Lecture 17

Games and Consumer Electronics

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Consumer Electronics

Everyday use

Affordable, off the shelf

Entertainment, productivity, communication
Television gives you a choice seat at the game.

Television—a Season Pass to Baseball!
Now! Zenith Adds "LAZY BONES" Remote Control to Black Magic Television

Complete automatic program selection in the palm of your hand... from anywhere in the room. Another Zenith "First"!

It's like something out of the Arabian Nights! From across the room without ever leaving your seat, change television programs with a small, hand-operated control that fits easily in the palm of your hand. Just grip lightly with your thumb. That's all there is to it! Nothing more to scan! Yet only single button to adjust or re-set! All the necessary adjustments are made for you--automatically!

Here's the greatest advance in automatic program selection and tuning ever seen on television! Another Zenith "first" that adds greatly to your home enjoyment of television as Zenith Black Magic program quality and viewing ease.

The remarkable precision and effortless-like ability of Zenith's tuning mechanism makes possible this new remote control. When you see how Zenith's Black Magic Television bequeath your reflection-free, clear pictures even in bright rooms... even in the toughest locations... and now by "Lazy Bones" Remote Control... you'll never be content with less than a Zenith. Ask your Zenith dealer--he knows.
Television Remotes

Modal options
Instantaneous operations (usually)

Better wireless affordances
Increasing complexity
Converging functionality
You can configure various picture options such as the picture to suit your personal preferences.
Television OSD

Simple, text based overlays and menus
As televisions grew complex, so did menus

Adopting conventions of contemporary computer technology

Trend towards merging remote and OSD
(stay tuned for Chris Harrison’s lecture)
Lots of other interaction techniques to think about (and improve)
Video Games

“an electronic game that involves human interaction with a user interface to generate visual feedback on a video device”

(as per Wikipedia)
Early

Middle

Late
Taking Action

Moving

Status/Configuration
Early Era
OXO - 1952
Tennis for Two - 1958
Spacewar!
1961

WEDGE SHIP

CENTRAL STAR

STARFIELD (HARD TO SEE AT SUCH A LOW RESOLUTION)

NEEDLE SHIP
West of House

ZORK I: The Great Underground Empire
Copyright (c) 1981, 1982, 1983 Infocom, Inc. All rights reserved.
ZORK is a registered trademark of Infocom, Inc.
Revision 88 / Serial number 840726

You are standing in an open field west of a white house, with
a boarded front door.
There is a small mailbox here.

> **examine mailbox**
The small mailbox is closed.

> **open mailbox**
Opening the small mailbox reveals a leaflet.

> **get leaflet**
Taken.

> |
Early Games

• Appropriate existing physical games

• ‘Hacked’ together controllers

• Very simple interactions

• Arcades
Arcade Games
Pong
1972
Space Invaders
1978
Space Invaders Video

YouTube Link
Pacman - 1980

www.gamesdbase.com
Consumer Game Consoles
Atari 2600

- Sears Video Arcade
- 1978 - $199
- Space Invaders – 1980
- Fancy, graphic manuals
- Similar controls to arcade
- Home gaming revolution
Pitfall - 1982
Nintendo Entertainment System
1983 / 1985
Legend of Zelda Video

YouTube Link
Middle Era
Super Nintendo
1990 / 1991
Sega Genesis
1988 / 1989
Ken Masters

Throws:
NS Seoi Nage
NS Tsukami Hiza Geri
N  Jigoku Guruma
S  Jigoku Guruma

Air Throws:
S  Jigoku Fuusha

Special Moves:
NS Hadou Ken
NS Shouryuu Ken
NS Tatsumaki Senpuu Kyaku
What about the PC?
Doom 1 Video

YouTube Link

YouTube Link
Nintendo 64
1996
Sony Playstation
1995
Super Mario 64 Video

YouTube Link
CURRENT DIRECTION

TURN < 90°

NEW DIRECTION (TURN GRADUALLY)

CURRENT DIRECTION

TURN > 90°

NEW DIRECTION
(STOP, PLANT, REVERSE)
A peak of the jump (~0.60 sec) occurs at the apex where the vertical velocity = zero. The time taken for the jump to reach the apex is approximately 0.60 seconds.

One-time upward jump velocity.

The graph shows height inMarioo units on the y-axis and time in seconds on the x-axis.
Meanwhile…
Quake 3 Video

YouTube Link
Starcraft Video
STEEL BATTALION CONTROLLER :: NEW COLORS
Late Era
Set Up Internet Connection

What is the password for the Wi-Fi network?

password:

OK
Use the Wii Remote to control Mario.

Touch the GamePad to place Boost Blocks.
Kinect Tech Demo

YouTube Link
XBOne Gestures Video

YouTube Link
CIAO
Assassin’s Creed 3 Tech Video

YouTube Link
Flower Video
Octodad Video

[YouTube Link]
FOOD

Ale

Alto Wine (9)
Bread (6)
Cabbage
Eidar Cheese Wedge
Eidar Cheese Wheel (3)
Goat Cheese Wedge (2)

ALE

Weight 0.5
Value 5

Restore 15 Stamina. Stamina regenerates 30% slower for 30 seconds.