hile much of this chapter originally appeared in my book, The Mac Bathroom Reader, it has recently been updated and expanded exclusively for Apple Wizards. I retain all rights to this material and no part may be reproduced in any form without my written permission. I encourage you to visit my home page at http://www.netcom.com/~owenink/.

roken Breakout Promises

efore co-founding Apple in April 1976, Steve Jobs was one of the first 50 employees at Atari, the legendary Silicon Valley game company founded by Nolan Kay Bushnell in 1972. Atari's Pong, a simple electronic version of table tennis or ping-pong, had caught on like wildfire in arcades and homes across the country and Bushnell was anxious to come up with a successor. He envisioned a variation on Pong called Breakout, in which the player bounced a ball off a paddle at the bottom of the screen in an attempt to smash the bricks in a wall at the top.

He turned to Jobs, a technician, to design the circuitry. Initially, Jobs tried to do the work himself, but soon realized he was in over his head and asked his good friend Steve Wozniak to bail him out. "Steve wasn't capable of designing anything that complex. He came to me and said Atari would like a game and described how it would work," recalls Wozniak. "There was a catch: I had to do it in four days. In retrospect, I think it was because Steve needed the money to buy into a farm up north."

Designing a complex game in such a short period of time was a challenge, so even though Wozniak was working full-time in Hewlett-Packard's calculator division, he and Jobs put in four all-nighters in a row and finished a working prototype. Both came down with mononucleosis as a result, yet Wozniak remembers it as an incredible experience. "I was so proud of designing a product like that. Nolan Bushnell wanted a game with as few chips as possible. Steve said if there were less than 50 chips, we got paid \$700 and split it in half. Less than 40 chips, \$1,000. After four nights, it was 42 chips. I wasn't about to spend another second trying to reduce it by two more chips; I'll settle for \$700," decided Steve.

delivering the game to

Atari, Jobs put off paying

Wozniak, explaining that there

was some problem getting the

money, but he finally wrote a

check for \$350 and immediately

split for the All-One Farm in

Oregon. Jobs was happy because

friend had helped him get in

good with Bushnell. Bushnell was

thrilled because Breakout was

designed in record time and used

so few chips. And Woz was happy earning some pocket money doing what he loved best. "I would have done it for a quarter," says Wozniak. It wasn't until 1984 that he discovered the truth about the Breakout project and his "good friend," Steve Jobs.

"I was on a plane going to a user group club in Fort Lauderdale to promote the Mac, along with some other members of the Mac team," recalls Wozniak. "Andy Hertzfeld had just read Zap!, a book about Atari which said that Steve Jobs designed Breakout. I explained to him that we both worked on it and got paid \$700. Andy corrected me, 'No, it says here it was \$5,000.' When I read in the book how Nolan Bushnell had actually paid Steve \$5,000, I just cried."

Certainly it wasn't the money that bothered Woz. Had Jobs asked, Wozniak

his

After

would have done the project for free because he was turned on by such technological challenges. What really hurt was being betrayed by his friend.

Looking back on the incident, Wozniak ealized Jobs' behavior was completely in character. "Steve had worked in surplus electronics and said if you can buy a part for 30¢ and sell it to this guy at the surplus store for \$6, you don't have to tell him what you paid for it. It's worth \$6 to the guy. And that was his philosophy of running a business," says Wozniak.

Ironically, Woz's design for Breakout was so brilliant that none of the Atari engineers, including Jobs, could figure out exactly how it worked, which made it impossible to test, so the whole thing had to be redesigned in-house before it shipped.

olan Bushnell Today

Nolan Bushnell is currently director of strategic planning and one of the founders of New York-based PlayNet Technologies, Inc. (NASDAQ Smallcap "PLNT"), which designs and develops global, pay-per-play Internet entertainment for bars, restaurants, and hotels.

he Legacy Lives On

The legacy of Breakout lives on at Apple in the form of an Easter egg. If you are running System 7.5, launch SimpleText or choose Note Pad from the Apple menu (or open any other Drag Manager-enabled word processor), type "secret about box"; select the text without the quotes and drag it to the Finder's desktop. Out pops a simple Breakout-style game with the names of the System 7.5 team appearing in the bricks. When the ball drops in a few seconds, use the mouse to move your paddle so that the ball bounces towards the bricks and destroys them. If you miss the ball, don't worry; you get as many as you need. When all of the bricks are gone, a new batch appears. When this simple game grows tiresome, click the mouse button to close the window.

This works only with System 7.5, not 7.5.1 or later. If you are running System 7.5.2 or later on certain late-model Macs, instead of a Breakout game, the screen is filled with a color photograph of Apple's R&D center at 1 Infinite Loop in Cupertino. Programmer credits scroll below the scene and In the foreground is a flag with a large green iguana and the slogan: "iguana iguana powersurgius." You control the direction that the flag waves by moving the mouse around. You can even snap the flag off the pole and watch it flutter to the ground by rapidly moving the mouse back and forth just right (it's not easy, but it can be done). Click anywhere to return things to normal. There are even a few special options in this Easter egg. After selecting "secret about box" and while you are dragging it to the desktop, press and hold the P key to replace the iguana flag with one depicting the System 7.5.2 programming team or the Mac OS logo (if you are running System 7.5.3). Likewise, press and hold Q while dragging to see a pink flag and blank background with the message "QuickTime required for images;" this is what you would see if you accessed this Easter egg without OuickTime installed.

or further information on the history of Apple Computer, watch this space in the coming months, or pick up a copy of The Mac Bathroom Reader.

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