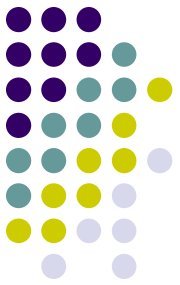


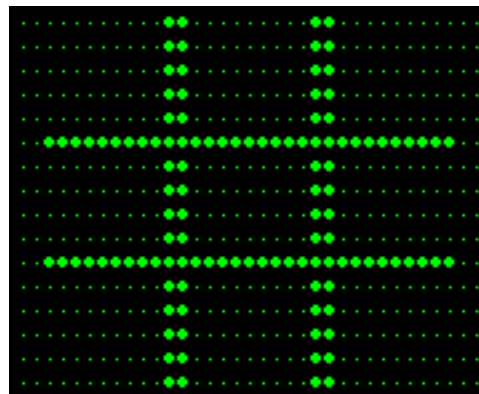
# **A Brief History of Video Games**

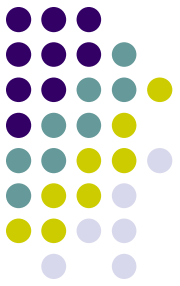
CSE/ISE 301



# Early Video Games

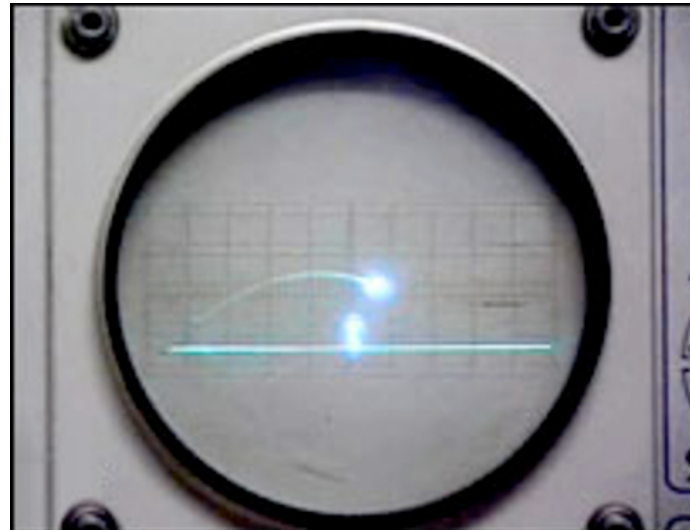
- A. S. Douglas creates Noughts and Crosses (Tic Tac Toe)
  - Created in 1952 for doctoral dissertation
  - Created on Cambridge University's EDSAC computer



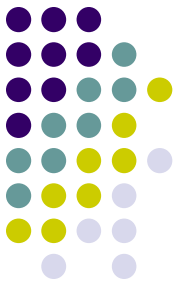


# Early Video Games

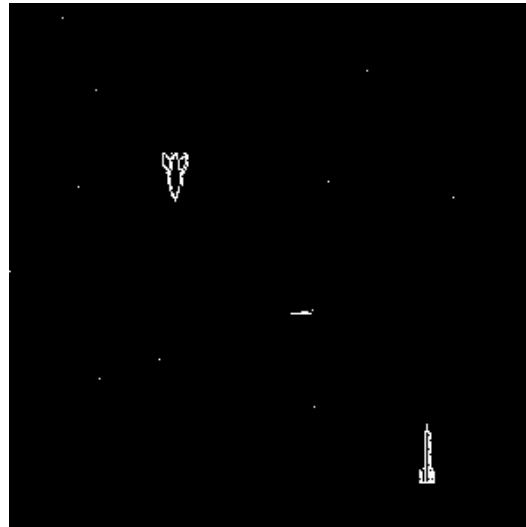
- William Higginbotham and *Tennis for Two*
  - Created in 1958 for the Brookhaven National Laboratory's annual visitor day
  - Display was an oscilloscope
  - Sound effects were a side-effect of the relays that made the game run

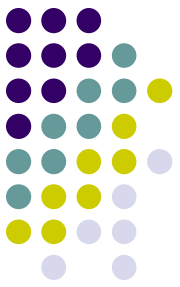


# Early Video Games



- Steve Russell and *Spacewar*
  - Created in 1961 at MIT for the DEC PDP-1 computer
  - Eventually shipped as a diagnostic program with PDP-1s



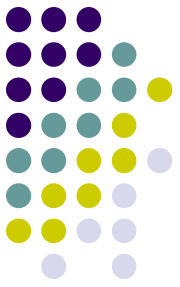


# Ralph Baer and Magnavox

- 1968 Baer applies for US patent for "Television Gaming and Training Apparatus" (granted 1973)
- Created a shooting game and ice hockey game
- Sold to Magnavox in 1972 which introduces Odyssey console and includes ping pong game



# Bushnell and Computer Space

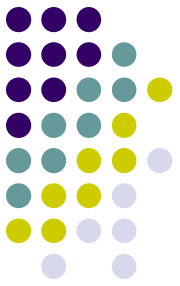


- Engineering major at the University of Utah
- Background in coin-operated amusement devices
- Tried to bring *Spacewar* to arcades as *Computer War*
- Unsuccessful: Interface too complicated
- “Games should be easy to learn, but hard to master”



# Atari

- 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 NEWEST <sup>2</sup> PLAYER  
VIDEO SKILL GAME

# PONG

from ATARI CORPORATION  
SYZYGY ENGINEERED

**The Team That Pioneered Video Technology**

**FEATURES**

- STRIKING Attract Mode
- Ball Serves Automatically
- Realistic Sounds of Ball Bouncing, Striking Paddle
- Simple to Operate Controls
- ALL SOLID STATE TV and Components for Long, Rugged Life
- ONE YEAR COMPUTER WARRANTY
- Proven HIGH PROFITS in Location After Location
- Low Key Cabinet, Suitable for Sophisticated Locations
- 25¢ per play

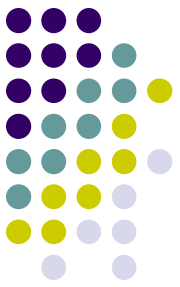
THIS GAME IS AVAILABLE FROM YOUR LOCAL DISTRIBUTOR

Manufactured by  
ATARI, INC.  
2962 SCOTT BLVD.  
SANTA CLARA, CA.  
95050

Maximum Dimensions:  
WIDTH - 26"  
HEIGHT - 50"  
DEPTH - 24"  
SHIPPING WEIGHT:  
150 Lb.

A black and white photograph of the Pong arcade machine, showing its cabinet and the screen area. The word "PONG" is visible on the top of the cabinet.





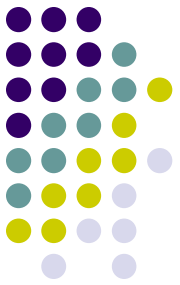
# Consoles

- Atari sold to Warner Communications for \$28M in 1976, Atari 2600 console released in 1977
- Open architecture allowed easy development
- First to introduce licensing of a system





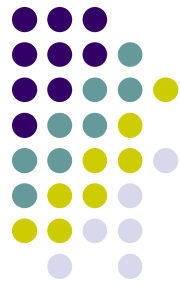
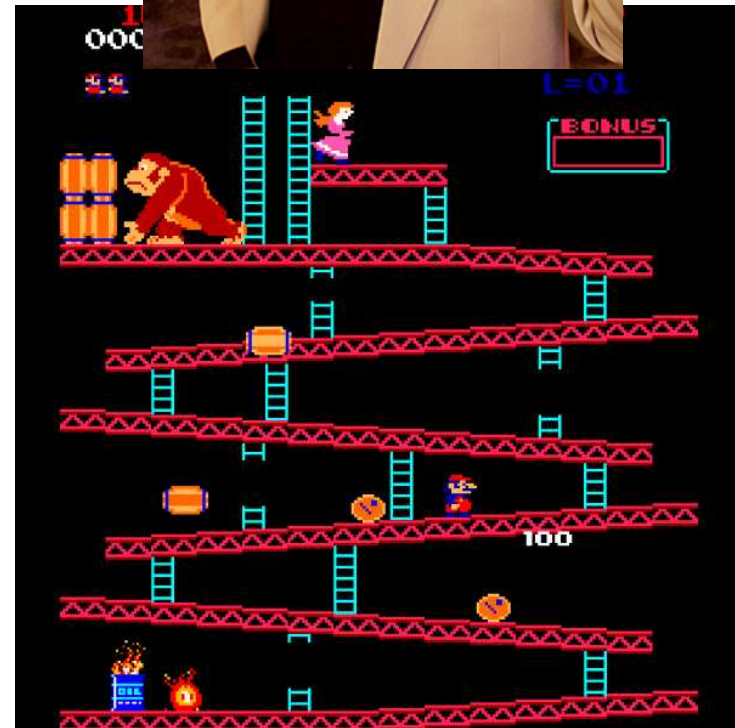
# Consoles



- Video Game Crash of 1982 -1984
  - Warner stock falls 32% after Atari announces declining sales of consoles
  - Atari sold to Jack Tramiel (owner of Commodore) Atari Corp. pulls out of console market
  - Mattel loses \$225M on Intellivision
  - Factors leading to the crash
    - Poor economy
    - Too many competitors (Commodore 64, Coleco)
    - Introduction of home computers

# Consoles

- Nintendo and Shigeru Miyamoto
  - Released *Donkey Kong* arcade machine in 1981
  - Released Nintendo Entertainment System in 1985 with 8 bit color graphics
  - GameBoy debuts in 1989
  - During late 80's Nintendo owned 90% of the market



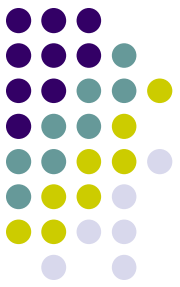


# Consoles

- Nintendo and Shigeru Miyamoto
  - Followed up with Super NES (16 bit) in 1990
  - Introduced Nintendo 64 with Legend of Zelda and Mario 64 in 1996



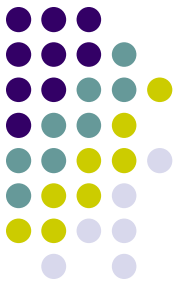
# Consoles



- Sega
  - Created in 1952 in Japan to sell amusement games on US army bases
  - Released the popular Sega Genesis in 1990 (16 bit)
  - Final console was 1999's Sega Dreamcast
  - Now dedicated to software



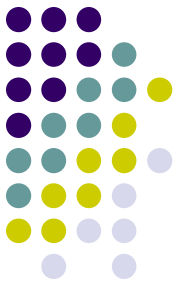
# Consoles



- 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 – sells over 140 million units
  - 128-bit, first to use DVD technology



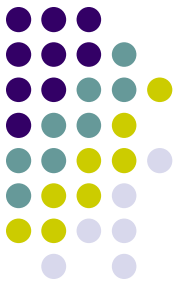
# Consoles



- Microsoft and the Xbox
  - Xbox released in 2001
  - Based on a PC-like architecture, extensive use of DirectX
  - Initially significant money lost on each console sold
  - *Halo* and *Halo 2* are its most popular games
  - Xbox 360 released in 2005



# Controversy



- **Video Game Violence**

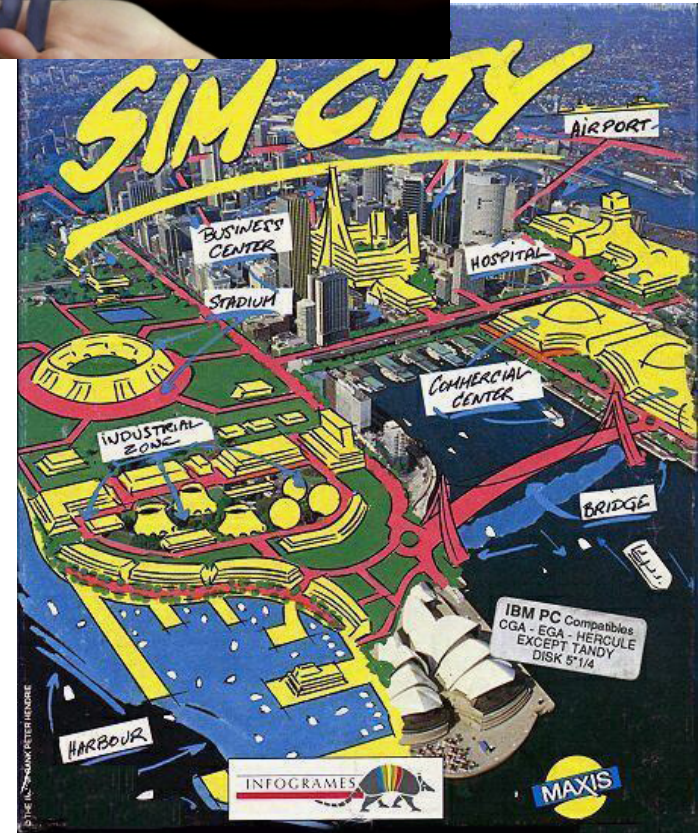
- Mortal Kombat from Acclaim Entertainment premieres in 1992
- Sen. Joseph Lieberman (D-Conn) initiates senate investigation into video game violence in 1993
- Entertainment Software Association formed in 1994 to establish ratings system for games



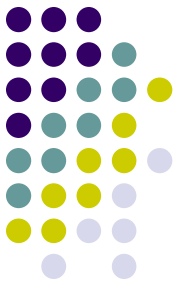


# Designers

- Maxis and Will Wright
  - *SimCity* released in 1989, self-published by Wright
  - 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

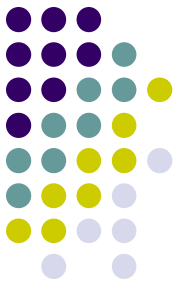
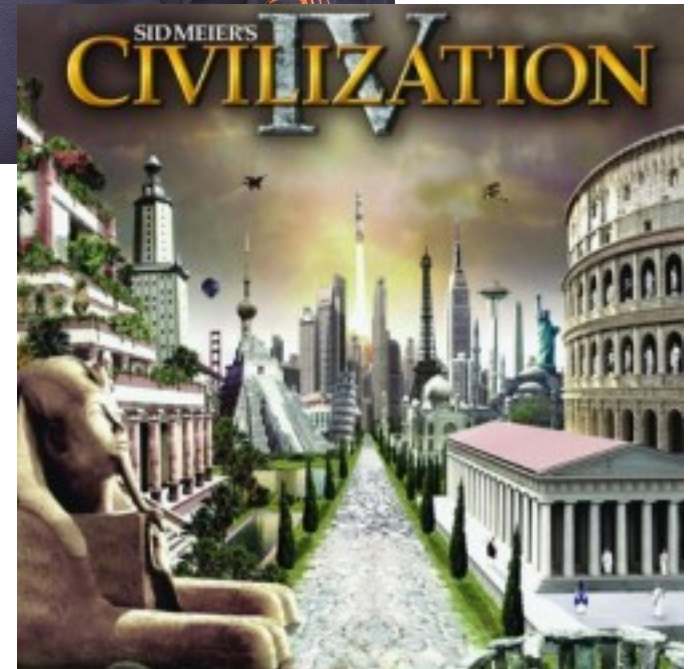


# SimCity



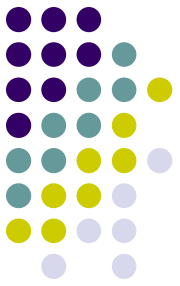
# Designers

- 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 first game
  - Genre-defining *Railroad Tycoon* and *Civilization* (1991) followed



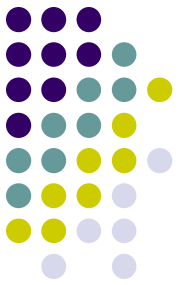
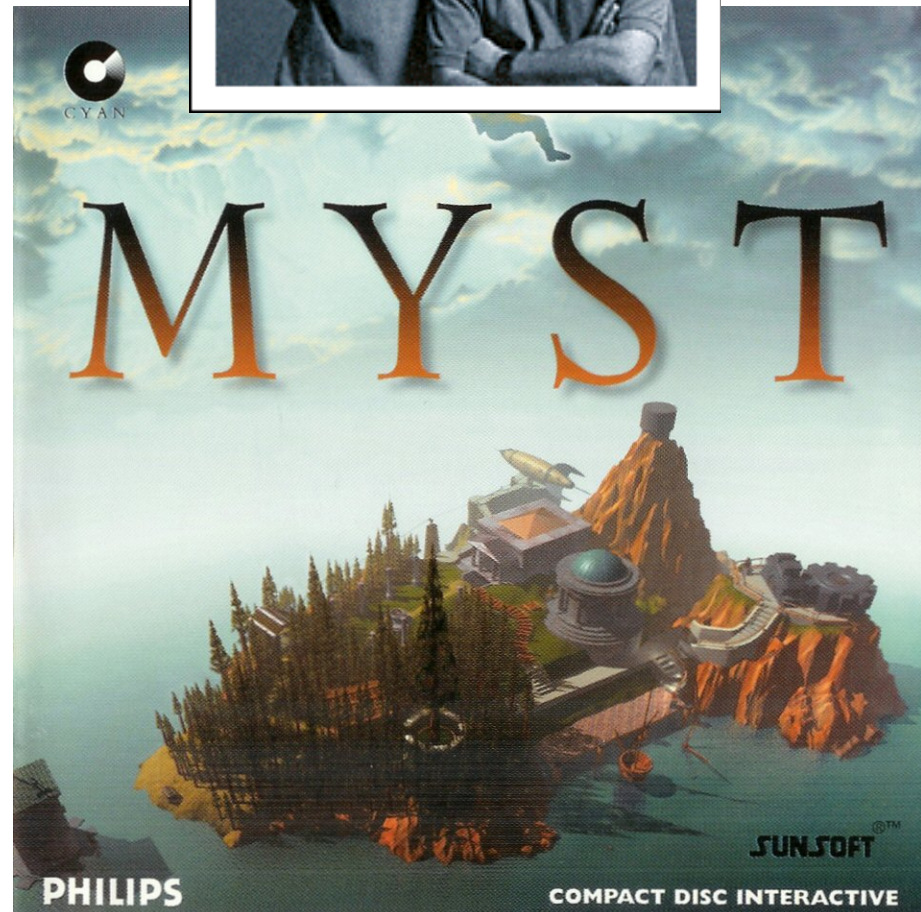


# Civilization



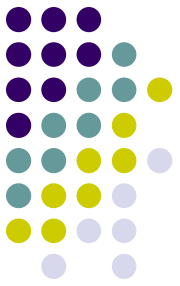
# Designers

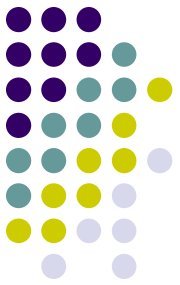
- Cyan and Myst
  - Created by Rand and Robyn Miller
  - Released in 1993 on the Apple Macintosh
  - Helped popularize the CD-ROM drive





# Myst



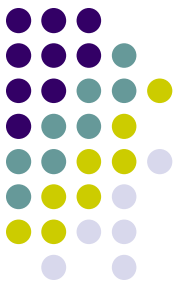


# Notable Games

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



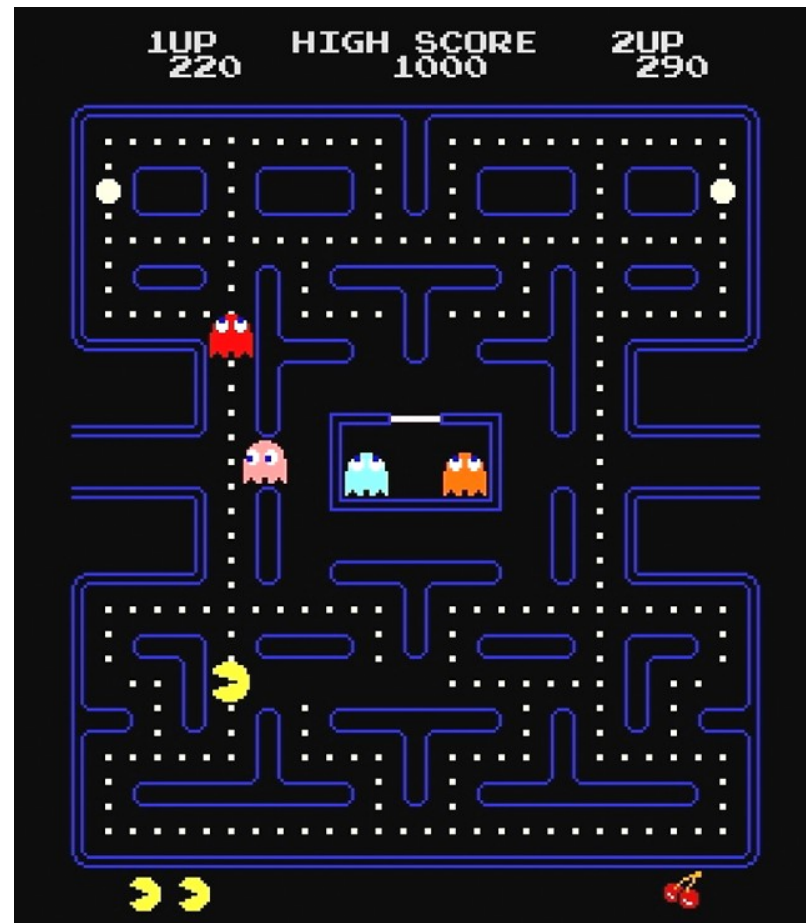




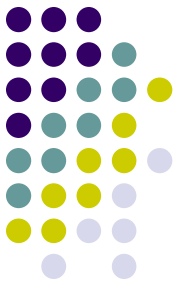
# Notable Games

- *Pac-Man*

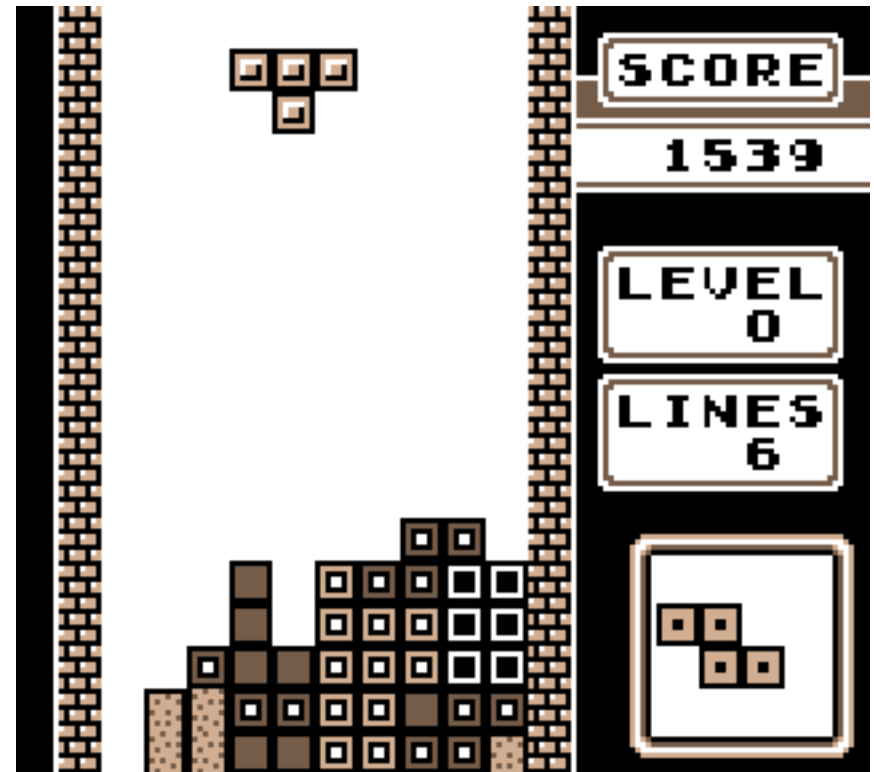
- American debut in 1981 by Midway
- Attempt to create a completely non-violent game
- Generated \$100 million in sales during its lifetime

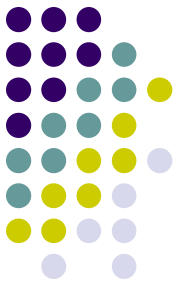


# Notable Games



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



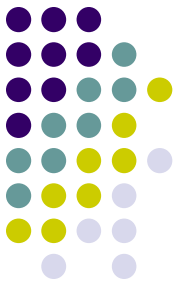


# Studios

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

**ACTIVISION®**

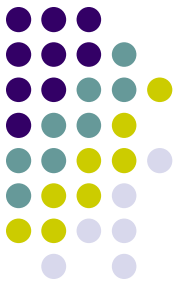
# Studios



- 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



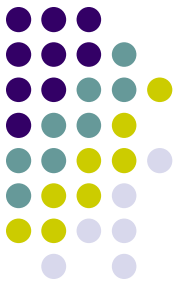
# Studios



- LucasArts
  - Formed in 1982 as an offshoot of LucasFilm Ltd.
  - Created Star Wars games



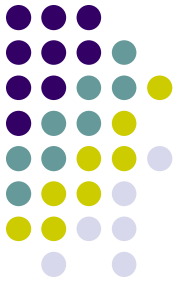
# Studios



- 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



# World of Warcraft







# Studios

- id Software
  - Formed 1991
  - Successfully utilized Apogee's shareware formula
  - Created first-person shooters *Wolfenstein 3D*, *DOOM*, and *Quake*



# Quake

