

## Video Consoles - The Next Generation

Computer Literacy 1 Lecture 10  
13/10/08



### Topics

- Next Generation consoles and games from 1994 - present
- PlayStation
- Xbox
- Nintendo Wii
  - Wii hardware
- Moving on to 3D games



### Next generation

- Actually the next generation of video game consoles and games is a series of generation
- At the moment we are playing with generation 7



### Next generation - PS

- It's widely believed that the Modern Age was replaced by the Next Generation with the introduction of Sony's PlayStation
- Not only had the PlayStations games on CD-Rom (which was much more cost-effective)
- They also released a series of games more interesting for an older audience



### Next generation - Begins 1995



- Since the first generation of users had now grown up the companies wanted to keep them playing
- That lead to games like Resident Evil, Final Fantasy, Tomb Raider etc...
- A wider audience needed to be served (Kids as much as Adults)

### Next Generation - Late 90s



- Nintendo is missing out on including CD-ROM in their new console
- Which means they still use cartridges that can only display 32 MB (compared to CD-ROM with 650 - 700 MB)

### Nintendo 1998



- Nintendo makes up for their console miss out by introducing the GameBoy Colour (which is still the most popular handheld console of all times)
- Not only is it in colour now. It also keeps a backward compatibility so that the system is launched with a huge pre-existing game-library

### Rest of 1998



- Sega releases the Dreamcast
  - First console that enables user to online gaming by including 56k modem
  - Unfortunately, due to its GDRM drive and the ported version of Windows CE that it used for an operating system, the Dreamcast titles were rather easily pirated
- Although Sony's PlayStation2 wasn't able to do as much as the Dreamcast it won over the market and most third party developers concentrated on it

## Next Generation



- The PlayStation2 sold out immediately in spite only a few launch titles were available
- Most important franchise was Grand Theft Auto
  - The release of Grand Theft Auto III enters a fully immersive 3D city (released 2001 for PS2, 2003 for Windows, 2003 for Xbox)
- Though all games were eventually also available on Xbox and PC, their initial incarnation on PS2 helped to define Sony's system as a mature entertainment machine

## 2001



- Sega decides to quit investing in hardware development
  - They refocus their efforts on continued software development for the other platforms
- America is eventually back in the game

## 2001 - Xbox release



- After over a decade of Japanese companies leading the platform market Microsoft enters the ring with its Xbox
- The system sells well because of what many believe is the best first-person shooter game on a console - Halo



## 2002 - 2004



- 2002 Nintendo introduces the GameCube
- 2004 last appearance of Atari
  - They launch a nostalgic console which is modeled (outside and inside) after their old Atari 7800
- 2004 Nintendo DS introduces 2 screens for handheld console
  - One is used as display, the other is touch sensitive and serves as input
- 2004 Sony enters handheld market with its PSP

## 7th Generation 2005 - Present

- Microsoft's Xbox 360
- Sony's PlayStation 3
- Nintendo's Wii
  - Of these three the Wii is the least expensive and the most sold worldwide
  - It's believed that this is because the Wii games attract more elder people and families



## What makes the Wii different

- Wider internet connection than other consoles because of their different channels
- Not only handheld controllers can be used but also balance board and dance mat
- Supports all NintendoCube games and many games from systems prior to the Cube can be downloaded

## Hardware of Nintendo Wii

- Wii 24 connection is permanently even when the Wii is powered off (to download updates or enable other Miis to visit)
- The Wii can connect to the World Wide Web through the WiFi
- Loading slot in front for 12cm optical disks and 8cm disks from Nintendo's older consoles
- 2 USB ports and 1 SD card slot

## Wii hardware



- Wireless controller and remote with 3D functions
- The Wii remote has accelerometers and infrared detection that enables positioning in 3D space
  - Meaning user can participate in the game using hand gestures as well as buttons
  - The controller connects to the Wii console through Bluetooth technology

## Wii hardware



- The Nintendo Wii has 512 MB built-in flash memory that can be expanded using an SD card
  - Flash memory or flash storage is like a hard drive in that it permanently stores data but it is also like RAM in that it has no moving parts and stores data on a circuit board
  - Flash storage data can be accessed faster and is less prone to errors than hard drives
  - But its primary limitation has been its relatively small data capacity

## Wii Hardware



- The Wii has a sensor bar that can be positioned such that the Wii remote can be used as an accurate pointing device from a distance of 5 meters
  - However the sensor bar is sensitive to halogen lights and sunlight affecting its functions

## Wii hardware



- Apparently it makes free online gaming a reality
- It can communicate with Nintendo DS
- Internet Browser they use is builtin Opera
- Each Wi-Fi enabled game carries with it a unique ID called a Friend Code. To play with your friends, you must each register the other's Friend Code in the game.
  - This system has been met with some criticism in comparison to Xbox Live since it does not employ a single unifying Friend Code, and codes must be entered on a game-by-game basis. However the Wii console has one code for all games

## Wii hardware

- The editors of CNET have rated the Nintendo Wii as an 8 /10
  - "Positive is the futuristic controller design with motion-sensitive gameplay options and the Wi-Fi is all set to extend free online services and game play
  - The Nintendo Wii is the most affordable of all current gaming systems
  - Negative in the Wii is short battery life, no advanced HD graphics or surround sound and inability to play CDs or DVDs"
    - However in Japan the console has DVD - Video capabilities

## Wii name and launch

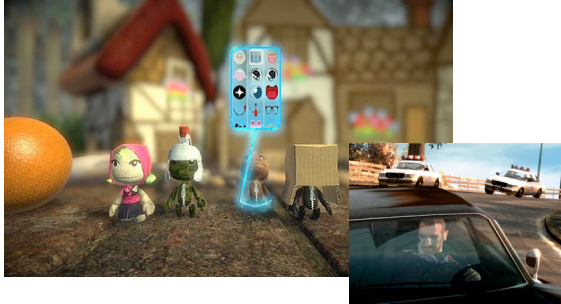
- Should be called Revolution but was changed into Wii because
  - "Wii sounds like **we** which emphasizes it is for everyone"
  - Nintendos spelling of Wii with two lower case "i" characters is meant to resemble two people standing next to each other
- Was launched in September 2006 to main user countries (USA, Canada, Europe, Australia, Japan)

## Nintendo Wii

- Smallest and lightest console
- Simple interface
- Some games (especially Wii Sports, Fit etc...) have rather simple Graphics but all 3D
  - Simplicity in all features is intended by the developers of the Wii to make it better success with untrained users
  - Gamers who are interested in more sophisticated graphics can still play their games on Wii
    - Neither Xbox nor PS pursuit this simple approach yet, they design and develop for more advanced gamers (including children, see "Little Big Planet" for PS3)



## Little Big Planet vs GTA IV



## Key points



- Next Generation saw
  - Switch from cartridge to CD-Rom
  - Microsoft enters game console market while Sega leaves it
  - Graphics are becoming more and more sophisticated
  - Nintendo introduces the Nintendo DS with 2 screens (one of them a touch-screen) and the Wii
    - Wii using flash drive memory
    - The Wii seems to contradict the use of highly sophisticated graphics by going back to looking simpler
    - Which turns out to be good marketing and attracts a new user group