Chapter 1.1
A Brief History of Video Games

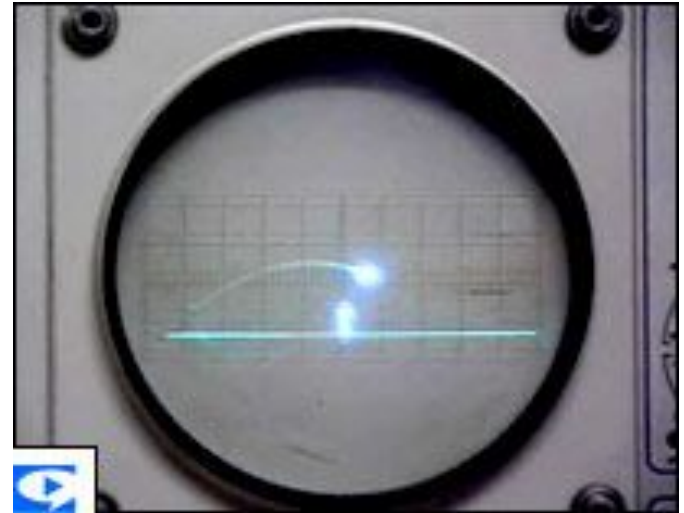(Note the use of the term "video"
and not "computer")

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
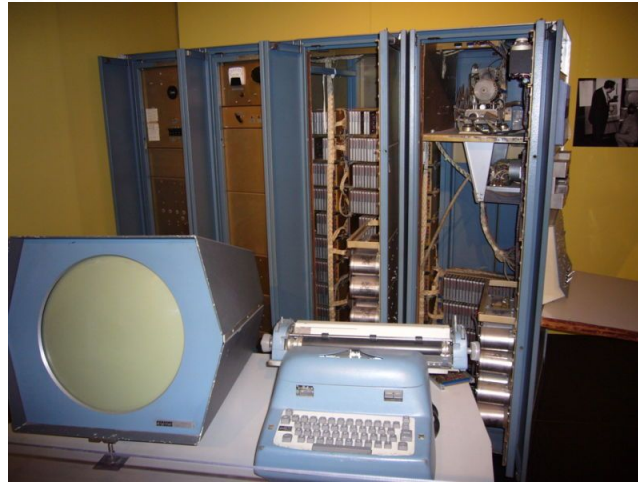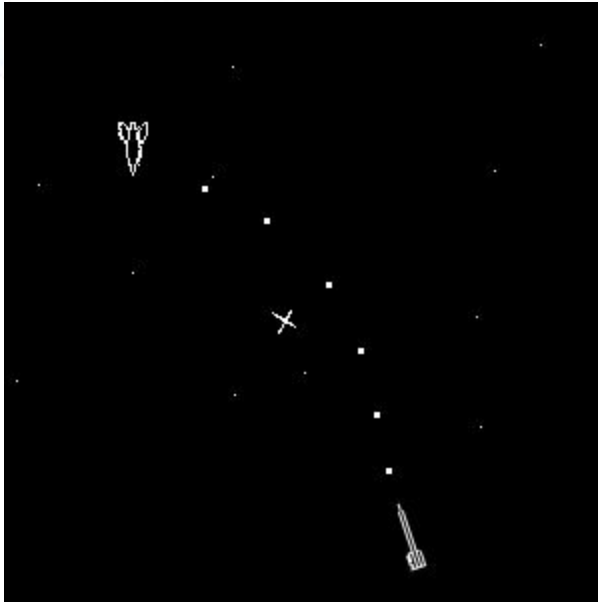
Tennis for Two

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

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

Magnavox Odyssey

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

Pong & Space War

	1900	1920	1940	1960	1970	1980	1990	2000
Computer Games					Military Mainframes	Home PCs		Doom	Casual Games
Arcade Games		Penny Arcades		Pinball Parlors		Video Arcades		Twilight of the Video Arcades
Console Games						Early Evolution	Crash	The Console Wars	Multimedia Machines

Console Kings
(Past, Present Future)

The Console Kings

- Atari and the 2600

  - Released October, 1977
  - Not quite the first cartridge-based home system
  - Open architecture allowed easy development
  - First to introduce licensing of a system

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

A timeline chart titled with columns for years 1900, 1920, 1940, 1960, 1970, 1980, 1990, 2000. Rows: Computer Games (Military Mainframes, Home PCs, Doom, Casual Games); Arcade Games (Penny Arcades, Pinball Parlors, Video Arcades, Twilight of the Video Arcades); Console Games (Early Evolution, Crash, The Console Wars, Multimedia Machines).
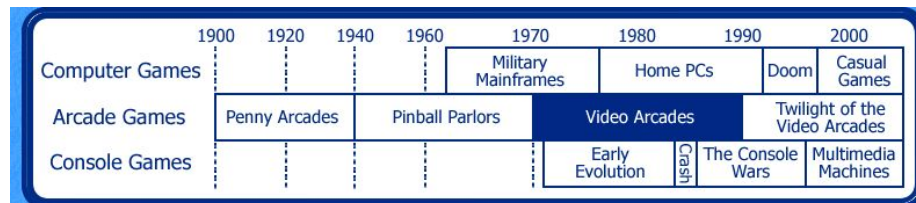
The Console Kings

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

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

Sega (in memoriam)

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 (2000), backwards compatibility with hugely popular PS1
  - PSP handheld, Wi
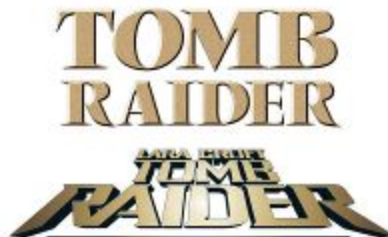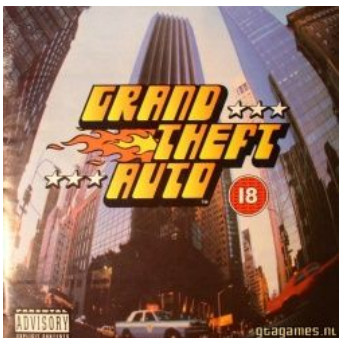
The Console Kings

- Microsoft and the Xbox
  - Xbox released in 2001, Xbox 360 2005
  - Based on a PC-like architecture
  - Significant money lost on each console sold
  - *Halo* became the reason to own the system.

Home Computers?
Who can afford $12,000?

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
    - Why? Complete System & Low Cost (48K $2,638.00 $1,938.00 board only).

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

Commodore C64

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

Famous Games & Designers

The Designers

- Maxis and Will Wright
  - *SimCity* released in 1989
- Sid Meier
  - Concentrated on strategic simulations
  - *Pirates!* (1987) R*ailroad Tycoon* and *Civilization*
- Sierra and Ken and Roberta Williams
  - Created first graphical adventure game, *Mystery House* in 1980
  - *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 and *Ultima Online*, one of the first MMORPG (tanked in 2000)
- **Origin & Chris Roberts**
  - Created *Wing Commander*
  - One of the more popular starfighter games
  - Known for epic storylines and full-motion video
  - Spawned a 1999 movie, directed by Roberts

"You never played _____ ?
Where've you been?"

The Phenomenons

- *Space Invaders*
  - Introduced to the US in 1978
  - First big Japanese success
  - Introduced the "High Score" list to video games
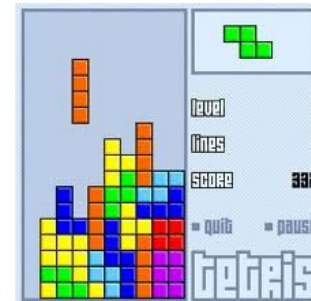
The Phenomenons

- *Pac-Man*
    - American debut in 1981
    - Attempt to create a completely non-violent game
    - Generated $100 million in sales during its lifetime
- *Tetris*
    - Russian programmer Alexy Pajitnov in 1985
    - Became a pop culture sensation
    - Helped drive the success of Nintendo's Game Boy

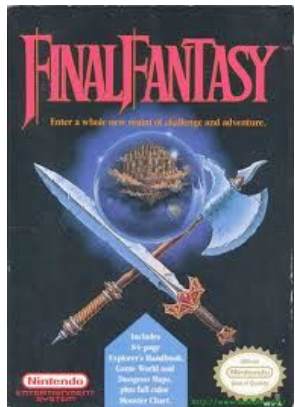# The Phenomenons

- Capcom (1979) *Resident Evil*
  - Also created *Street Fighter*, *Mega Man*
  - *Resident Evil* has spawned 15 variations and sequels as well as two Hollywood movies
- 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 (and a movie)
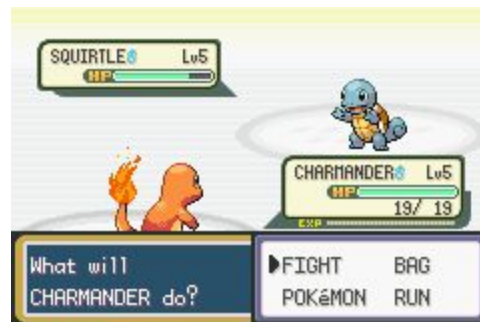
The Phenomenons

- 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
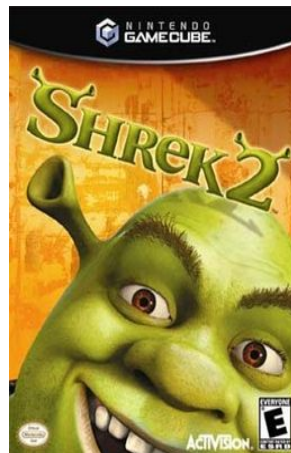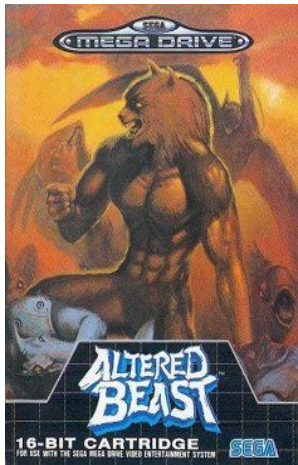 - Movies, TV series and multiple sequels have followed

"We're looking for a few good programmers"

The Studios

- Activision and Infocom (& Blizzard)
  - Founded by former Atari programmers
  - Lawsuit by Atari created "royalties" system still employed 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

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*
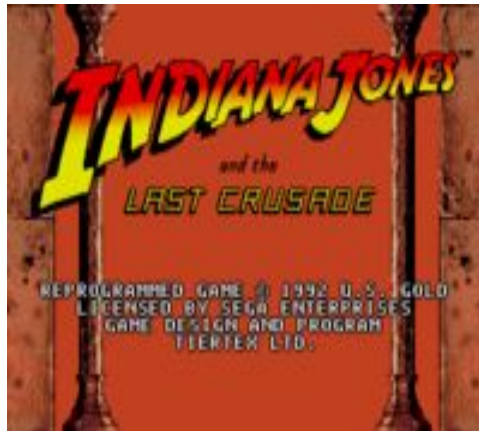 - Currently bankrupt.
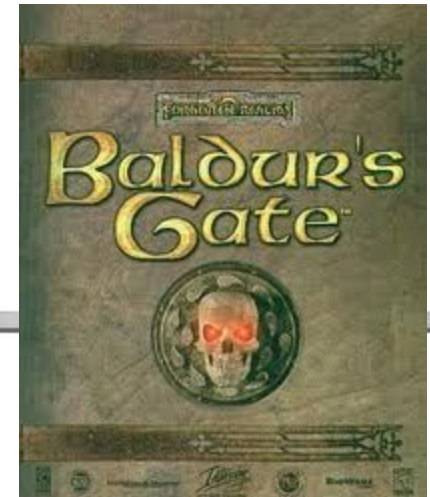
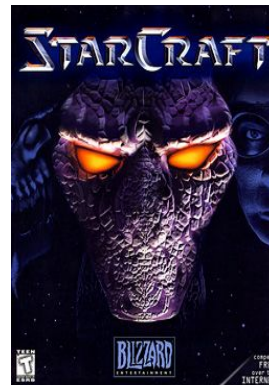# The Studios

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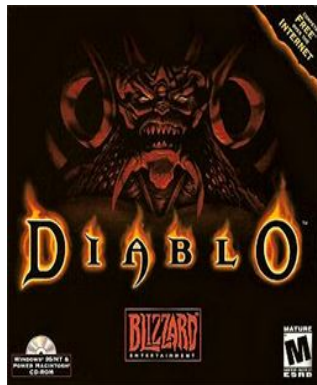 - Released *Maniac Mansion* in 1987
  - Created strong history of adventure games and Star Wars universe games

The Studios

- Blizzard (subsidiary of Activision 2007)
  - 1991 by Frank Morhaime, Allen Adham, and Frank Pearce.
  - Released one of the seminal Real-Time Strategy games, *Warcraft*, in 1994
  - *World of Warcraft (MMORPG)*, became the fastest selling PC game in history

The Studios

- id Software
  - Formed on February 1, 1991
  - Utilized Apogee's shareware formula
  - Created the defining first-person shooter with *DOOM*
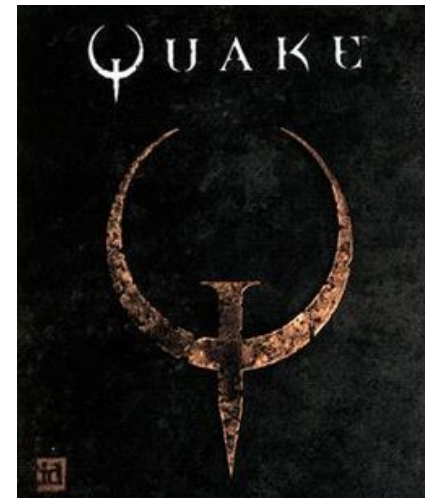
Top Studios 2009 (GD)

Rank (2009)	Publisher
1	Nintendo
2	EA
3	Activision/Blizzard
4	Ubisoft
5	Take-Two Interactive
6	Sony Interactive
7	Bethesda
8	THQ
9	Square Enix
10	Microsoft
11	Konami
12	Sega
13	Capcom
14	MTV Games
15	Namco Bandai
16	Warner Bros. Interactive
17	Disney Interactive
18	Atari
19	Atlus
20	LucasArts

Genres

- Can be thought of in "historical" terms
- We will consider them in Design terminology and discuss them next week.

Modern Trends

- Casual Gamers?
- Controls and Interfaces
- On-line Content (downloads)
- Return of shareware (content charging)
- On-line Identities & Communities
- Game economies
- Multimedia PC's vs. Multimedia Consoles
- Mobile Gaming

The End