

Mixamo

Animated 3D avatars go social

**Mixamo**

San Francisco, California
www.mixamo.com

Results

- Reached millions of users on China's biggest social networking site
- Enabled 3D gamers to customize and animate avatars in minutes
- Reduced development time by 35%
- Created unique workflow by seamlessly integrating multiple frameworks

Game developers use Adobe® Flash® Professional and Stage3D APIs to launch animated 3D game on Renren, China's leading social network

Bending reality into three dimensions on a two-dimensional surface has transcended gaming consoles, saturated desktops and websites, and landed squarely in the land of social media. Now, social media enthusiasts with a penchant for games and a love of motion graphics can customize and animate their own 3D avatars that play nicely with others on massive social media sites.

A mass-market 3D social game was built by the game developers at Mixamo, providers of an online animation service that allows users to automatically create and apply animations to characters in minutes. This project took the form of a browser-based, 3D animated game deployed on Renren, one of the biggest social network sites in China.

The team at Mixamo took on this ambitious project—leveraging Adobe Flash Professional software and the advanced rendering capabilities that Stage3D APIs brings to Adobe Flash Player 11—and set out to create a unique holiday promotion for a major beverage brand.

"Adobe Flash Professional, Adobe Flash Player 11, and Stage3D are without a doubt a great combination of solutions for creating browser-based games that can reach the widest possible audience without the need for a plug-in installer," says Stefano Corazza, CEO and co-founder at Mixamo.

Mixamo leveraged Adobe Flash Professional, Stage3D, and Adobe Flash Player 11 to create an advanced, browser-based game—a unique holiday promotion for a major beverage brand.



Challenge

- Deliver top-quality, 3D animated game for high-profile beverage brand that reached mass market of social gamers on Renren
- Create unique end-user experience that reinforces top-tier beverage brand messaging

Solution

Deploy Adobe gaming technologies that leverage the tight integration and advanced 3D functionality of Adobe Flash Professional, Adobe Flash Player 11, and Stage3D—in tandem with Flare3D tool environment

Systems at a glance

Adobe Gaming. Technologies used include:

- Adobe ActionScript*
- Adobe Flash Professional
- Adobe Flash Player 11
- Adobe Stage3D API

Other technology used:

- Mixamo Flare3D

Stage3D is a rendering method developed by Adobe that is part of Adobe Flash Player 11 and is supported by a set of low-level APIs. This new technology takes graphics in the browser to new heights by enabling advanced 2D and 3D capabilities. The same Stage3D APIs are supported in Adobe AIR® for the deployment of standalone downloadable games for desktop, TV, and mobile devices.

Stage3D APIs provided Mixamo developers with the ability to leverage GPU hardware acceleration for significant performance gains when the promotional game was deployed on Renren.

Integrated, accelerated workflow

Launching the first Adobe Flash Player 11 game on one of China's biggest social networking sites required the Mixamo team to create custom workflows from scratch, having to strike the right balance between their vision and project constraints such as build size and streaming content requirements.

They needed to deliver a uniquely compelling solution for their high-profile client, while providing a great social gaming experience for millions of Renren users. "To our delight, we were able to create something a lot bigger than we ever imagined in such a short time, thanks to Adobe gaming technology," says Corazza.

Corazza estimates that the use of Adobe gaming technologies resulted in 35% savings on development costs by enabling the firm to leverage in-house resources and knowledge. Any other platform would have required hiring new staff with different skill sets and using untested frameworks. "If we had gone with less familiar technology, it would have surely resulted in a missed deadline," he says.

Two in-house developers well versed in Adobe Flash Professional and ActionScript programming worked with a design team that modeled and textured content within specifications so the builds could stay within a certain target size—and the job could be completed within a tight six-week deadline.

The Mixamo team used the professional tools in Flare3D Studio to create the 3D content for this project, using its intuitive interface to build content specific to the Stage3D functionality of Adobe Flash Player 11. Flare3D creations can be exported to all platforms supported by Adobe Flash—in this case the Renren social network.

"Our ability to leverage Adobe Flash Player 11 was made infinitely easier with Flare3D, a complete and easy-to-use 3D framework that allows our Flash developers to focus on creativity in a familiar animation environment," says Corazza. The team applied character animations from the Mixamo animation service, exported them as Collada files, and literally dragged and dropped them into Flare3D.

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Stefano Corazza

Chief executive officer and co-founder, Mixamo

"This unique workflow gave us incredible content creation speed and enabled object transformations and material properties to be animated in scenes, which freed developers to focus on ActionScript programming," says Corazza. From there, it was only a matter of days before initial builds were ready for testing and revisions.

With the promotional game on Renren having successfully engaged several million users during the Chinese New Year holiday season, Corazza notes that Mixamo set new precedents for what can be done with Adobe Flash Professional, Adobe Flash Player, and Flare3D. "We see a powerful trend with 3D animation on the rise, not just for gaming but also for marketing and applications. Our technology and services integrate so well with Adobe gaming technologies and Flare3D, we're certainly going to be developing more Flash powered games and applications that demonstrate how easy and effective 3D can be."

For more information
www.adobe.com/go/gaming



Adobe

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