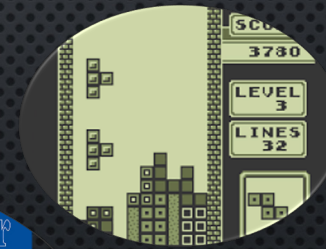# A BRIEF HISTORY OF COMPUTER GAMES

PART 1

INDEX

- Categorization of changes

- Chronologic review 1950-2009

- Summary

CATEGORIZATION OF CHANGES

- CHANGES IN HARDWARE FOR PLAYING GAMES

- CHANGES IN INTERACTION DEVICES

- CHANGES IN THE SOFTWARE DEVELOPMENT TOOLS

- CHANGES IN THE GAME BUSINESS

- CHANGES IN THE DEMOGRAPHICS OF THE PLAYERS

- DIVERSIFICATION
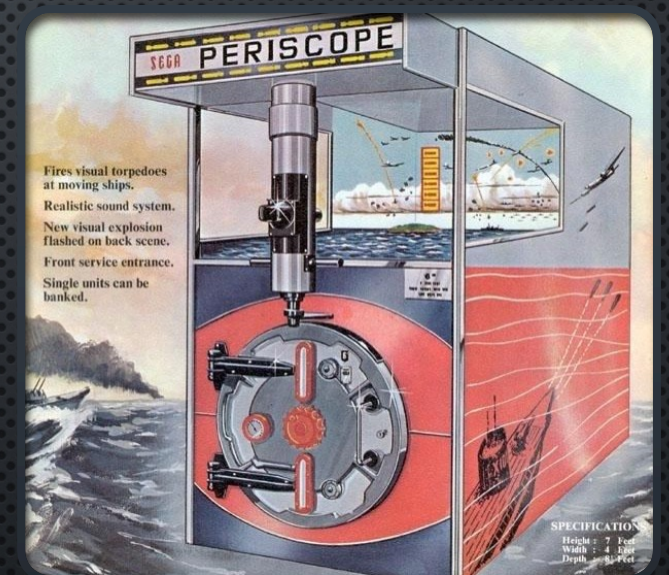
- CHANGES IN THE DESIGN OF GAMES

1950-1959

- First game in the world: OXO
- Considered by most to be first: tennis for two
- Required a lot of equipment
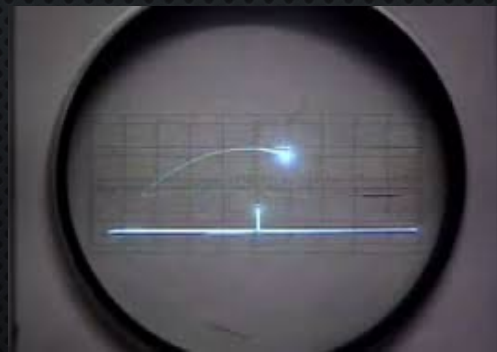
1960-1969

- Spacewar! developed by student at school computer

- First arcade game: Periscope

1970-1979

- The golden age of arcade gaming
  - Arcade games were expensive
  - Pong, breakout, space invaders,
- 1978 first color arcade games
- First home consoles
  - Limited in hardware
  - In the beginning, hard programmed game
  - 1976 cartridges
- Atari VCS system (Console)
  - Better hardware
  - Didn't sell before bundled with space invaders
    - Game more important than hardware

1980-1989

- GAME PRODUCTION INCREASED
  - DONKEY KONG, MARIO BROS., DRAGON'S LAIR, KING'QUEST, THE LEGEND OF ZELDA, METROID, MEGA MAN, FINAL FANTASY, METAL GEAR, ETC.
- PACK-MAN
- GAME CONSOLE MARKET CRASH
  - MANY NEW BUSINESSES CREATING GAMES AND CONSOLES
  - GAME COMPUTERS
  - ATARI E.T. WORST GAME EVER!
  - PRODUCTION MOVED FROM US TO JAPAN
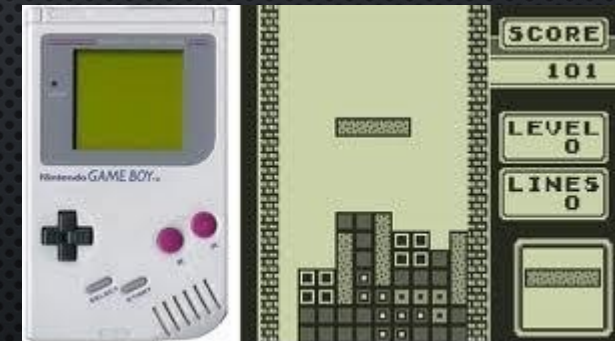 - NEW BUSINESSES JOINED: NINTENDO

1980-1989

- NES and Super Mario Brothers
  - NES was weaker than the competition, but the games were better
    - Games matter, not the specs

- First handheld gaming device
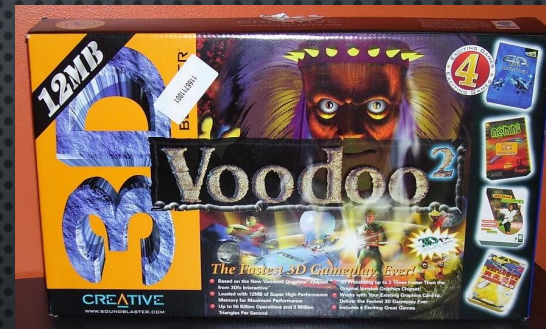 - Game boy
    - Tetris

1990-1999

- Massive increase in power of the game consoles
  - Arcade games popularity declined as no longer superior
- Sega Genesis, Nintendo Super NES

- Next generation: Saturn, N64, PlayStation
  - 32- or 64-bit processors
  - 2-4 Mb RAM
  - Basic 3D graphics
  - Saturn and PlayStation had CD drives
- Nintendo supported 4 player games

9717

1990-1999

- PC GAMING BECAME MATURE
  - MORE POWERFUL THAN CONSOLES
  - MOUSE AND KEYBOARD
    - REAL TIME STRATEGY
    - SIMULATORS
  - INTERNET MODEMS
    - MMORPG

  - DIFFICULT TO INSTALL GAMES
    - PLAYERS HAD COMPUTER SKILLS → GAMER IS A NERD
  - DIFFICULT TO DEVELOP GAMES TO PC BECAUSE OF HARDWARE DIFFERENCES
    - EASIER WITH DIRECTX FROM WINDOWS 95
  - PC GAMES WERE IN THE OFFICE/STUDY WHILE CONSOLE WAS IN LIVING ROOM
    - PC HAD DARKER GAMES
    - CONSOLE MORE FAMILY FRIENDLY

1990-1999

- Handheld devices
  - Game boy color
    - Pokémon – RPG
    - Wide audience
    - Red/Blue made it social

2000-2009

128-Bit Era

- Dreamcast, PS2, Xbox, GameCube
  - Modern hardware
- Sega dropped out of console market
- GameCube
  - Worse hardware, but cheap and 4 player
- PS2
  - Could play DVDs and was Cheaper to by than a DVD player
  - Backwards compatible
- Xbox was better at multiplayer, but was too late to the market

- Difficult to create games for consoles
  - Many different consoles, demand for better graphics
  - Budget rose from 1 to 5 millions per game
  - Missed deadlines and several went bankrupt

2000-2009

- Modern consoles
  - Xbox 360
    - Very powerful
    - Halo 3 – Online games made it very popular
    - Xbox live, marketplace
    - Achievement system, Gamerscore
  - PlayStation 3
    - Powerful, blue ray player
  - Nintendo Wii
    - Was a lot weaker, aimed at casual market
    - new ways of controlling, didn't even support HD, weak hardware, but revolutionary controllers
    - Cheap, easy to use
    - Later they released an exercise game with a balancing board



13/17

2000-2009

- PC
  - Hardcore gamers preferred PC, better graphics than console
  - Easy to crack and copy games
    - Publishers dropped PC games or released them later than consoles
  - The sims (2000)
  - Casual games
    - More houses had PCs and had fast internet, so non-typical gamers started playing
    - Easy to play and learn games in short amounts of time
    - Flash, often from a website
    - Often free, money from ads
   - Later, through facebook, like farmvill

2000-2009

- Handheld devices
  - Nintendo DS
    - Introduced new ways to play and design games
      - Double screen, bottom was touch
      - Microphone
  - Nintendo broadens demographics:
    - Woman and elder people
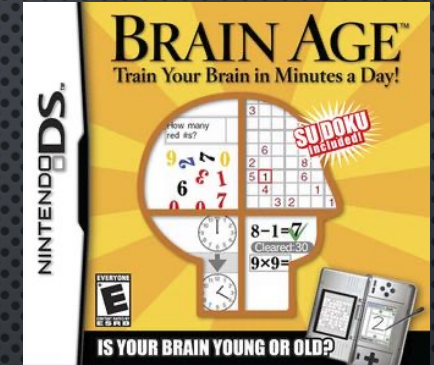
2000-2009

- Mobile phones
  - tiny screens, weak specs, and limited interactions
  - Hard to create games
    - difficult interactions
    - Lots of different phones
  - Smartphones
    - Removed these problems
    - More phone users
    - Multi-touch, accelerometer
    - App store – developers got 70%
      - One-person developerteams
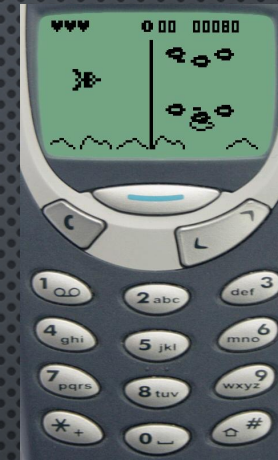
SUMMARY

- MASSIVE COMPUTERS → NOW PLAYED ON CONSOLES, PCs, AND PHONES

- BASIC INTERACTIONS → TOUCH, ACCELEROMETERS, MICROPHONES

- SIMPLE ARCADE GAMES → HIGHLY COMPLEX MODERN GAMES

- VERY SIMILAR GAMES → MANY DIFFERENT TYPES OF GAMES

- NO GAME INDUSTRY → MASSIVE GAME INDUSTRY

- ETC., ETC., ETC.,