



AI-Powered Mobile Platform for Democratising Sports Talent Assessment



Team Name: *Team Skill Issues*

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Theme: *Fitness & Sports*

Problem Statement Title : *AI-Powered Mobile Platform for Democratizing Sports Talent Assessment*

Problem Statement ID : 25073

PS Category : *Software*

Team ID :

Addressing Critical Challenges in Indian Sports

Despite immense potential, India's sports ecosystem faces significant hurdles. Our platform aims to tackle these head-on, ensuring fair and widespread opportunity.

→ Lack of Standardised Assessment

Inconsistent and subjective talent identification processes in rural India hinder equitable opportunities.

→ Limited Technology & Facilities

Many aspiring athletes lack access to modern training equipment or assessment tools, especially in remote areas.

→ Rising Doping Concerns

The integrity of sports is undermined by increasing doping instances, necessitating robust detection mechanisms.

Understanding the landscape:

65%

Rural Population

Of India's total population resides in rural areas, often with limited sports infrastructure.

35%

Rural Internet Penetration

Highlighting the digital divide and need for accessible solutions.

260+

Doping Cases in 2024

Reported, underscoring the urgent need for anti-doping measures.

Our Innovative Solution: Empowering Talent Through AI

We propose a multi-faceted platform designed to overcome traditional barriers, making talent assessment inclusive and reliable.



AI-Powered Video Analysis

Utilising mobile phone cameras for precise, objective fitness test assessments, accessible to all.



Offline + Kiosk Model

Ensuring reach to athletes without smartphones via dedicated kiosks, bridging the digital gap.



Cheat & Manipulation Detection

Advanced AI algorithms identify and prevent fraudulent attempts during assessments, maintaining integrity.



Proactive Anti-Doping Feature

AI cross-checks blood reports and performance data to flag potential doping violations.

Key Features & Robust Tech Stack

Our platform is built on cutting-edge technology, ensuring performance, accessibility, and scalability across India.



On-Device AI (TensorFlow Lite)

Enables processing directly on low-end devices, reducing reliance on constant internet connectivity.



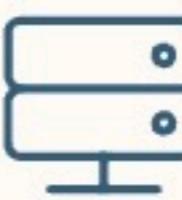
React Native

A single codebase ensures seamless deployment on both Android and iOS platforms, maximising reach.



OCR + Vision APIs

For accurate scanning and verification of official documents and reports, including medical data.



FastAPI/Node.js Backend

Provides high speed and robust scalability, handling large volumes of user data and requests efficiently.



Cloud (AWS/Azure)

Ensures nationwide data accessibility, secure storage, and the infrastructure for future expansion



Gamification

Leaderboards, badges, and recognition provide motivation and encourage sustained engagement among athletes.

Transformative Impact: Nurturing India's Sporting Future

Our platform promises to revolutionise sports talent identification, fostering a new era of fairness and widespread participation.



Democratised & Fair Discovery

Objective, AI-driven assessment opens doors for talent previously overlooked, regardless of location or background.



Transparent, Low-Cost, Scalable

Provides an affordable and highly scalable model for nationwide talent identification, fostering broad participation.



Anti-Doping Ensures Credibility

Robust measures protect the integrity of sports, building trust and ensuring a level playing field for all athletes.



Inclusivity via Kiosks & SMS

Ensures that even those without smartphones can participate, promoting widespread access to the platform.



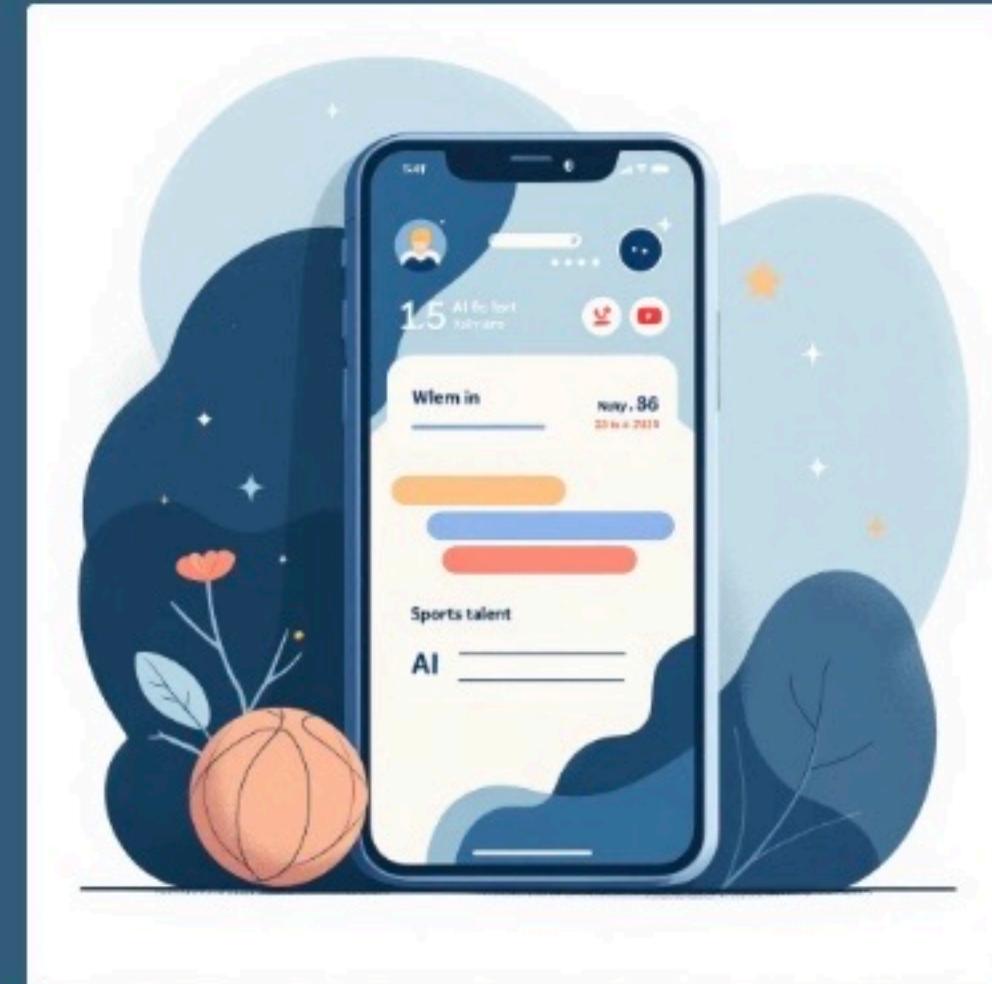
Alignment with "Khelo India"

Supports the national vision of promoting grassroots sports and identifying future champions for India.

A large, stylized silhouette of a person running towards the right is set against a background of a setting sun over hills and a horizon line with small clouds.

Conclusion: Our Deliverables

We are committed to delivering a comprehensive solution that empowers every aspiring athlete across the nation.



- Fully functional **Mobile Application** (Android & iOS).
- Integrated **AI-Powered Assessment Modules** for various fitness tests.
- Advanced **Anti-Doping Verification** system with AI cross-checking.
- Centralised **SAI Dashboard** for national-level talent management and analytics.

“Empowering Every Athlete, Everywhere.”