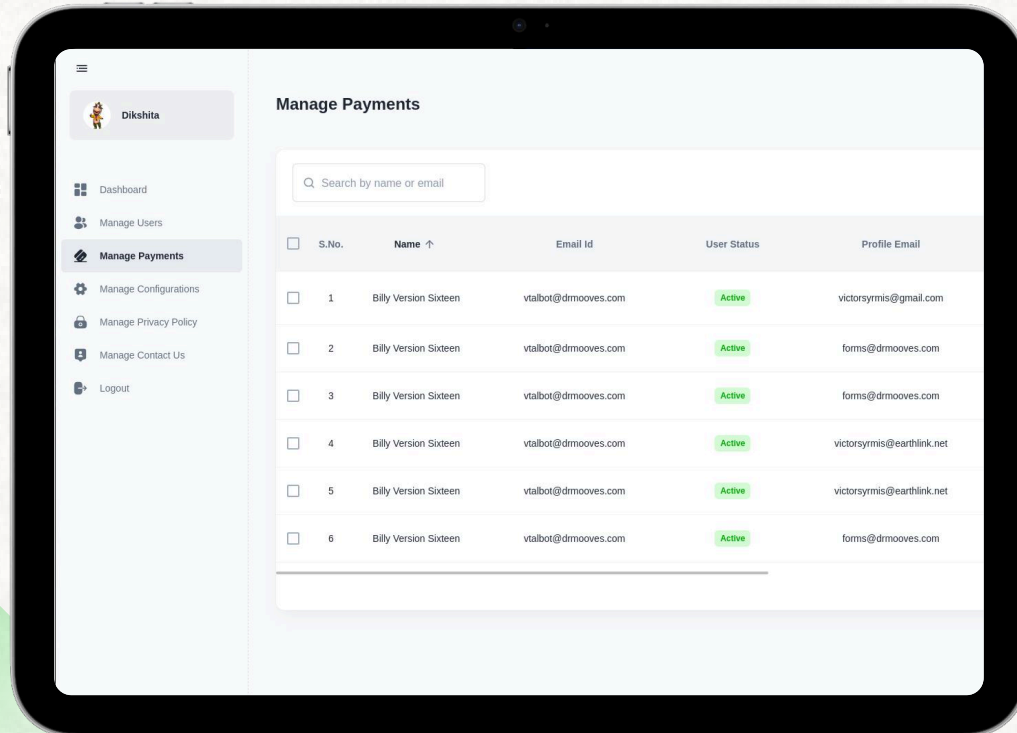
Manage configuration dashboard showing payment settings and dance-style configurations within Dr Mooves' platform interface.

## Dual Reward & Financial Infrastructure

To reinforce consistent participation, we engineered a structured dual-reward system in which children earn real cash rewards and crypto-backed currency points based on performance thresholds and improvement scores derived from motion analysis.

Unthinkable integrated the Dwolla payment gateway to enable secure micro-deposit transfers to parents' linked bank accounts. The reward engine includes point-to-monetary conversion logic, configurable daily reward limits, automated and manual payout controls, and batch transaction processing.

The result is a secure and transparent financial incentive system.



**Reward management interface displaying payout tracking and transaction records for user reward distributions.**

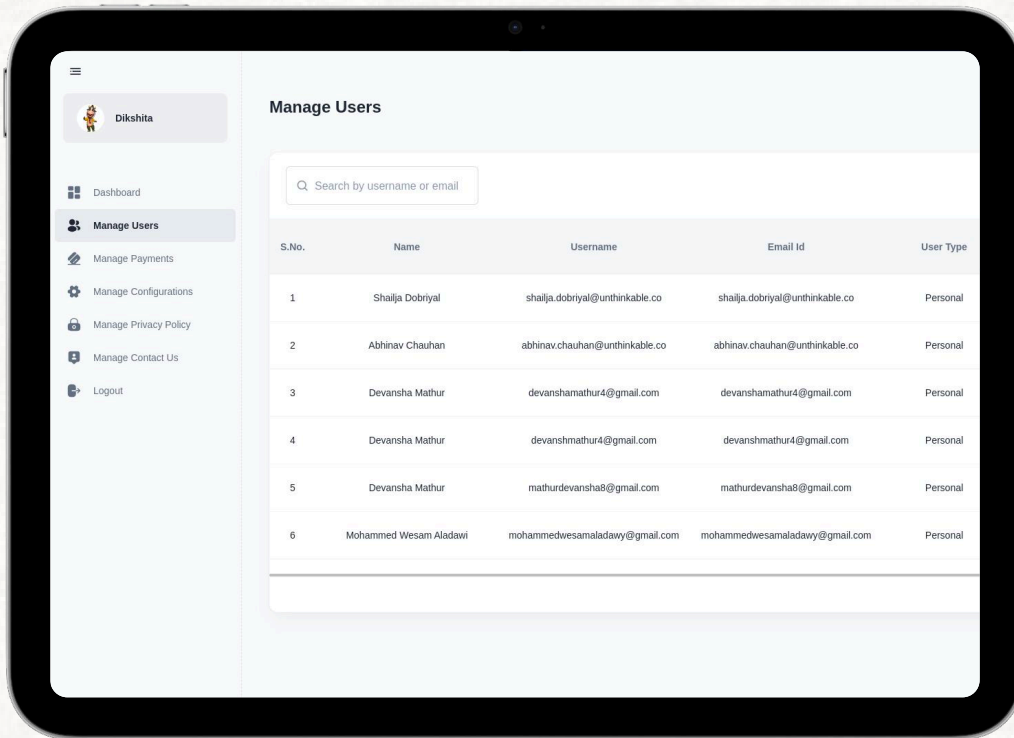
## Administrative & Impact Dashboard

We built a centralized admin portal from scratch to provide visibility into operations and impact.

The dashboard offers access to active and newly registered users, transaction distribution (pending, completed, failed, and in progress), reward generation metrics, \$SPC™ tracking, dance participation data, and performance trends.

Administrators can manage user profiles, monitor reward payouts, configure dance-style parameters, set performance thresholds, and control payout scheduling and batch sizes.

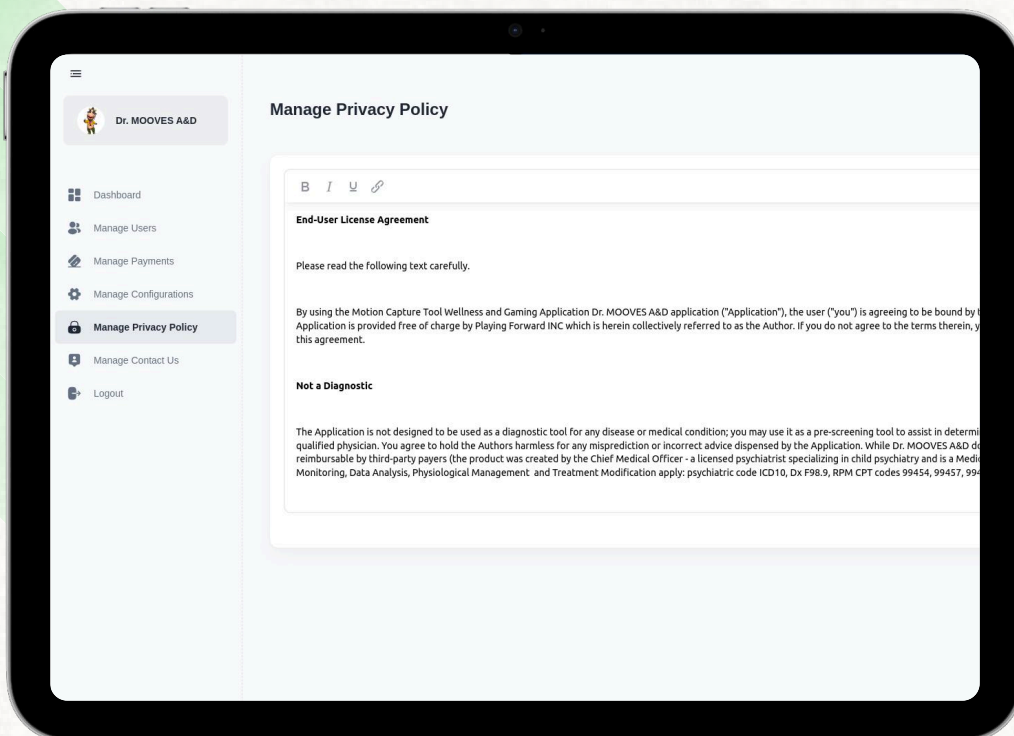
This infrastructure enables Dr. Mooves to manage engagement mechanics, financial flows, and performance data without requiring backend code changes.



Administrative dashboard displaying user management, performance metrics, and reward management controls.

## Compliance & Content Management

We modernized static content structures and introduced dynamic content management capabilities that allow administrators to update privacy policy content, maintain regulatory alignment, manage contact information, and provide structured communication channels.



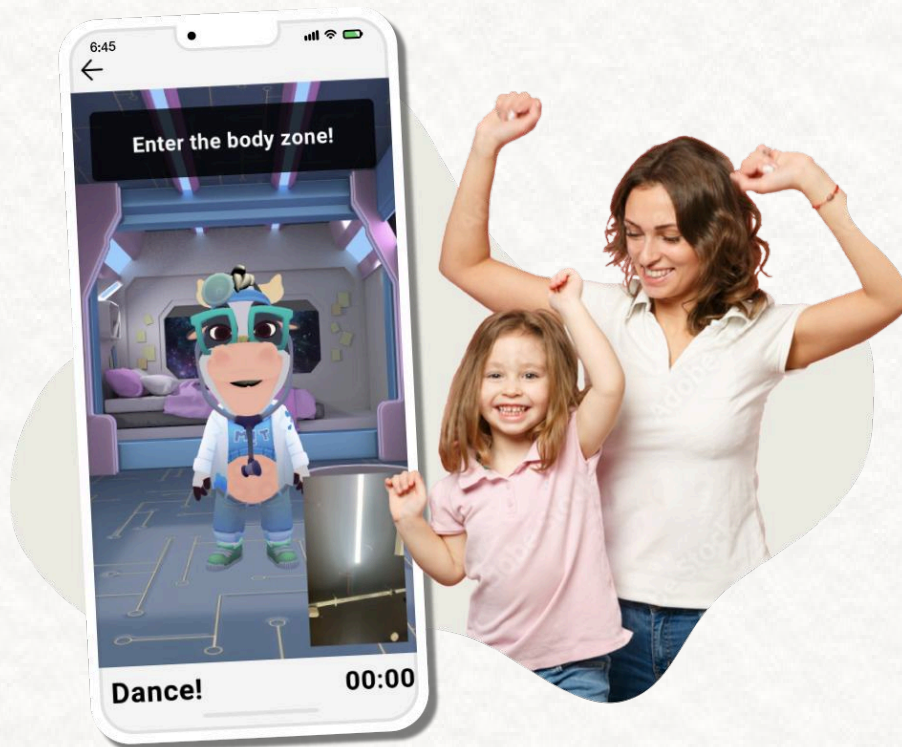
Admin panel interface for managing privacy policy content and platform configuration settings.

## IMPACT

We developed a scalable, data-driven pediatric wellness platform that supports growth and operational efficiency. The redesigned interface increased consistency in engagement, while the integrated reward system reinforced positive behavioral patterns.

Repeat session participation increased by approximately 12%, manual payout processing effort was reduced by nearly 30%, and administrative configuration updates became 25% faster. Enhanced dashboard visibility improved operational decision-making.

Dr. Mooves now operates on a configurable, secure, and analytics-enabled infrastructure that supports continued innovation in dance-based emotional wellness for children.



**HAVE A SOFTWARE  
PRODUCT VISION IN MIND?**

Set up a personalized consultation with our technology expert

Let's Talk 



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