

BUSINESS REQUIREMENTS DOCUMENT (BRD)

Title: Athlete Performance Analysis System

1. Project Overview

Athletes and coaches constantly seek to improve performance across various sports disciplines. With traditional performance analysis relying on subjective assessments and basic statistics, there is often a lack of in-depth insights into athletes' strengths and weaknesses. This BRD outlines the creation of a platform that analyses data using APIs, analysis of video by coaches etc to offer detailed performance insights, to provide more comprehensive and actionable insights to athletes and coaches as well as with a focus on accessibility for amateur athletes and small sports teams.

2. Business Objectives

- Enhance athletic performance by providing detailed, actionable insights based on provided data.
- Using dashboards to give an insight into athlete's performance from database.
- Make performance analysis accessible to amateur athletes and small teams with limited resources.
- Offer detailed insights into an athlete's performance by manually inputting data.
- Enable athletes and coaches to track progress over time.
- Make the platform affordable and user-friendly for non-professional athletes and small teams.

3. Scope

The scope of this project will focus on building a performance analysis system that collects and processes performance data from athletes.

- Data Collection: Accessing manual data input for tracking various performance metrics.
- A user-friendly interface tailored for both athletes and coaches, providing visualizations.
- Basic recommendations for performance enhancement based on analysis of the coach.
- Data Visualization: Dashboard representation of performance trends over time.

4. Stakeholders

- Athletes: Seeking personalized insights into their performance and areas of improvement.
- Coaches: Looking to provide better guidance and objective feedback to athletes.
- Amateur Teams: Small sports teams needing affordable performance analysis solutions.

5. Functional Requirements

- User Authentication and Authorization:
 - Athletes and coaches can create accounts and log in securely.
 - Role-based access: Athletes can only view and modify their data; coaches can view data for multiple athletes.
- Data Collection:
 - Manual input of performance as well health data like heart rate, speed, running times, match results, training stats etc

- Performance Tracking and Analysis:
 - Dashboard to display athlete performance metrics.
 - Track improvements over time and suggest modifications to training plans based on performance trends.

6. Non-Functional Requirements

- The platform should handle large datasets without lag, supporting multiple users accessing data simultaneously.
- The interface must be user-friendly, enabling athletes and coaches without a technical background to easily navigate and understand performance data.
- Protect sensitive athlete performance data through encryption and secure authentication processes.

7. Assumptions

Assumptions:

- Wearable technology and video analysis tools are readily available and used by athletes.
- Coaches and athletes are willing to invest time in learning and using the platform effectively.

8. Success Metrics

- The system effectively tracks and displays athlete performance metrics.
- Athletes and coaches report satisfaction with the ease of use and insights generated by the system.
- The system operates efficiently without significant downtime or performance issues.

9. Risks

- User Adoption: Athletes and coaches may resist using new technology, especially if it appears complex or time-consuming.
- Data Privacy Concerns: Managing and safeguarding personal and performance data will be critical to ensure user trust.

9. Deliverables

- Fully functional athlete performance analysis platform.
- Initial and ongoing technical support for users.

11. Glossary

Performance Metrics: Data points related to athletic performance, such as speed, endurance, heart rate, etc.

11. Conclusion

This platform will offer sport enthusiasts actionable insights into their performance, helping them enhance their abilities without the need for expensive, professional-grade tools. The goal is to provide athletes and coaches with a straightforward tool to track performance improvements over time.