



# Meta Ninza – Al-Powered eSports Management

Advanced gaming platform leveraging AI to streamline eSports team management, tournament organization, and player performance analytics for a competitive edge.

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#### Background

With the booming popularity of eSports, managing online tournaments efficiently has become a major challenge. Players need a streamlined way to register, track schedules, and engage in tournaments, while organizers require robust tools to handle registrations, payments, and communication. Meta Ninza was developed as an AI-powered platform to simplify eSports tournament management, enhance user engagement, and provide a seamless experience across web browsers, mobile devices, and tablets.

#### **Key Challenges**

Manually managing player registrations, brackets, and match results is time-consuming and prone to errors. The platform must support thousands of users simultaneously, especially during major eSports events. Different players have unique preferences, and engagement needs vary

across casual and professional gamers. Players and organizers need AI-driven insights on game performance, match outcomes, and player statistics. Ensuring secure payments, preventing fraud, and maintaining a fair gaming environment.

### **Our Solution**

Implemented machine learning models to automatically create tournament brackets, assign matches, and predict player performance based on historical data. Used AI to pair players of similar skill levels, ensuring fair and competitive gameplay. Deployed the platform on cloud-based servers to handle high user traffic and ensure seamless performance. Leveraged AI-powered recommendation engines to suggest tournaments, casual games, and in-app purchases based on user behavior. Integrated AI to analyze player performance, predict match outcomes, and provide insights through interactive dashboards. Used AI-driven fraud detection to identify suspicious activities, ensuring a secure environment for players and transactions. Enabled AI-powered content moderation and automated highlight generation for stream embedding.

### **Tech Stack**

Frontend: React.js (Web), Flutter (Mobile)

Backend: Node.js with Express.js

AI & ML Models: TensorFlow, OpenAI GPT, PyTorch

Database: PostgreSQL

Cloud & Hosting: AWS (EC2, S3, RDS)

Authentication & Security: Firebase Authentication, OAuth, AI-based fraud detection

Payments: Stripe/PayPal Integration

Additional Features: WebSockets for real-time updates, AI-powered chatbot for user assistance, AI-driven game insights

## Value Delivered

Al automation reduced manual effort by 60%, ensuring smooth operations for organizers.

Al-powered recommendations and game analytics kept players engaged, increasing platform retention.

The cloud infrastructure handled peak tournament loads without performance issues.

Personalized AI-driven suggestions for game purchases and upgrades boosted in-app sales.

AI-based fraud detection minimized cheating and unauthorized transactions, ensuring a trustworthy gaming experience.