



Hole in one

Realistic online golf game created with Adobe® Creative Suite® 4 Web Premium software is available to all via Adobe Flash® Player 10



How World Golf Tour's Workflow has Improved with Adobe Creative Suite 4 Web Premium

Pain point: Offer golf enthusiasts a realistic and affordable way to play

World Golf Tour strives to create highly photorealistic online golf experiences that exceed that which players have on traditional video game consoles. Adding a high degree of realism is an important part of attracting new players and keeping them on the site for long periods of time; however, it can be both technically difficult and time-consuming.

Solution: Adobe Creative Suite 4 Web Premium and Adobe Flash Player 10

- Developers use the 3D transformations in Adobe Flash CS4 Professional to enhance the look of golf shafts by adding glints of light at just the right angle.
- The Bones tool in Flash CS4 Professional helps developers create more realistic flag animations.
- With Adobe Flash Player 10, consumers are seeing a 30% performance boost and 10% to 20% less RAM usage, resulting in a better overall experience.

San Francisco-based World Golf Tour seeks to democratize the game of golf with a free, online golf game that is both available and affordable for all. Launched in October 2008, WGT.com offers players a truly photorealistic online golf experience. Designed with Adobe Creative Suite Web Premium software, WGT.com features dynamic 3D depictions of renowned golf courses from around the world.



“The integration among Adobe Creative Suite 4 Web Premium applications and the advanced animation capabilities of Adobe Flash CS4 Professional add new efficiencies to our workflow, enabling us to create higher quality online games and bring them to market faster than ever before.”

YuChiang Cheng, CEO, World Golf Tour, Inc.

Realistic online gaming

World Golf Tour golf games are massive multiplayer online games (MMOGs) and 90% of the content on the website is free. The company wanted to create an online golf game that could be distributed across multiple platforms and browsers. The team quickly settled on designing the game using Adobe Creative Suite Web Premium and distributing it for the Adobe Flash Player.

The Adobe Flash Player is already installed on over 98% of Internet-connected computers worldwide and is a core component of the Adobe Flash Platform. Today, the game is available to users via Flash Player 10, the most quickly adopted player in history with over 55% penetration in its first two months of availability.

Designed with Adobe Creative Suite Web Premium software, World Golf Tour games feature photorealistic depictions of famous golf courses. Players compete in online virtual golf tournaments for credits and prizes.

“Adobe Creative Suite Web Premium software offers us a comprehensive and integrated set of design and development tools and we couldn’t have achieved the same quality, realism, and reach without it,” says YuChiang Cheng, CEO of World Golf Tour, Inc.

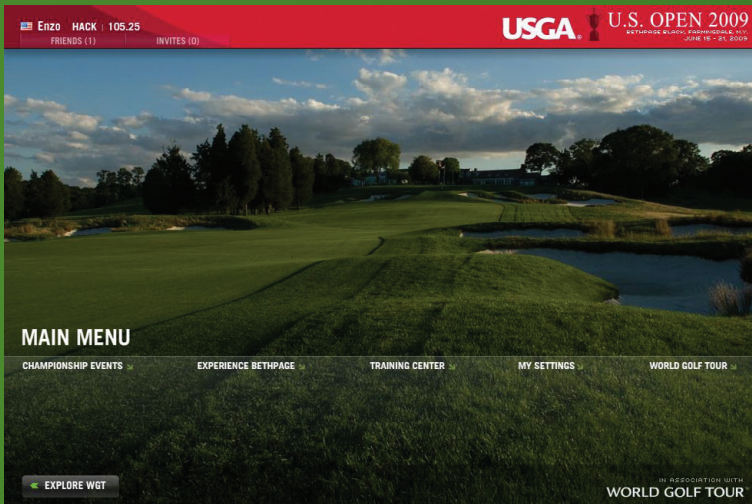
In the first six months after the public beta launched, players completed six million rounds of online golf and hit more than 72 million golf shots on the site. The company expects usage numbers to double by the end of its first year.

Today, golfers can play a round of online golf on the sunny Ocean Course at Kiawah Island Golf Resort or the always fair-weathered Wolf Creek Golf Course in Nevada. In spring 2009, players can participate in a Virtual U.S. Open Championship on a state-of-the-art simulation of Bethpage Black in New York.

Captive audience

WGT.com appeals to a definite sweet spot in the market. Site metrics show WGT attracting mostly 25- to 45-year-old males who make more than \$100,000 a year. On average players are completing four to five rounds of golf per week and spending about 18 minutes at a time on the site.

Recognizing the appeal of this demographic, World Golf Tour has established successful co-marketing arrangements with organizations wanting to expand their footprint in the golf enthusiast market. Rather than charging consumers for expensive game consoles and



The state-of-the-art simulation of the Black Course at Bethpage in New York, created with Adobe Creative Suite Web Premium software, will enable golf enthusiasts everywhere to play the Virtual U.S. Open Championship from their computers at no cost.

proprietary games, World Golf Tour derives revenue from high-profile online tournament sponsors, branded advertisements on the website, and in-game micro transactions.

“People can play our online golf game on a platform they already have using the Adobe Flash Player, rather than purchasing an expensive game console or downloading anything to their computer, which can be a barrier for many people,” says Cheng.

World Golf Tour enters into license agreements with the golf courses and tournament owners, and online virtual golf tournaments are featured on the website for a set period of time. Financial institutions, auto manufacturers, golf associations, and equipment providers, including the USGA, PING, and TaylorMade, take advantage of the opportunity to reach their target audiences in a highly relevant environment.

Course anatomy

The entire WGT.com client is written in Adobe Flash Professional. World Golf Tour quickly upgraded to Adobe Creative Suite 4 Web Premium software and now uses it throughout the online golf course development process. The World Golf Tour team uses the Adobe Creative Suite 4 Web Premium integration capabilities to directly import files from Adobe Photoshop® CS4 Extended into Flash CS4 Professional.

The online game does not feature canned responses, but lets players experience the golf courses as they would if they were playing them live. WGT.com uses a fully functional physics engine and an Adobe Flash Professional model, featuring Adobe ActionScript® 3 programming, to make each experience unique. “Golf cannot be played in a linear fashion and ActionScript 3 allows for a multitude of reactions based on player input, creating a more realistic experience,” explains Cheng.

Color correction and touch-ups, such as removing power lines from photos of the golf courses, are done using Adobe Photoshop CS4 Extended, while overall color balancing and organizing images is handled in Adobe Photoshop Lightroom® 2. Adobe After Effects® CS4 is used to create all of the animation within the new courses.

World Golf Tour is excited to take advantage of new features in Flash CS4 Professional that will help up the reality quotient in the online game. Enhancements to the JavaScript API in Flash CS4 Professional simplify piecing together avatar parts, while improvements to the blend modes make lighting avatars easier. Developers use the 3D transformations and the Bones tool in Flash CS4 Professional to add realistic effects. World Golf Tour is also taking advantage of the speed improvements afforded by Flash Player 10 to improve the player experience.

World Golf Tour

San Francisco, California
www.wgt.com

Challenges

- Make golf available and affordable for all
- Eliminate technical and cost barriers to playing golf online
- Attract top sponsors and partners
- Build an online golf community

Solution

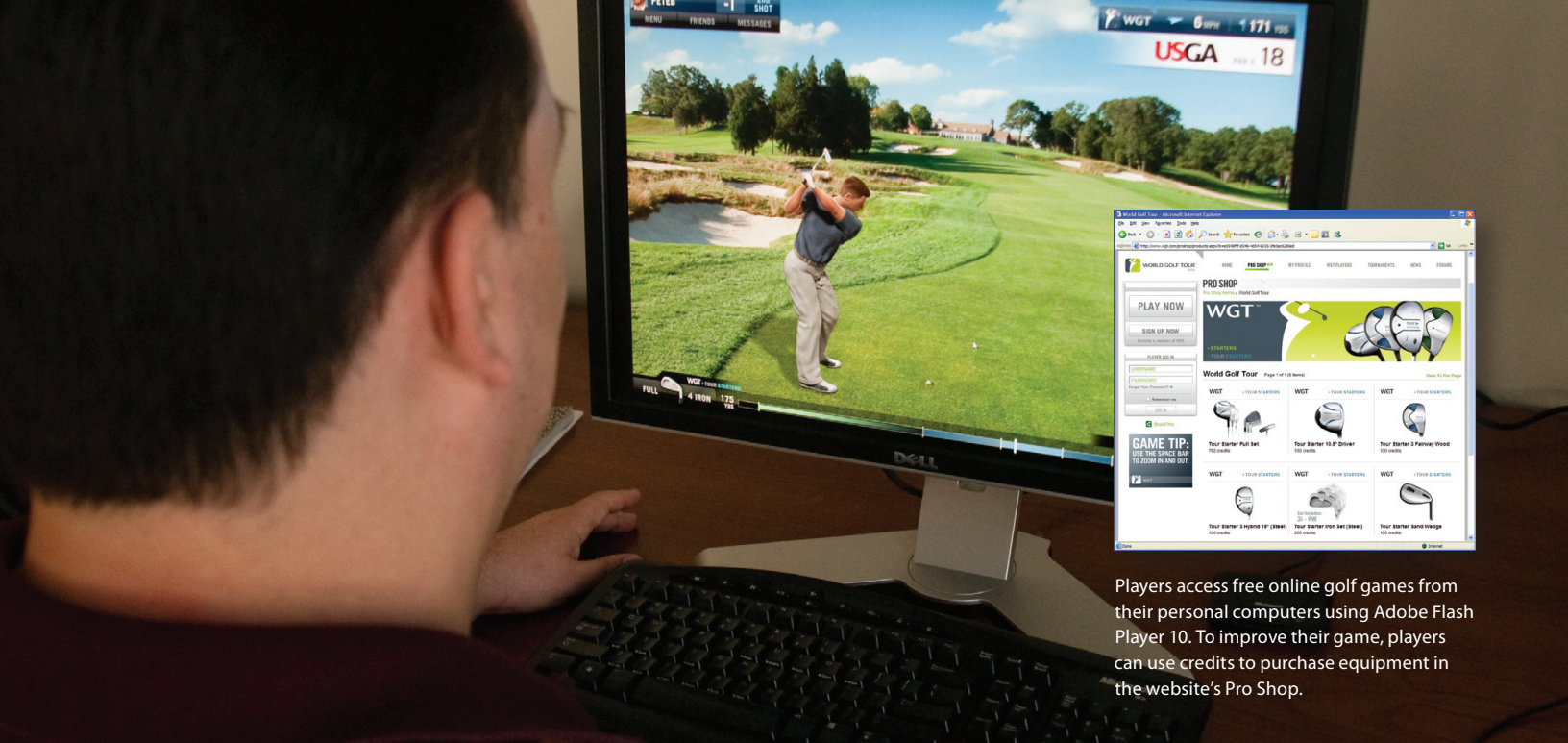
- Create a photorealistic, 3D online golf experience using Adobe Creative Suite 4 Web Premium software
- Make online golf available to all via Adobe Flash Player 10

Benefits

- Attracts a valuable demographic of consumers who together completed six million rounds of online golf and hit more than 72 million golf shots in the first six months
- Helps organizations wanting to expand their footprint in the golf enthusiast market reach their target demographic through successful co-marketing arrangements
- Enables friends, families, and golf fans to play a round of golf simultaneously, compete in tournaments for prizes, share scores, and test out the newest equipment
- Derives revenue from high-profile online tournament sponsors, branded advertisements on the website, and in-game micro transactions

Toolkit

- Adobe Creative Suite 4 Web Premium. Components used include:
 - Adobe Photoshop CS4 Extended
 - Adobe Illustrator® CS4
 - Adobe Acrobat® 9 Pro
 - Adobe Flash CS4 Professional
 - Adobe After Effects CS4
 - Adobe Photoshop Lightroom 2
 - Adobe Flash Player 10



Players access free online golf games from their personal computers using Adobe Flash Player 10. To improve their game, players can use credits to purchase equipment in the website's Pro Shop.

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Golf community

In addition to the high quality, reliable game play made possible by the Adobe Flash Platform, online community elements and prize incentives help keep players engaged. Monthly sweepstakes challenges run along with the events and include a prize drawing at the end. In-game micro transactions also generate revenue by letting players purchase virtual items from the Pro Shop, such as apparel and equipment, to personalize their avatar and improve their golf game.

With its online transaction capabilities, World Golf Tour is also able to support organizations like Play Golf America and the Muscular Dystrophy Association. For Patriot Golf Day, the company invited players to donate a minimum of \$1 during a round of golf to benefit the Folds of Honor Foundation, which

provides educational scholarships to families of those who have become disabled or have lost their lives in the line of duty. WGT.com also hosted the Jerry Lewis Open and Jerry Lewis Sweepstakes tournaments, the first ever online charity golf tournaments that raised money to fight muscular dystrophy.

World Golf Tour seeks to build an online community based on its engaging, interactive online golf experience. Like traditional social networking sites, World Golf Tour provides a rich community site that is virtual golf specific and lets people create profiles that feature their statistics, replays, and trophies. The website offers forums where members can communicate with each other and with the company. Players can participate in multiplayer games and communicate with other players using a chat client.

WGT.com is continually adding new courses, which will undoubtedly draw even more players and sponsors. For World Golf Tour, it is a dream come true to bring the golf lifestyle and game to everyone via the web.



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