

A Brief History of Video Games

The First Video Games

- William Higginbotham and *Tennis for Two*
 - Created in 1958 for the Brookhaven National Laboratory's annual visitor day
 - Display was an oscilloscope
 - Sound effects were a side-effect of the relays that made the game run
 - No one realized its significance
- <http://www.bnl.gov/bnlweb/history/higinbotham.asp>

The First Video Games

- Steve Russell and *Spacewar*
 - Created in 1961 at MIT for the DEC PDP-1 computer
 - Hugely popular within MIT
 - Required prohibitively expensive equipment
 - Eventually shipped as a diagnostic program with PDP-1s
- <http://lcs.www.media.mit.edu/groups/el/projects/spacewar/>



Games for the Masses

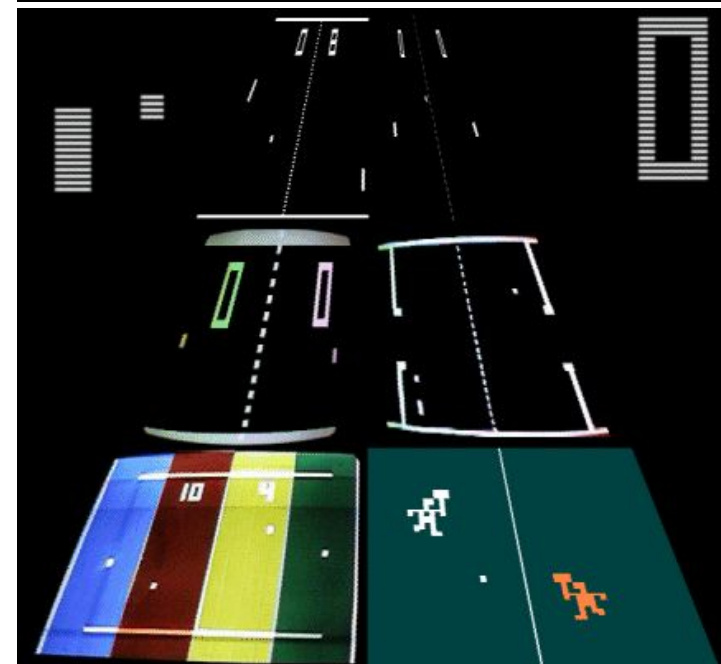
- The Advent of Home Video Games: Ralph Baer and the Magnavox Odyssey
 - 1966, initial idea for a game machine that would work on home TVs
 - Created a shooting game and ice hockey game
 - Sold to Magnavox in 1972
- <http://www.pong-story.com/odyssey.htm>

Games for the Masses

- Breaking Into the Amusement Business: Nolan Bushnell and Atari
 - Engineering major at the University of Utah
 - Background in coin-operated amusement devices
 - Tried to bring *Spacewar* to arcades as *Computer War*

Games for the Masses

- Bringing Games to the Masses
 - Atari founded by Nolan Bushnell in 1972
 - Brought *Pong* to arcades
 - Sued by Baer and Magnavox
 - Paid a one-time license fee of \$700,000



The Console Kings

- Atari and the 2600
 - Atari VCS (1600) released in 1977
 - Not quite the first cartridge-based home system
 - Open architecture allowed easy development
 - First to introduce licensing of a system



Image from
<http://www.geocities.com/TimesSquare/Lair/9260/>

The Console Kings

- Video Game Crash of 1983
 - Factors leading to the crash
 - Poor economy
 - Natural market cycle
 - Video games perceived as fad
 - Glut of poor 2600 games
 - Introduction of home computers

The Console Kings

- Nintendo and Shigeru Miyamoto
 - Released *Donkey Kong* arcade machine in 1981
 - Released Nintendo Entertainment System in 1985
 - During late 80's Nintendo owned 90% of the market
 - Latest console is the Nintendo DS



The Console Kings

- Sega
 - Created in 1952 in Japan to sell amusement games on US army bases
 - Released the popular Sega Genesis in 1990
 - Final console was 1999's Sega Dreamcast
 - Now dedicated to software

The Console Kings

- Sony's PlayStation
 - Created out of an aborted attempt to launch a CD-ROM based system with Nintendo
 - Released PlayStation in 1994
 - PlayStation 2 released in 2000, maintaining backwards compatibility with hugely popular PS1
 - Next console release is PSP handheld

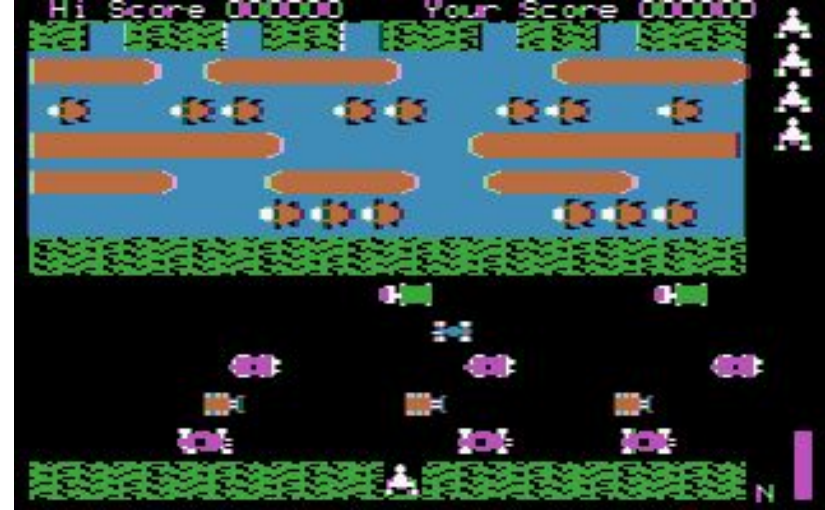
The Console Kings

- Microsoft and the Xbox
 - Xbox released in 2001
 - Based on a PC-like architecture
 - Initially significant money lost on each console sold
 - *Halo* and *Halo 2* are its most popular games



Home Computers

- Apple Computer
 - Founded by Steve Jobs, Steve Wozniak and Mike Markkula in 1976
 - Apple II was released in 1977
 - Revolutionized the home computer market



Home Computers



Adrienne Barr VidGame0 ©2002

- Commodore
 - Commodore Vic-20 Released in 1981
 - Low price and shrewd marketing lead to success
 - Commodore 64, released in 1982, became the best selling computer in history

Home Computers

- IBM
 - IBM PC introduced in 1981
 - Moderate pricing helped it gain a foothold in the business world
 - BIOS licensing model backfired on them, allowing cheap clones to enter the market

The Designers

- Maxis and Will Wright
 - *SimCity* released in 1989
 - Other *Sim* games followed (*SimAnt*, *SimCopter*)
 - Maxis becomes part of Electronic Arts
 - Released *The Sims* in 2000
 - *The Sims* has sold more than 6 million copies so far

The Designers

- MicroProse and Sid Meier
 - Founded by Sid Meier and “Wild Bill” Stealey
 - Concentrated on strategic simulations in early years
 - *Sid Meier’s Pirates!* in 1987 was Sid’s first signature game
 - <http://www.addictedtopirates.com/>
 - Genre-defining *Railroad Tycoon* and *Civilization* followed

The Designers

- Sierra and Ken and Roberta Williams
 - Created first graphical adventure game, *Mystery House* in 1980
 - Great success followed with *King's Quest* series, *Police Quest* series, and *Leisure Suit Larry* series
 - Published *Half-Life*

The Designers

- Origin Systems and Richard Garriott
 - Created the *Ultima* series
 - In 1997 created *Ultima Online*, one of the first Massively Multi-Player Online Role-Playing Games
 - Studios disbanded in 2000 by EA

The Designers

- Origin's Other Blockbuster: *Wing Commander*
 - Created by Chris Roberts
 - One of the more popular starfighter games
 - Known for epic storylines and full-motion video
 - Spawned a 1999 movie, directed by Roberts

The Phenomenons

- *Space Invaders*
 - Introduced to the US in 1978
 - First big Japanese success
 - Introduced the “High Score” list to video games



The Phenomenons

- *Pac-Man*
 - American debut in 1981
 - Attempt to create a completely non-violent game
 - Generated \$100 million in sales during its lifetime



The Phenomenons

- The Tangled History of *Tetris*
 - Created by Russian programmer Alexy Pajitnov in 1985
 - Became a pop culture sensation
 - Helped drive the success of Nintendo's Game Boy



The Phenomenons

- Capcom and *Resident Evil*
 - Capcom founded in 1979
 - Created *Street Fighter*, *Mega Man* and *Resident Evil*
 - *Resident Evil* has spawned 15 variations and sequels as well as two Hollywood movies



The Phenomenons

- Square and *Final Fantasy*
 - In 1987 released *Final Fantasy* as a last-ditch effort to stave off bankruptcy
 - 15 games have been released since then, selling more than 40 million copies
 - Computer-animated Hollywood movie released in 2001

The Phenomenons

- Cyan and Myst
 - Created by Rand and Robyn Miller
 - Released in 1993 on the Apple Macintosh
 - Helped popularize the CD-ROM drive

The Phenomenons

- Pokémon
 - Created by Japanese video game enthusiast Satoshi Tajiri
 - *Pokémon Red* and *Green* released for Nintendo Game Boy in 1996
 - Movies, TV series and multiple sequels have followed

The Phenomenons

- The Rise and Fall of the Video Game Mascot
 - Early mascots helped sell game systems
 - Mascots are seemingly less popular now
 - Over-exposure and an aging audience may be explanations for this trend

The Studios

- Activision and Infocom
 - Activision founded by former Atari programmers
 - Lawsuit by Atari created the “royalties” system still employed by consol makers today
 - Merged with Infocom and gutted it
 - Still a strong player today

The Studios

- Electronic Arts
 - Created by Trip Hawkins in 1982
 - Revolutionary business plan did three things
 - Creative talent treated like artists
 - Creation of in-house tools to aid cross-platform development
 - Handle own distribution
 - Now the largest game software company in the world

The Studios

- Interplay
 - Formed in 1983
 - First big hit was *The Bard's Tale* in 1985
 - Famous for their CRPGs, including *Wasteland*, *Fallout*, *Baldur's Gate*, *Baldur's Gate II: Shadows of Amn*
 - Since de-listed from the NASDAQ

The Studios

- LucasArts

- Formed in 1982 as an offshoot of LucasFilm Ltd.
- Released *Maniac Mansion* in 1987
- Created strong history of adventure games and Star Wars universe games



The Studios

- Blizzard
 - Started in 1991 by Frank Morhaime, Allen Adham, and Frank Pearce.
 - Released one of the seminal Real-Time Strategy games, *Warcraft*, in 1994
 - Their latest release, the MMORPG *World of Warcraft*, has become the fastest selling PC game in history

The Studios

- id Software
 - Formed on February 1, 1991
 - Successfully utilized Apogee's shareware formula
 - Created the defining first-person shooter with *DOOM*

Genres

- Adventure
 - Sub-genres include text-based adventure and graphical adventure
 - *Zork* by Infocom
 - *King's Quest* by Sierra

Genres

- Action
 - Superset of all other action-oriented genres
 - Typified by fast-paced combat and movement
 - *Spacewar*, *Pong*, and *Space Invaders* helped define the genre

A Genres

- Action-Adventure
 - Adventure games with action elements
 - The Legend of Zelda was first break-out hit
 - *Jak 3*, *Metroid Prime 2 Echoes*, and *Resident Evil 4* are modern examples of the genre

Genres

- Platformer
 - Typified by a character running and jumping in a side-scrolling playing field
 - Modern definition has expanded to include 3D
 - *Super Mario Bros.*, *Sonic the Hedgehog*, *Pitfall!* and *Super Mario 64* are examples

Genres

- Fighting
 - Players typically fight other players or the computer using swordplay or martial arts
 - *Double Dragon* is an example of a side-scrolling fighter
 - *Virtua Fighter*, *Mortal Kombat*, and *Street Fighter* are examples of versus fighters, where the players fight each other

Genres

- First-Person Shooter
 - Action game where player is “behind the eyes” of the game character in a first-person perspective
 - id Software’s *Wolfenstein 3D* and *DOOM* are the earliest popular examples

Genres

- Real-Time Strategy (RTS)
 - Typically, a game in which the goal is to collect resources, build an army and combat the other player or computer
 - Popularized by Westwood's *Dune 2* and *Command and Conquer* and Blizzard's *Warcraft*

Genres

- Turn-Based Strategy
 - Like real-time strategy games, but turn-based
 - *Civilization*, *X-COM*, *Master of Orion*, and *Jagged Alliance* are standouts of the genre

Genres

- Role-Playing Game (RPG)
 - The video game counterpart to pen and pencil games like Dungeons and Dragons
 - *Final Fantasy*, *Baldur's Gate* and *Wasteland* are some popular examples of the genre

Genres

- Massively Multiplayer Role-Playing Game (MMORPG)
 - An RPG set in a persistent virtual world populated by thousands of other players
 - *Ultima Online* in 1997 was the first popular one
 - *World of Warcraft* is currently the most popular one

Genres

- Stealth
 - Characterized by a focus on subterfuge and planned-out, deliberate play
 - *Metal Gear* in 1987 was one the first
 - Popular modern series include *Metal Gear*, *Splinter Cell*, and *Thief*

Genres

- Survival Horror
 - An action-adventure or first-person shooter where survival elements and a fight against the undead are stressed
 - *Resident Evil* is easily the most popular series in this genre

Genres

- Simulation
 - Based on the simulation of a system
 - *SimCity* and *The Sims* are example of “God” simulations where you control the lives of a town or a family
 - *Wing Commander* and *X-Wing* are popular space combat simulation games

Genres

- Racing
 - Games that involve competing in a race in a vehicle
 - Typically try to re-create a real-world activity
 - *Pole Position* was first popular racing game

Genres

- Sports
 - Games that simulate the sporting experience
 - Breakouts include *John Madden Football* and *Tiger Woods ' Golf*

Genres

- Rhythm
 - Gauge player's success based on the ability to trigger the controls in time to the beat of music
 - Sometimes require specialized controllers such as dance pads or bongo drums
 - Konami's *Dance Dance Revolution* is the pre-eminent title of the genre

Genres

- Puzzle
 - Games that combine pattern matching, logic, strategy and luck with a timed element
 - *Tetris* is the breakout hit of this genre

Genres

- Mini-Games
 - Short, simple games that exist within the context of a larger game
 - *Mario Party* and *Wario Ware* are popular examples of this genre

Genres

- Traditional
 - Computerized versions of board, word, and card games
 - *Battle Chess* and the *Hoyle* series are standouts of this genre

Genres

- Educational
 - Games designed to teach grade-school concepts to children and young adults
 - Oregon Trail was the first popular game in this genre
 - The *Carmen Sandiego* series and *Mavis Beacon Teaches Typing* are more modern popular examples

Genres

- Serious
 - A game designed to teach real-world events or processes to adults
 - Most are privately funded
 - Popular with the US Government and the medical field