

Gamentio

<https://gamentio.com/>

The client established from his in-depth research that there was a big gap in online card games market in India. Very few online casino games were available, that too in bleak 2D setting. So, the client conceived the idea of building a card games platform that would allow users in India to play multiple card games in a thrilling 3D setting - a first of its kind. The client needed a technology partner to turn that amazing idea into a reality. When the client reached out to Logic Simplified (LS), he just had the idea and wanted LS to built on that idea from scratch.

The journey had its own struggles to cope with. For instance, Adobe Flash, which was originally used to build Gamentio, decided to make its way out from video games. It was a big setback and LS had to take a big undertaking of moving Gamentio to altogether new technologies, including HTML5, Angular, BabylonJS and Websockets. There were also times when LS handled over 15,000 concurrent users (playing on apps, browsers and even phone browsers) on a single server without causing any jerk in the user experience. As of now, Gamentio has over 2 million registered users, with thousands playing on a daily basis.

Client Requirements:

- **3D Avatars** - Build 3D avatars that can be customized.
- **Build multiple card games:** Poker, Rummy, Teen Patti, Slots, Solitaire, Blackjack and Auctions.
- **Chatbox** - Chatbox function for players so that they can communicate with other players on the table during gameplay.
- **Multiple sites** - Multiple sites for each card game available for play on Gamentio.

- **Scalable platform** - The client initially wanted to build Poker, Teen Patti and Rummy and eventually add more games including Blackjack, Slots, Solitaire and Auctions.
- **Load balancing** - Handle thousands of users playing at the same time without any performance issues.
- **Multiple tournaments** - Conduct multiple tournaments for different card games that users can participate in on a daily basis.
- **Payment gateway integration** - Secured online payment methods to enable users to buy Gamentio coins.
- **Deep learning** - The client wanted to build deep learning tech to implement AI bots for game classrooms where beginners can learn the ropes of the games offered.
- **Cards generator** - Random playing cards generator for fair gameplay.
- **Game currency**: Two types of in-game currency; Real money and Gamentio coins
- **Winning transfer** - Daily payout transfer to winner bank accounts with TDS deduction and reporting.
- **Admin portal** - Comprehensive admin portal for user and game configurations and administration.

Solution scope:

The provided solution covered the following different applications:

- **Public website** - Public website with marketing pages
- **Mobile application**
 - Responsive web application
 - iOS mobile application
 - Android mobile application

- Real money Android application to be downloaded with APK

- **Admin web application**

Challenges:

Multiple card games - Building multiple card games within a strict deadline was a challenge. So, LS built a framework that allowed to make any turn-based card game ready for launch in just 15 days. For example, Blackjack was built and launched in just a matter of 15 days,

Technology migration - Gamentio was first built in Flash RTMP. With change in requirements, such as better animations, better 3D effects, better connection between gaming server and frontend, and more, LS migrated Gamentio from Flash to HTML5, Angular, BabylonJS and Websockets.

Tech stack:

- Deployed on AWS.
- Ejabberd XMPP for chatting.
- Firebase for push notifications, analytics, real-time database and authentication.
- Liferay for multiple sites - built one site for each game.
- Red 5-Websocket for game handling at the server end.
- Game backend in Java.
- Game frontend in HTML5, Angular, Phaser.
- Load Balancer (Nginx) with Liferay backend to handle thousands of users playing at the same time on Gamentio.
- Secure Seed and Mersenne Twister for random card generation.
- Auctions on Node.js and Angular.
- Secure communication encrypted between remote devices and backend server.

Team size:

- Developers - 8
- Designers - 8
- Architect - 1
- Testers - 2

Remarks: LS team handled from Scope definition to Designing, Architecting, Development, and Testing of the complete application.

Currently, LS is helping Gamentio to build separate mobile apps for different card games. Along with that, LS is providing dedicated post-production support with 1 support engineer. We keep undertaking short-term enhancements and development tasks as per client requirements.