

# 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

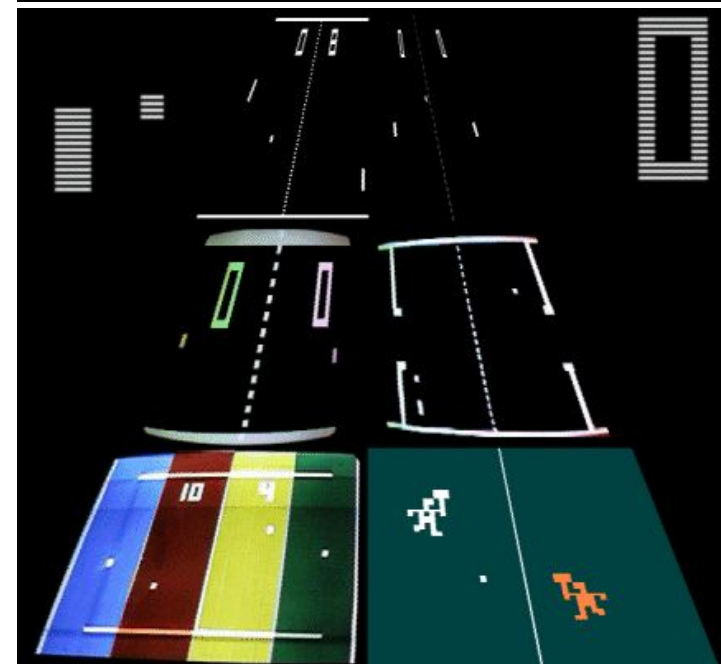
- The Advent of Home Video Games: Ralph Baer and the Magnavox Odyssey
  - 1966, initial idea for a game machine that would work on home TVs
  - Created a shooting game and ice hockey game
  - Sold to Magnavox in 1972
- <http://www.pong-story.com/odyssey.htm>

# 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

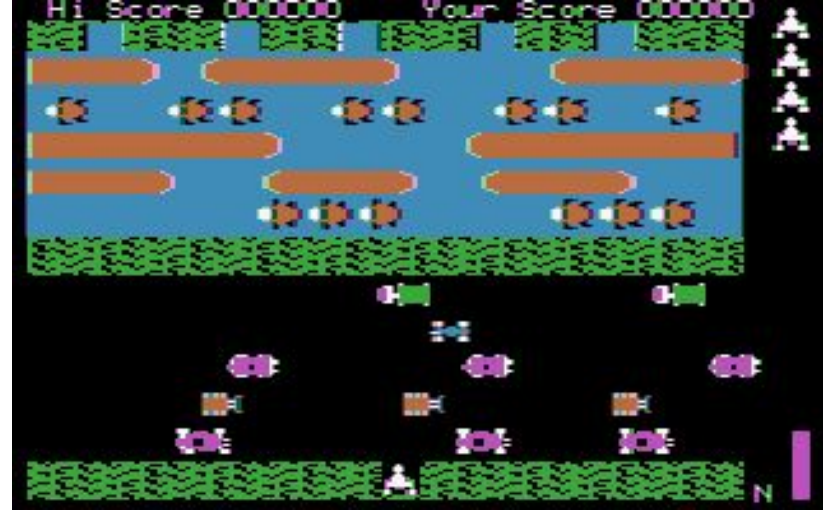
- Microsoft and the Xbox
  - Xbox released in 2001
  - Based on a PC-like architecture
  - Initially significant money lost on each console sold
  - *Halo* and *Halo 2* are its most popular games



# 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



- 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

Adrienne Barr VidGame0 ©2002

# 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