No More Excuses, Your Guide to Accessible Design

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GAME DEVELOPERS CONFERENCE®

MOSCONE CENTER · SAN FRANCISCO, CA

MARCH 2-6, 2015 · EXPO: MARCH 4-6, 2015

volition inc

IRRATIONAL
GAMES

READY AT DAWN

igda
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developers association
game accessibility special interest group

the ablegamers
foundation

WHAT ARE WE TALKING ABOUT TODAY?

- Who has a disability and what that means for games
- Features that improve your titles
- Resources

HOW DO YOU THINK OF DISABILITY?

MEDICAL MODEL

Viewed as an extension of a condition that needs treatment or therapy.

GOVERNMENT MODEL

Prevents you from substantial gainful activity, such as work

NEITHER OF THOSE ARE GREAT.

The cultural habit of regarding the condition of the person, not the built environment or the social organization of activities, as the source of the problem, runs deep.

-Deborah Kaplan, Director of the World Institute on Disability.

SOCIAL MODEL

- Result of Societal Forces on an impairment

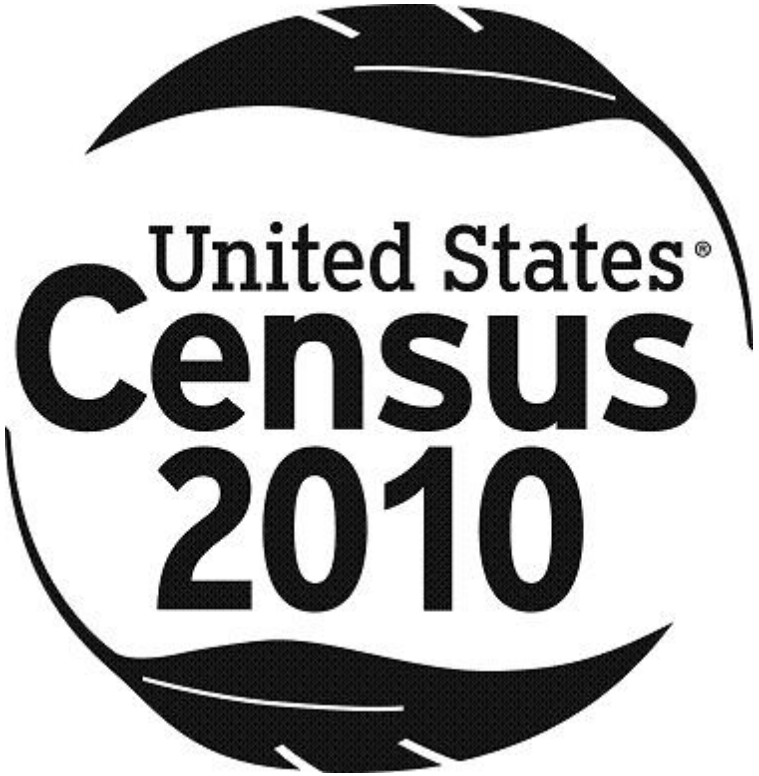
WHAT'S THAT MEAN?

WHO IS DISABLED?

HOW WE'LL TALK ABOUT IT

- International Classification of Functioning, Disability, and Health(ICF)
- An umbrella term for impairments, activity limitations, and participation restrictions – mental and physical

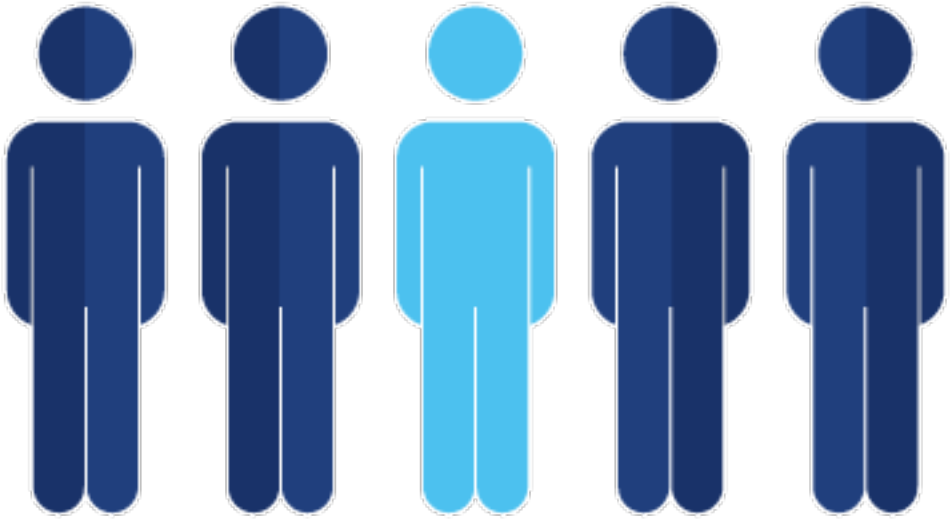
LET'S START TALKING NUMBERS.



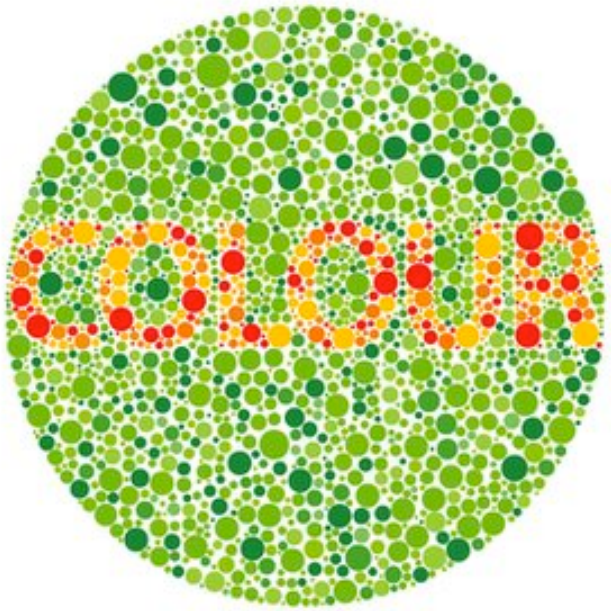
ONE IN FIVE HAVE A DISABILITY

6.9 Million

56.7 Million

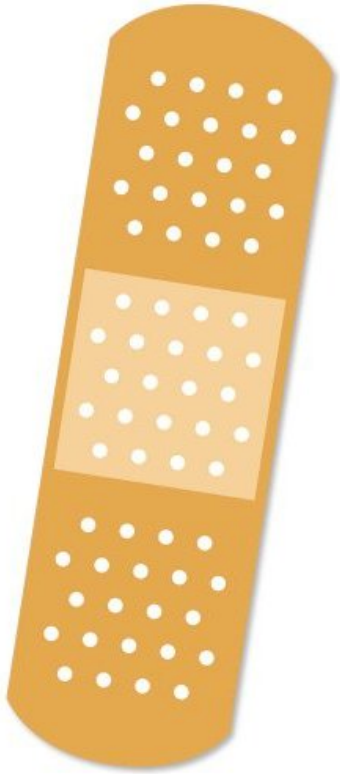


BUT SOMETHING'S MISSING-



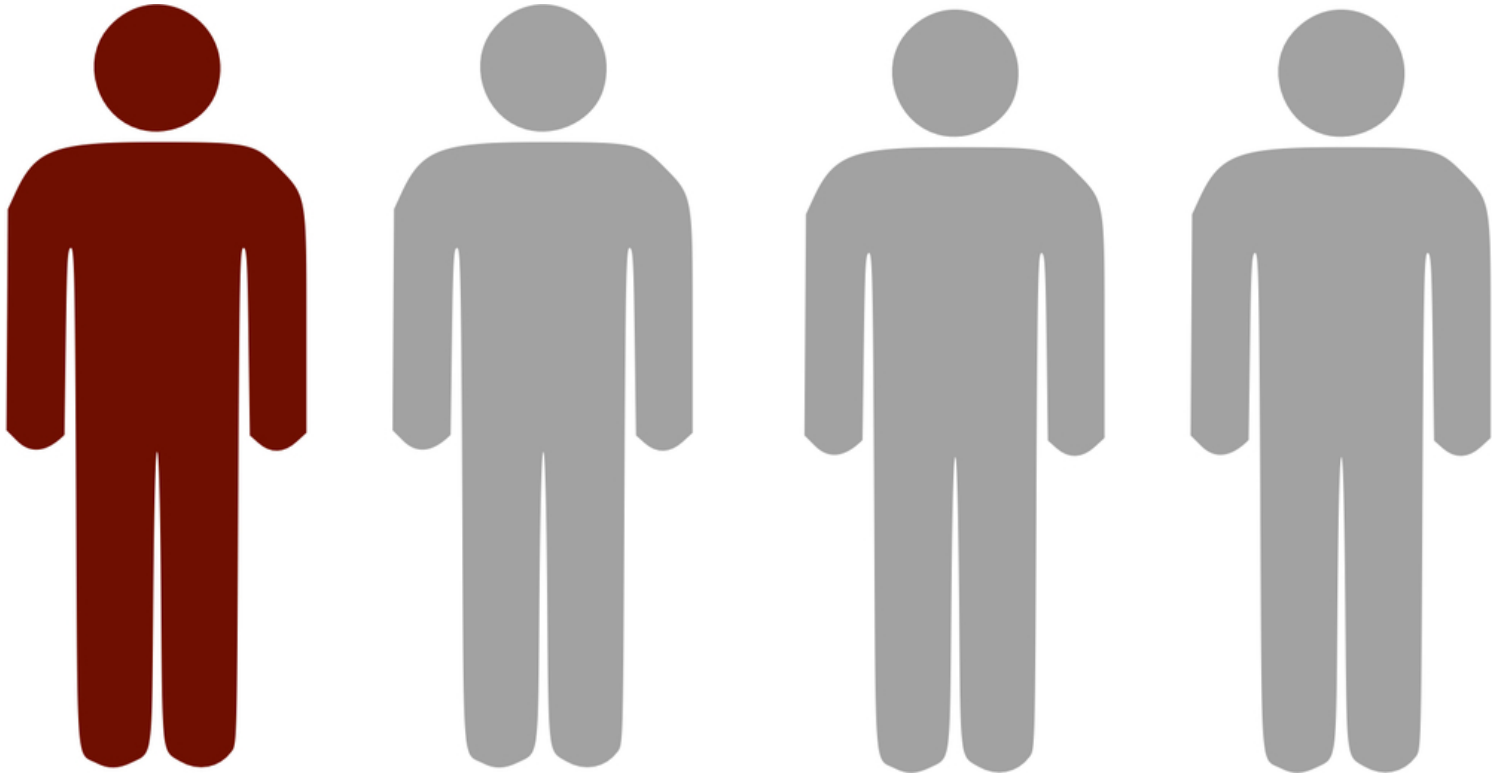
- Doesn't record information on colorblindness
- 14% of adult population with reading age below 11yrs old
- Future Impairments

FUTURE IMPAIRMENTS

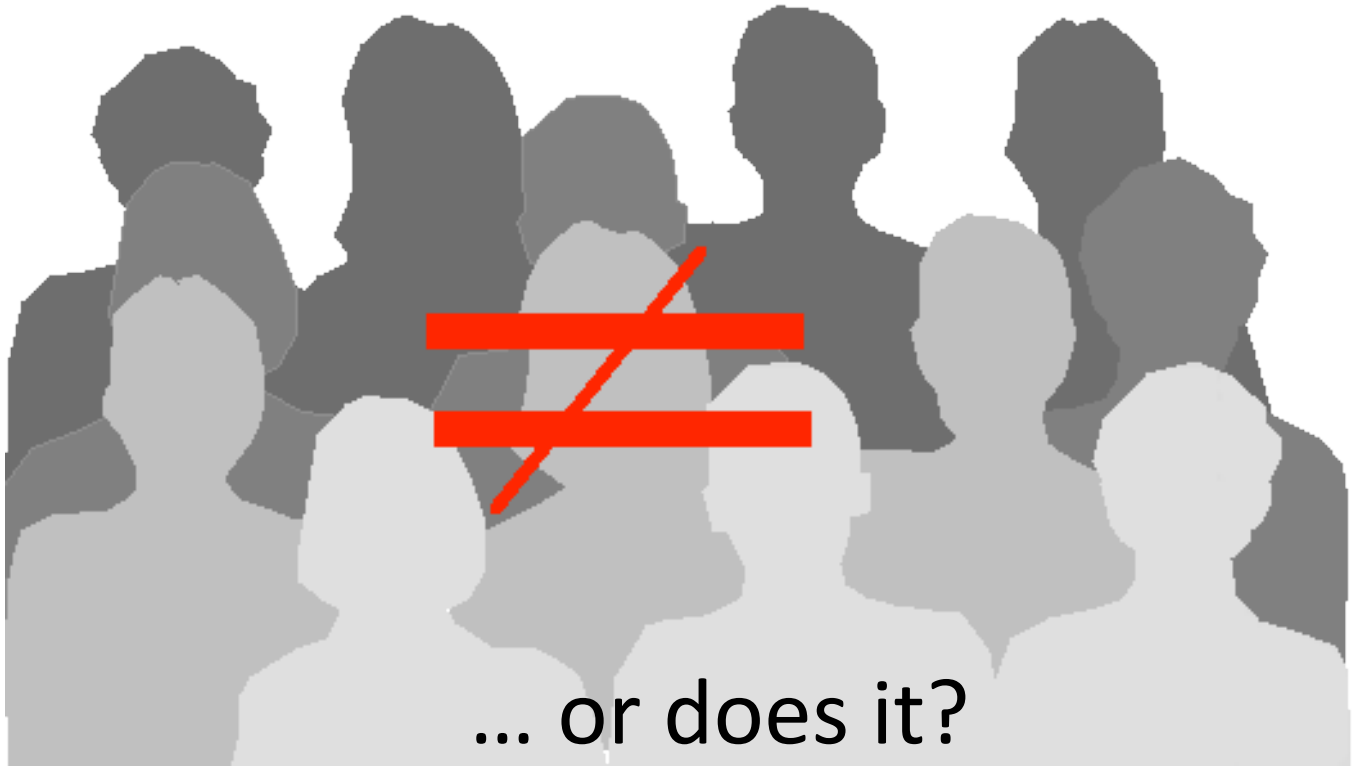


- those not with a disability now that will be in the future
- includes injuries such as broken arms and arthritis – two things that we may not think of as someone being "disabled" but would deeply impact someone's ability to play games

IT'S MORE LIKELY THAN YOU THINK.

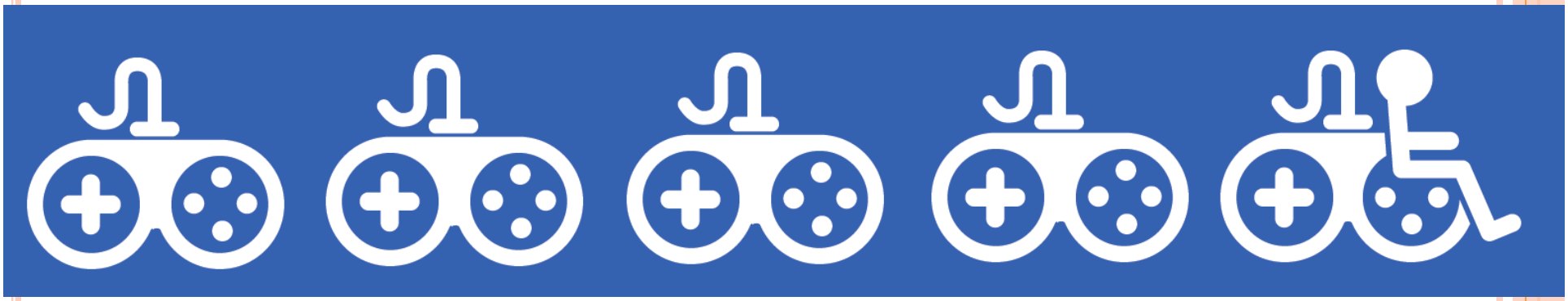


THAT DOESN'T MEAN IT'S REPRESENTATIVE OF YOUR AUDIENCE



SURVEY OF CASUAL GAMERS

20.5% of Gamers vs 15.1% of General Population



WHAT ABOUT HARDCORE GAMERS?

- No data
- Likely lower number of gamers
- Games aimed at this audience less accessible

WHY ENGAGE THIS GROUP?

- Play more frequently
- More Hours a week
- Longer periods per gaming session
- Report more benefits from playing

HELPING THEM HELPS YOU

- More dedicated consumers
- More likely to refer games to friends
- More likely to buy additional titles
- Results in a better overall product

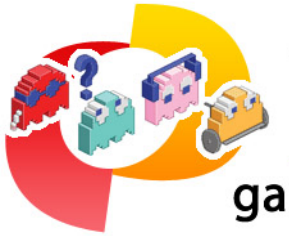
AN EXAMPLE

- Work for those with an auditory disability helps text only localized skus

SO WHAT CAN YOU DO?

the ablegamers foundation

SpecialEffect



igda international game developers association

game accessibility special interest group

SUBTITLES/CLOSED CAPTIONS

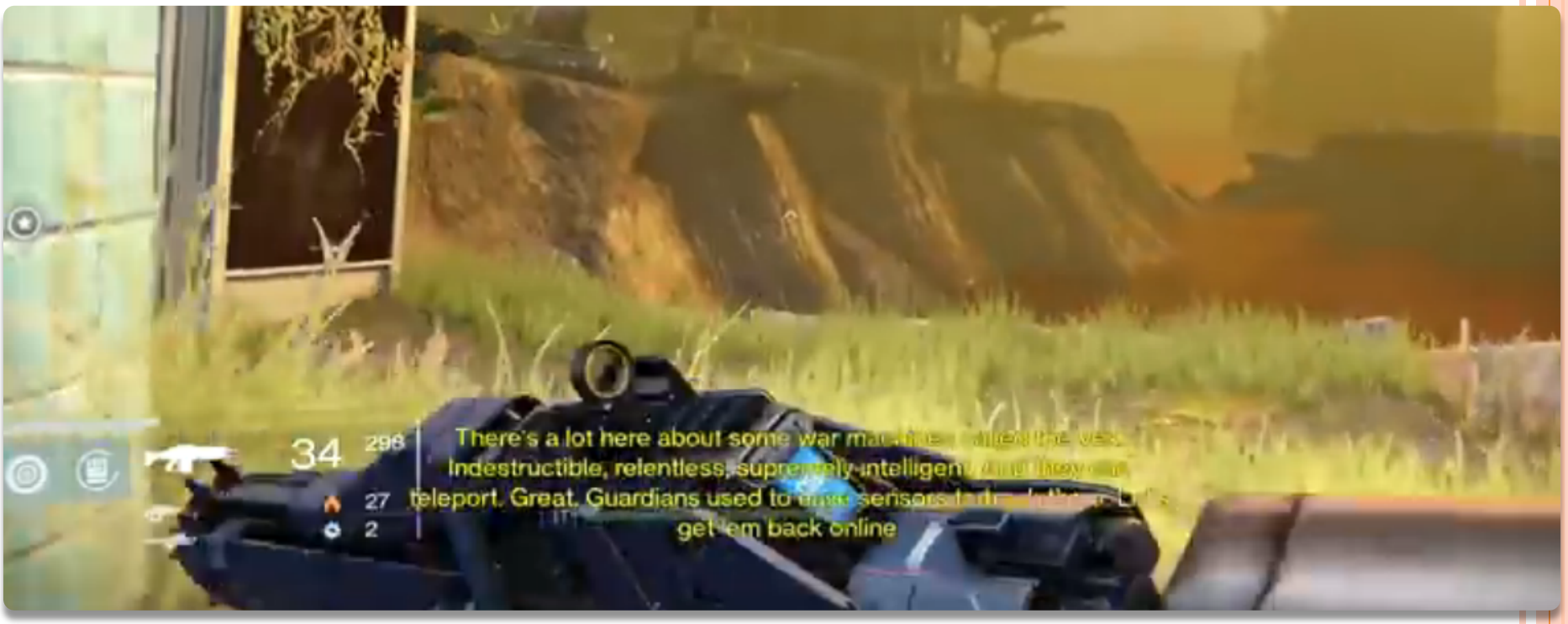
- On screen text for all speech in game
- Include important sounds for captions
- Not just cinematics

WHO IS THIS FOR?

- Not just those with hearing issues
- Gamers in noisy places (portables)
- Gamers in quiet places
- Text only localized SKUs

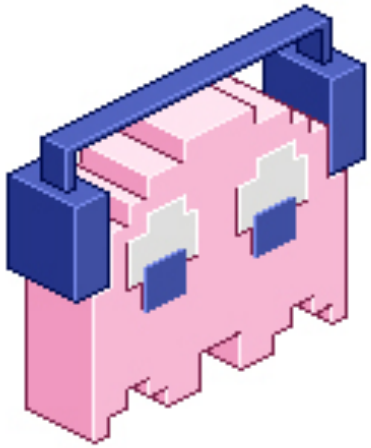
COMMON MISTAKES

- Too much text
- Hard to read font or color
- No info on who is talking
- Not all VO subtitled



- An extreme case of poorly implemented subtitles.

WHY DOES THAT MATTER?



- Mild vision impairment commonly associated with hearing impairment
- Lower reading ages because BSL/ASL is their first language

NO EXCUSE GUIDELINES

- Centered at the bottom of the screen
- Try to limit to of 3 lines at a time
- Spoken Text in upper and lower case
- SFX in all caps - *STATIC*

MAKE IT EASY TO READ

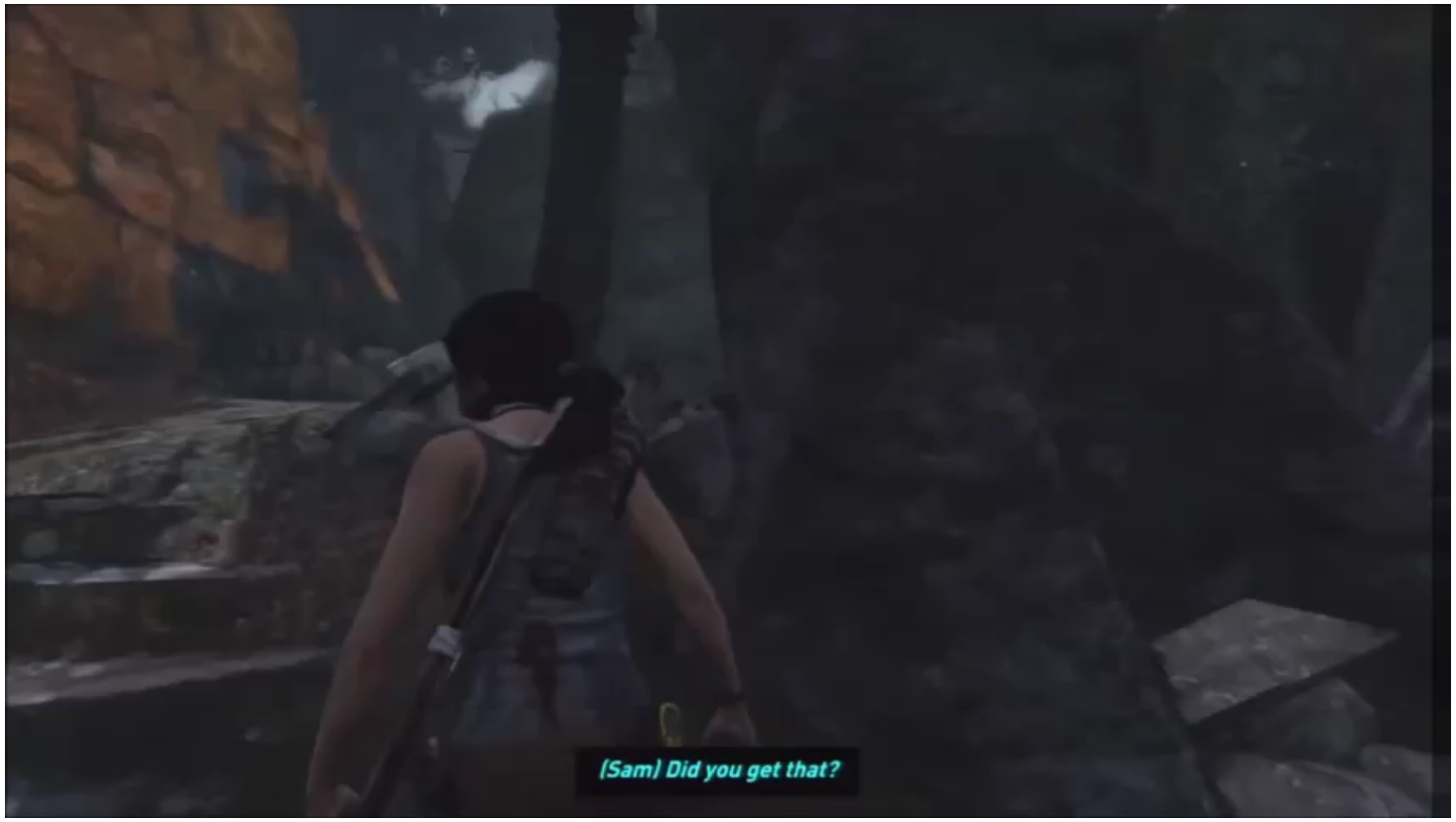
- Letter boxing
- List your speaker
- Consider font size and color

MAKE THEM EASY TO UNDERSTAND

- Offer a sans serif font
- Color label your speakers!

BASE LEVEL ACCESSIBLE

A DIFFERENT TAKE ON ACCESSIBLE



LET'S NOT FORGET SYSTEMIC VO!

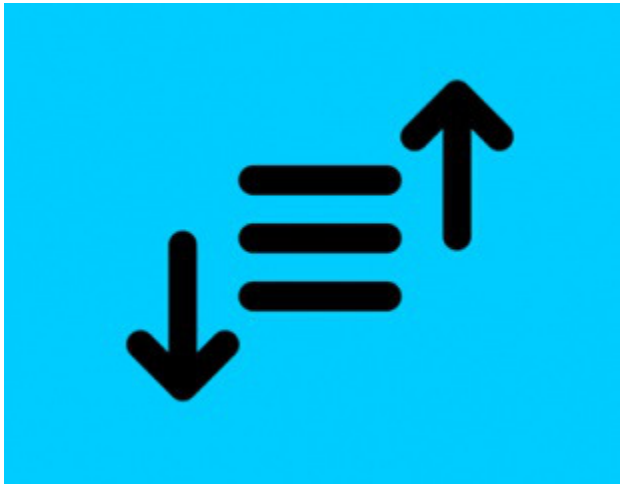
GAMERS NOTICE WHEN IT'S NOT THERE.

Accessibility At A Glance Bayonetta 2

9.1

Precision >	Yes	You will NOT need precision to play
One-Handed >	Yes	One-Handed gamers shoud be okay
Deaf Gamers >	Yes	You should have no issues with this game
Subtitles >	Yes	Character text is present but not ambiant
Colorblind >	Yes	Colorblind gamers should be okay

PRIORITY QUEUING SYSTEM

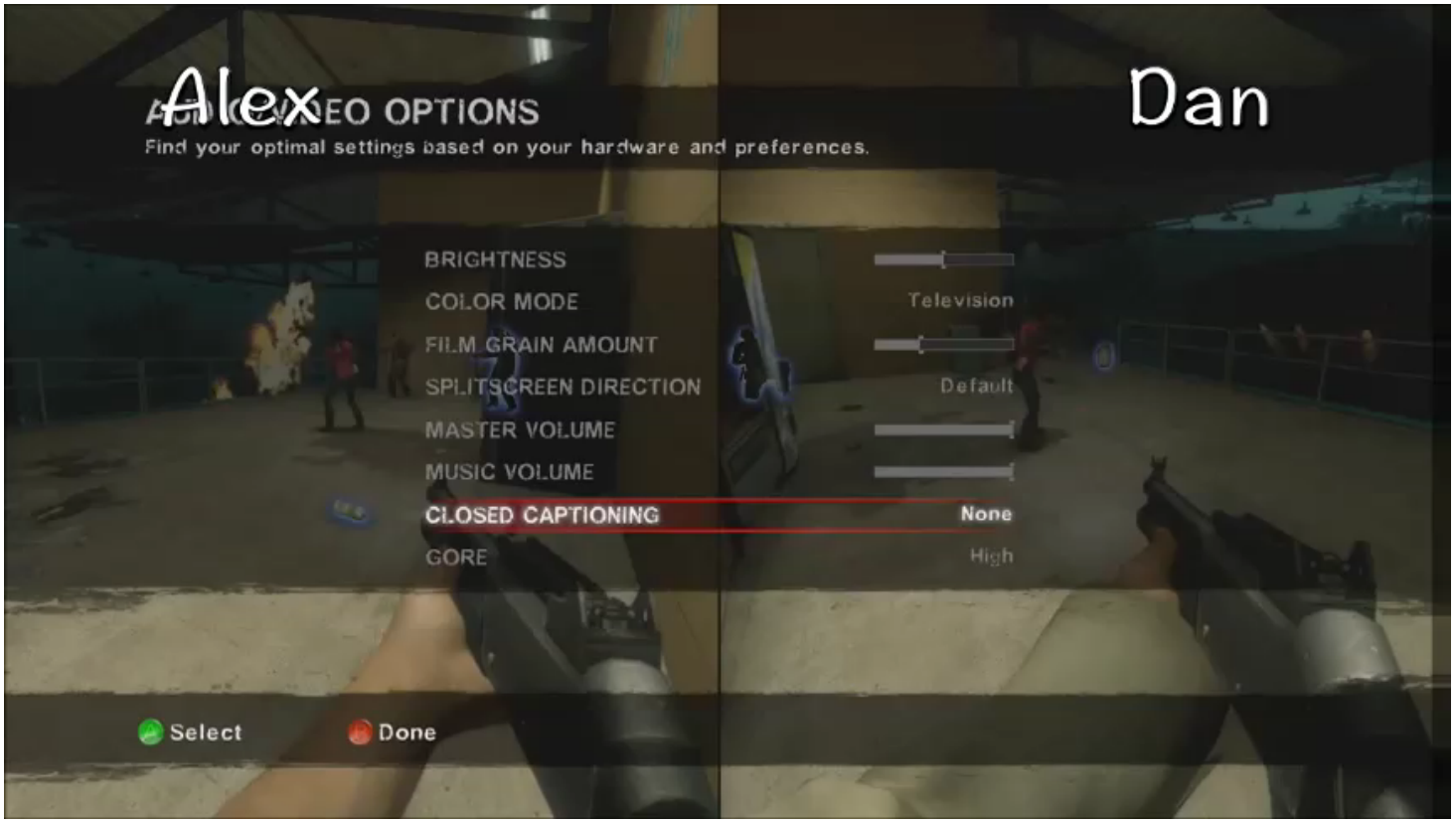


1. Story Dialogue
2. Systemic Dialogue
3. Audio Queues

TIME STAMP EXAMPLE

- **0:00** Character dialogue (Level 1 sound) starts playing, subtitle displayed for 2 seconds
- **0:01** Combat VO (Level 2 sound) starts playing, no room on screen for caption to be displayed, ignored
- **0:02** Character dialogue (Level 1 sound)'s 2 seconds pass, subtitle removed
- **0:03** Combat VO (Level 2 sound) starts playing, caption displayed

NO SUCH THING AS TOO MUCH TEXT FOR DISABLED GAMERS



DON'T FORGET TO LET PLAYERS TURN THEM ON.

SOUND ALTERNATIVES

- Visually representing important sounds in ways other than text

An Example

Silent Hill 1

Silent Hill Homecoming

TRAINING MODE/TUTORIALS

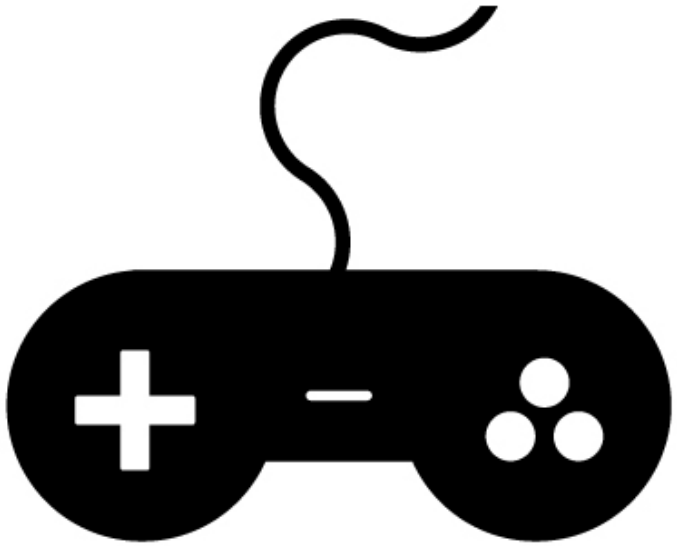
- Low pressure place for gamers to adjust and learn
- Interactive

TIMER FREE TEXT PROMPTS

- Give the player time to read text at their own pace

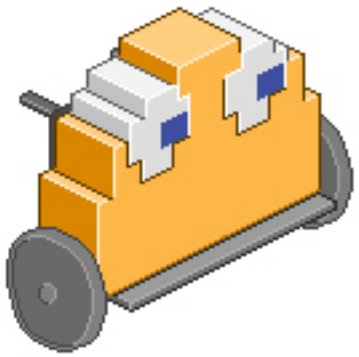
TWILIGHT PRINCESS HAS BOTH

REMAPPABLE CONTROLS



- Allow the player to remap gameplay controls as they see fit

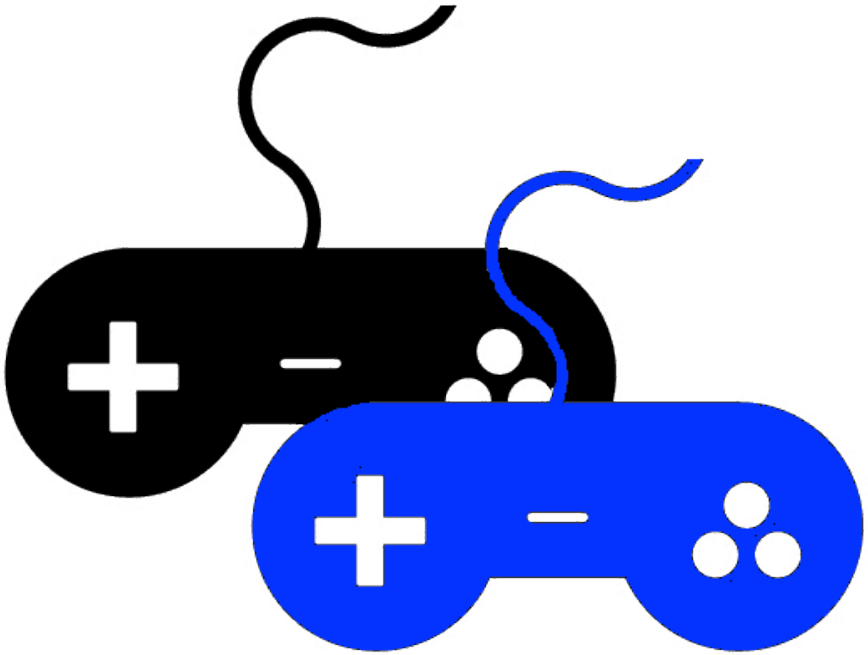
BACKGROUND INFO



- Most requested feature because it helps a wide range of people
- Adjusting standard controllers to get around impairments
- Remapping Custom controllers

- Shuhei Yoshida, President of Worldwide Studios, Sony Computer Entertainment

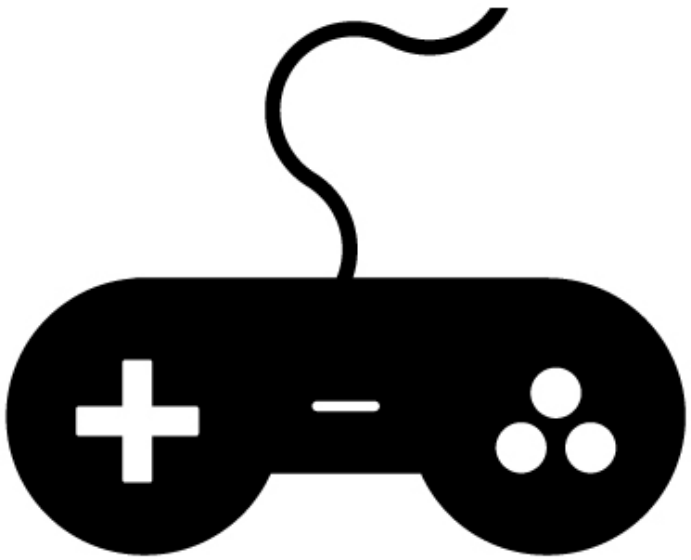
ADDITIONAL CONTROL OPTIONS



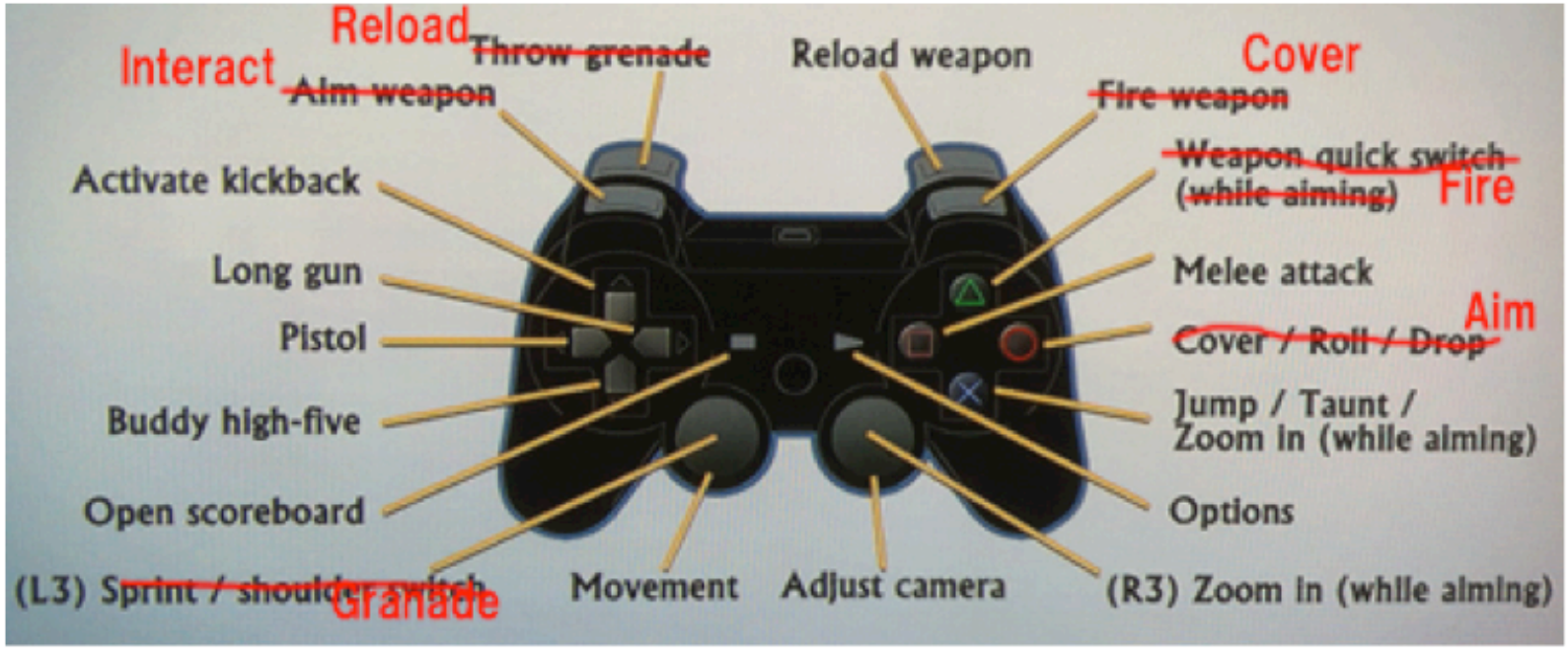
- Pre-sets
- Horizontal/Vertical Inversion
- Sensitivity Adjustments
- Southpaw
- Toggle Aim/Crouch

COMBINING THESE TWO FEATURES

ON STANDARD CONTROLLERS -

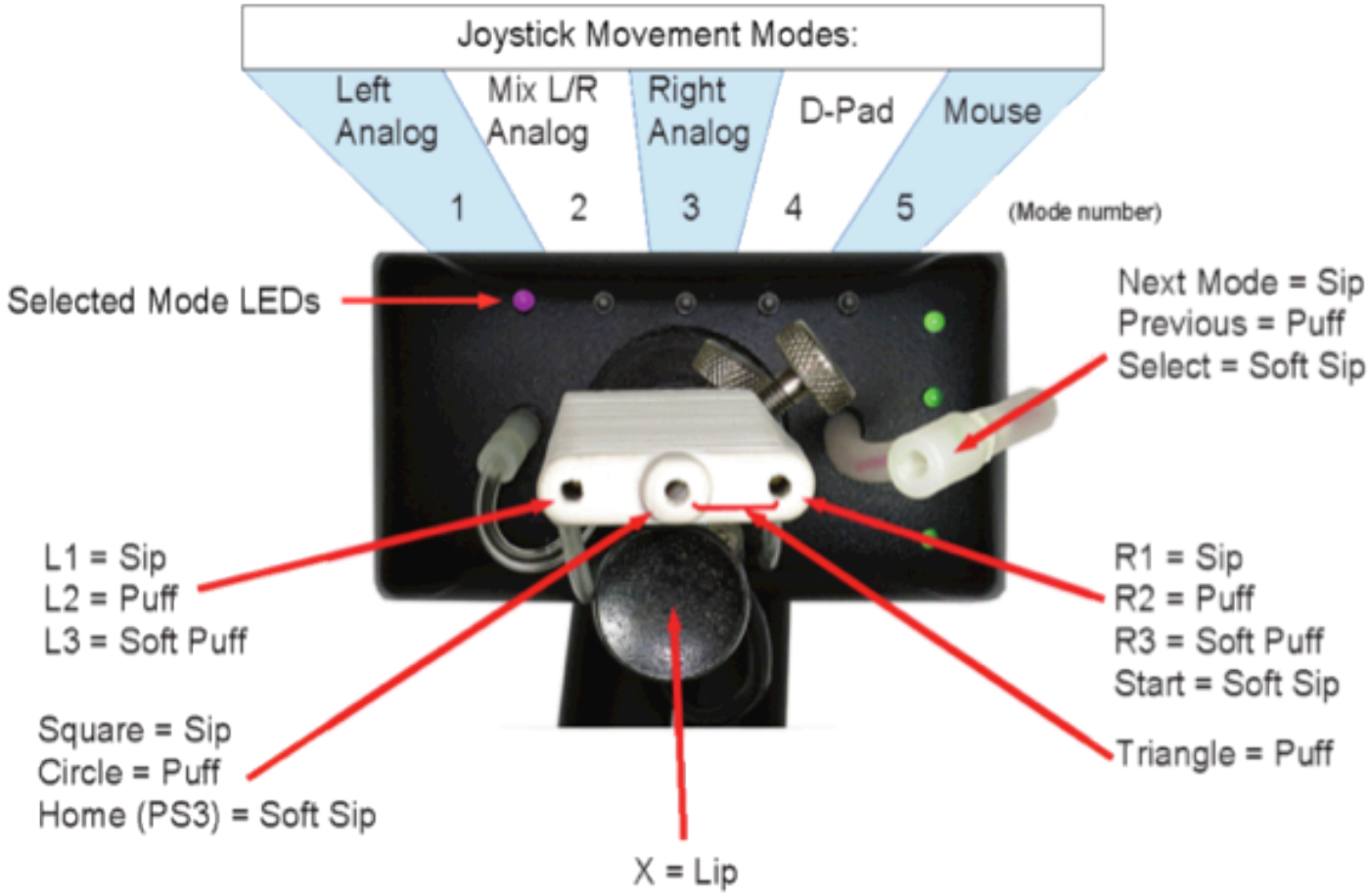


- Shoulder buttons require largest range of motion, strength
- Commonly remapped
- Commonly important



Uncharted Multiplayer

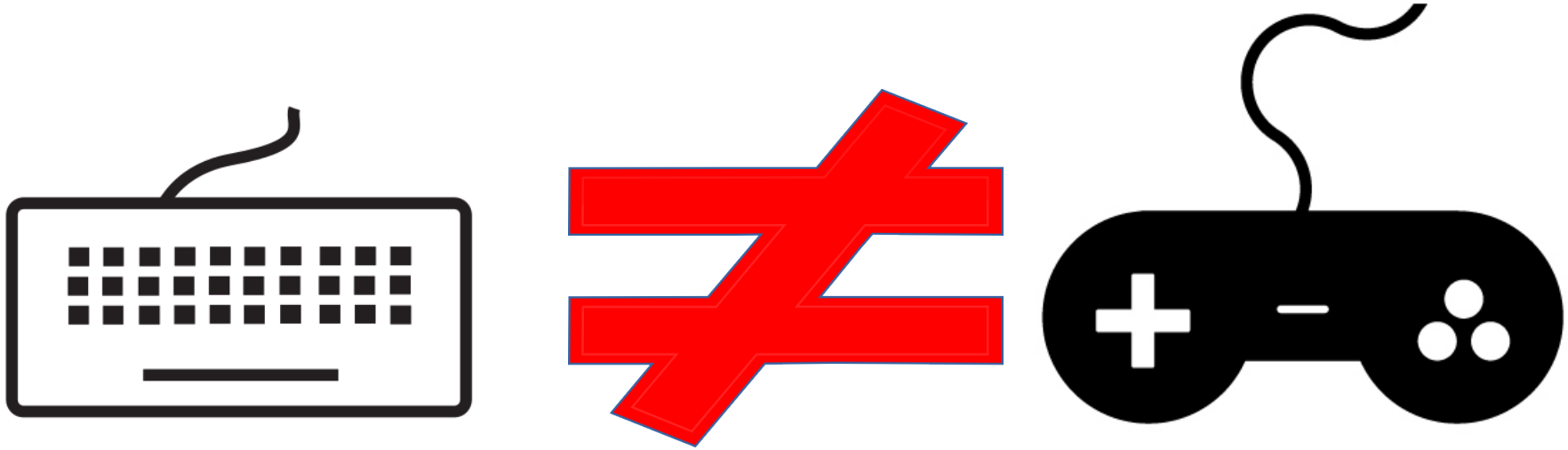
CUSTOM CONTROLLERS


Joystick Movement Modes:
Left Analog
Mix L/R Analog
Right Analog
D-Pad
Mouse
1
2
3
4
5
(Mode number)
Selected Mode LEDs
Next Mode = Sip
Previous = Puff
Select = Soft Sip
L1 = Sip
L2 = Puff
L3 = Soft Puff
R1 = Sip
R2 = Puff
R3 = Soft Puff
Start = Soft Sip
Square = Sip
Circle = Puff
Home (PS3) = Soft Sip
Triangle = Puff
X = Lip

REMAPPING THE HARDWARE?

$399 for Adroit

$399 for 500 GB PS4



How can you implement it?

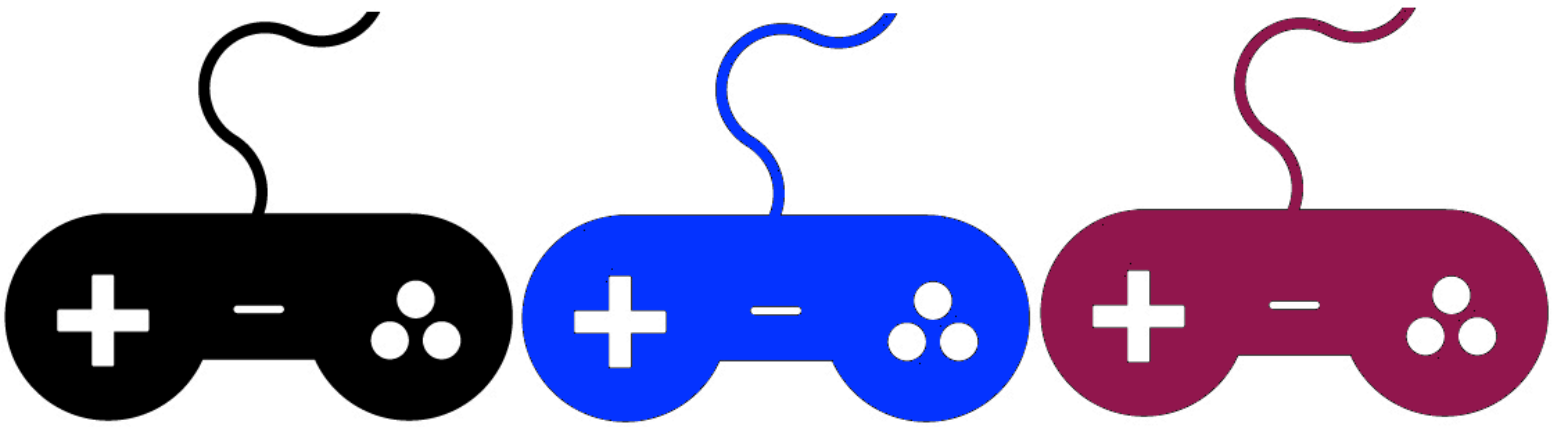
POPULAR WAYS TO REMAP

The List

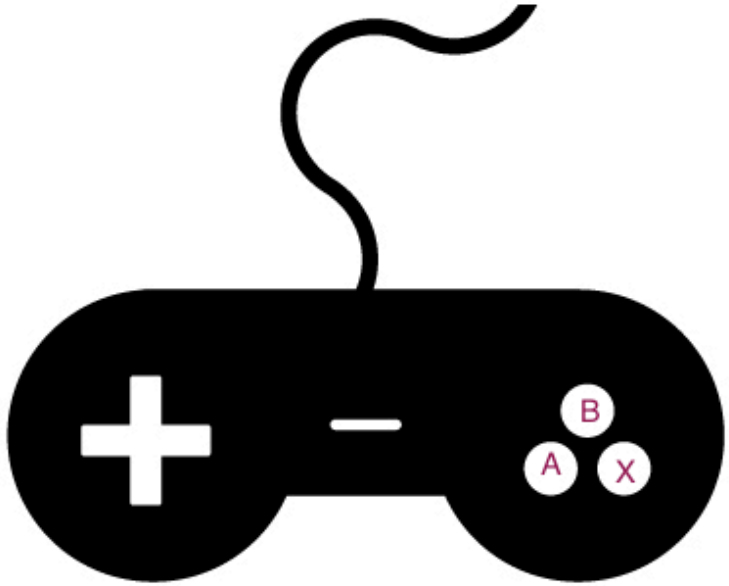
The Button Swap

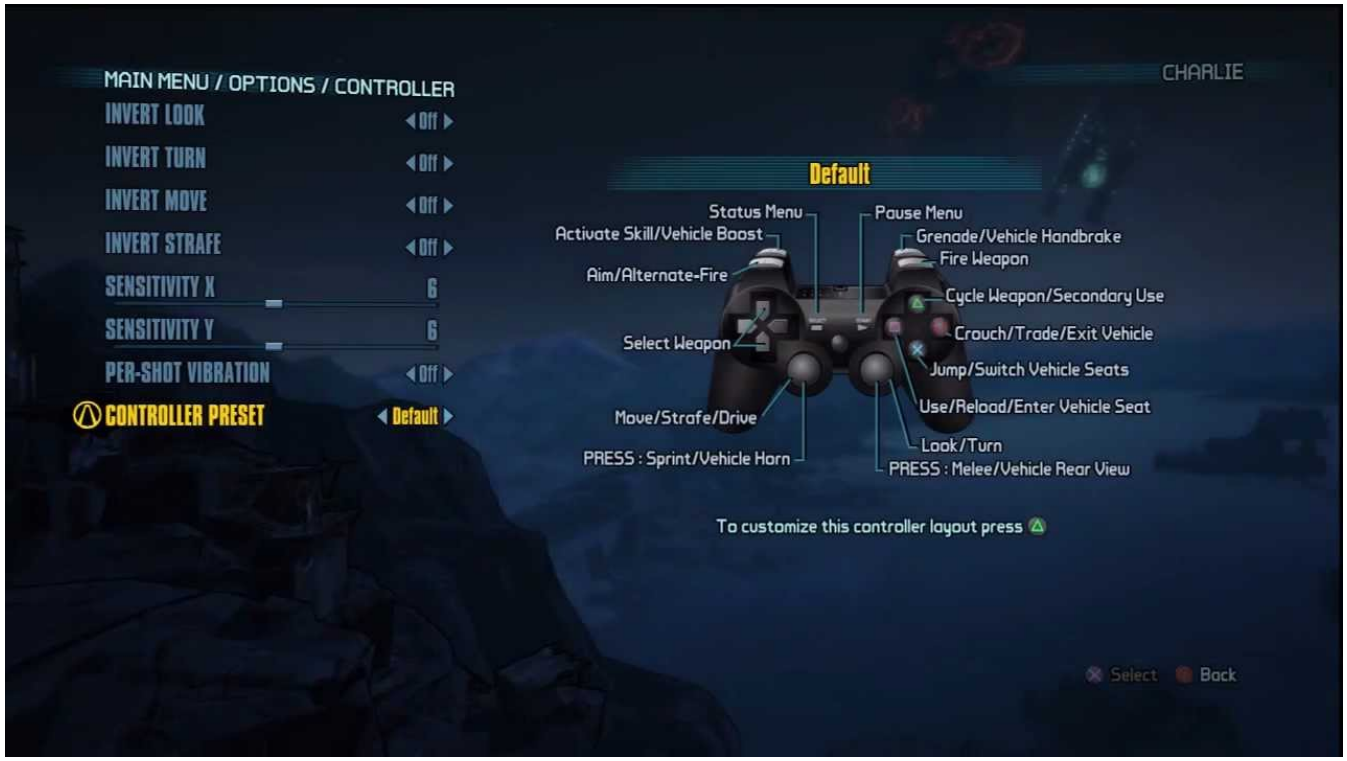
Street Fighter 4

SELECT A CONTROL SCHEME



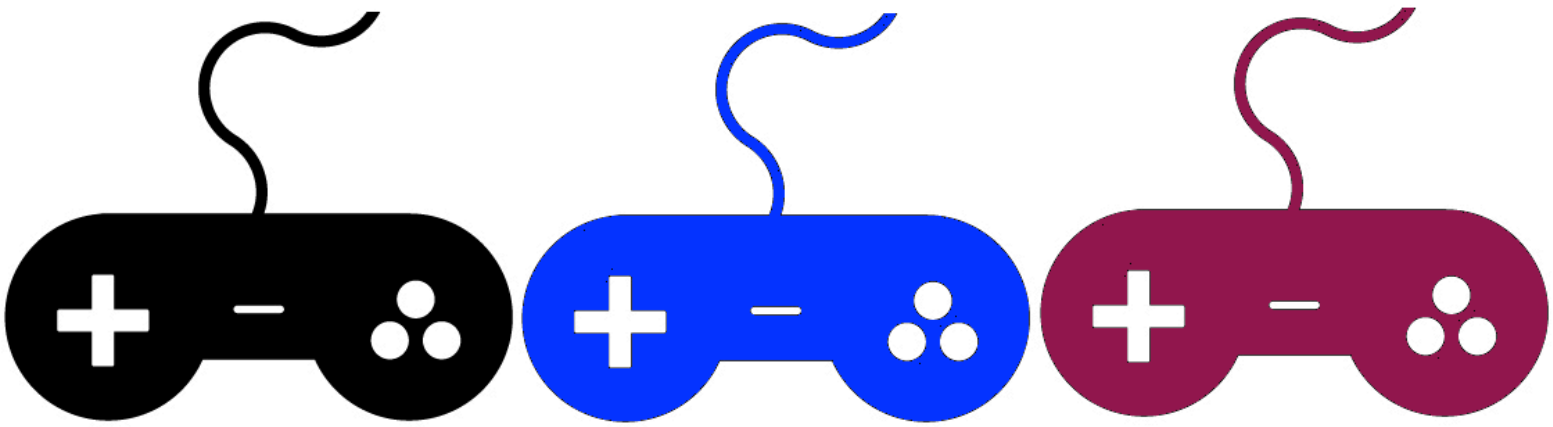
Button:	Action:
B	< Jump >
A	< Run >
X	< Fire >



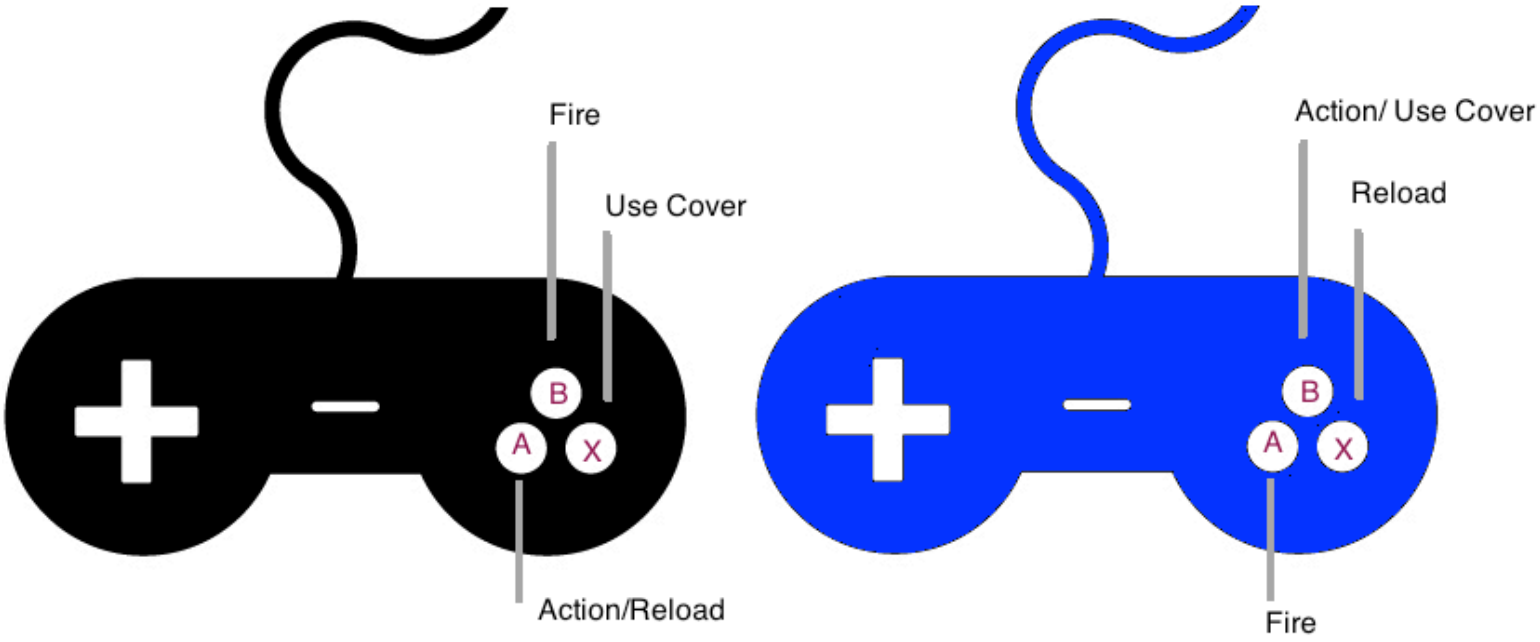


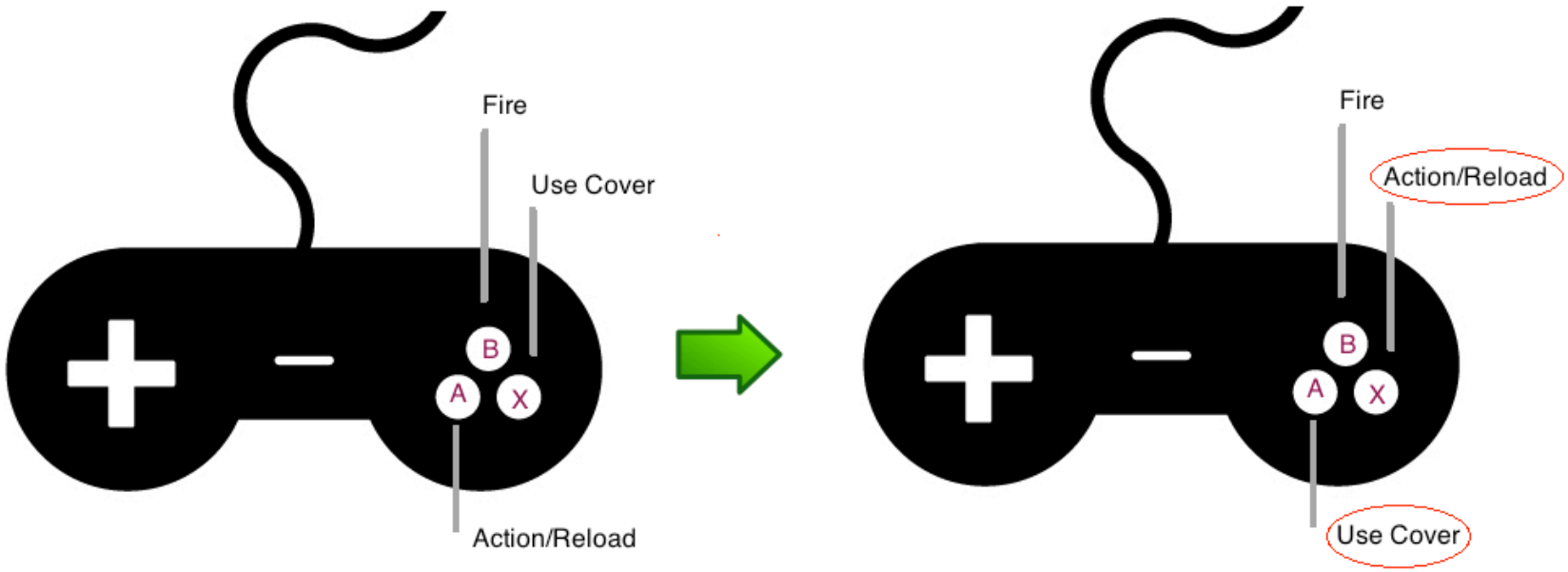
Borderlands 2

SELECT A CONTROL SCHEME



CONTROL SCHEMES MIX UP THEIR ACTIONS




Fire
Use Cover
B
A
X
Action/Reload
Fire
Action/Reload
B
A
X
Use Cover

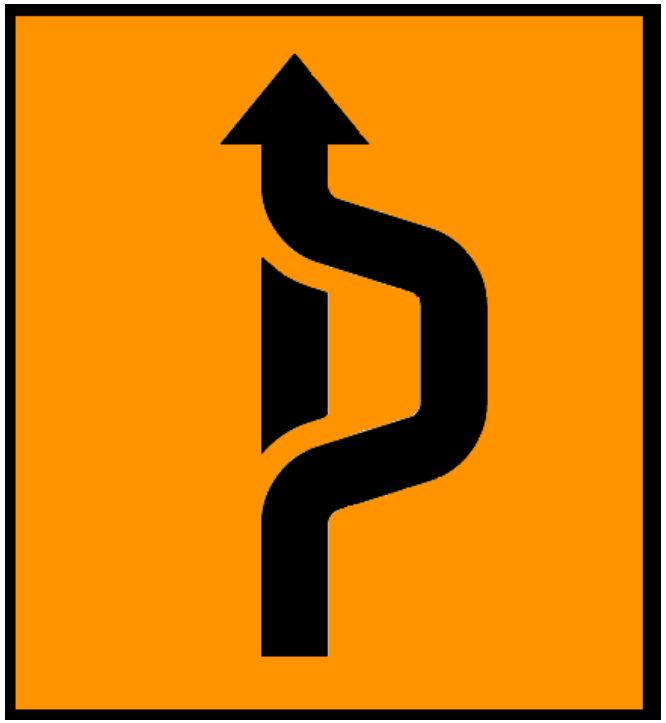
BOTH WAYS TO REMAP MAP PURPOSEFULLY DON'T

- Remap menu inputs
- Remap Joystick analog with a button input
- Anything that violates first party rules

WHAT ABOUT QTES?

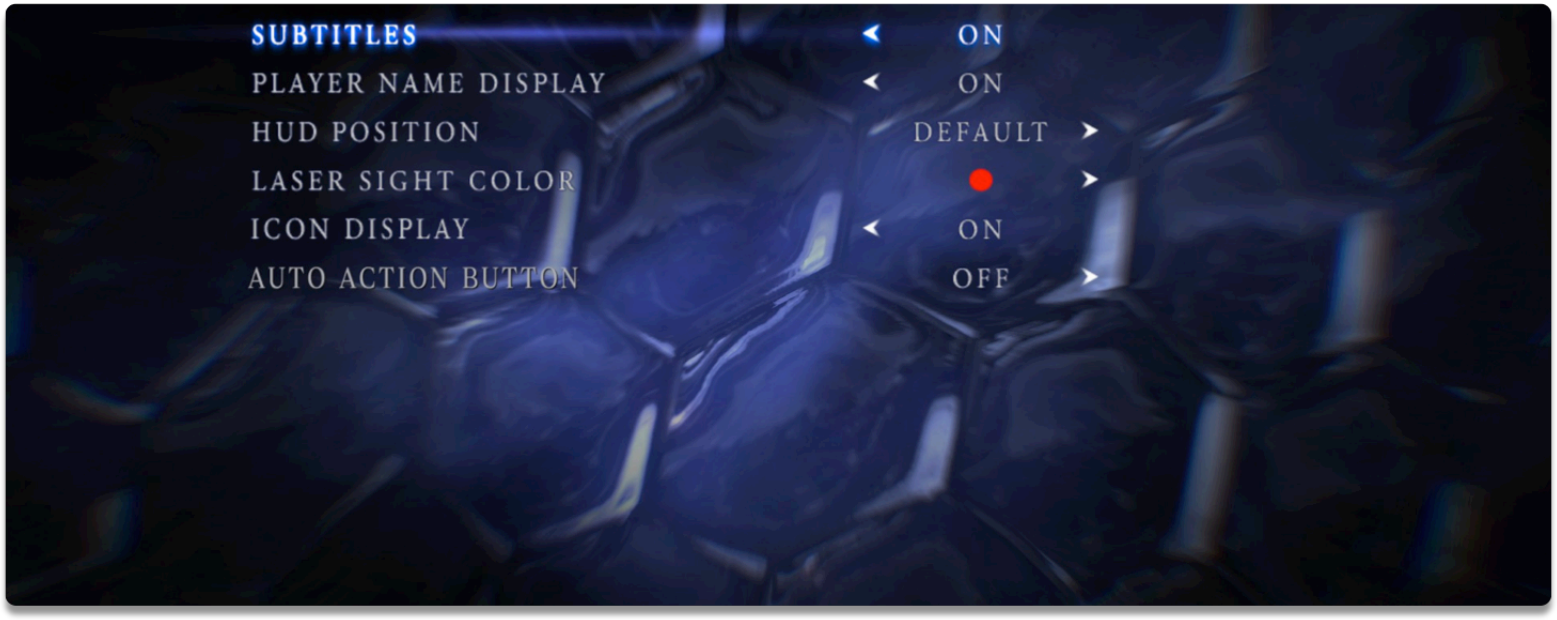
- Gamers with disabilities prefer that these get remapped with the rest of the controls
- If that is not possible, they would still rather take actions being able to remapped/limited remapping and QTEs remaining on the same buttons than no remapping at all

BYPASS MODE FOR QTE/BUTTON MASH



- Autopass
- Removing timer
- Single Button Press vs Mashing

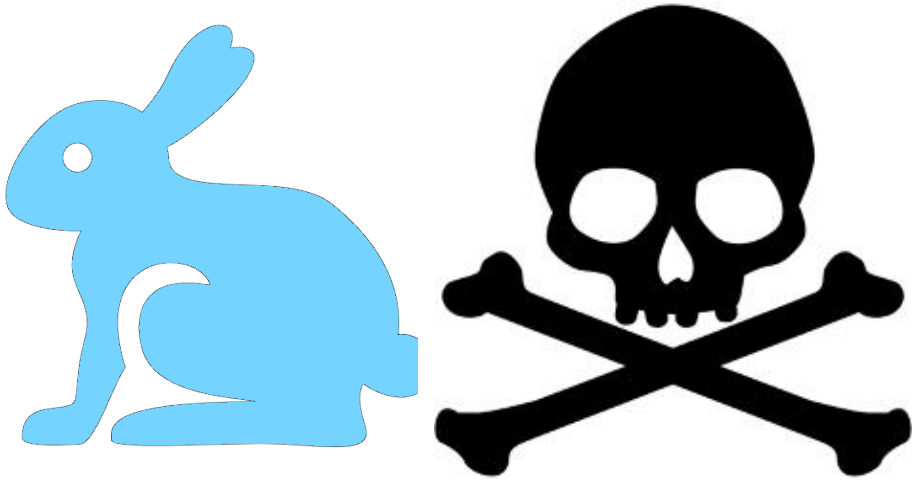
RESIDENT EVIL 6 ACTION BUTTON



Originally auto action button to complete auto win QTEs was only available for Amateur difficulty, but after they received enough requests from other players, they patched it in for all difficulties.

HARSHIL THE CAT

WIDE RANGE OF DIFFICULTY LEVELS



- Almost no way to fail to almost no way to win
- Narrative Mode
- Someone will use it, don't doubt

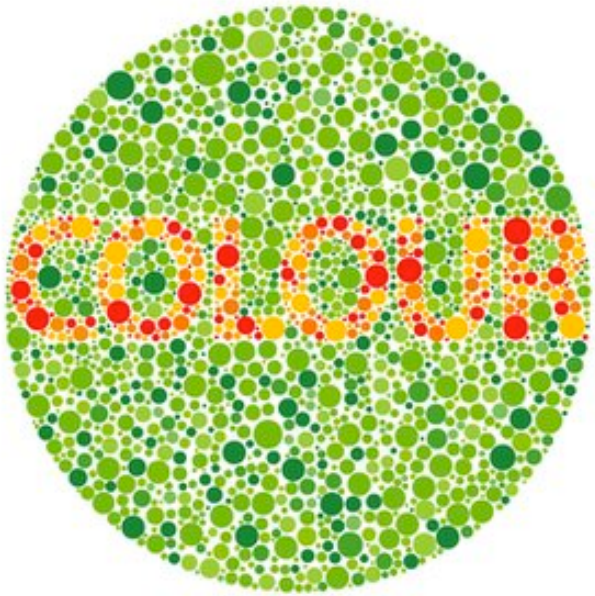
More Info

- These gamers would like a difficulty that your grandma could play and not get frustrated on.
- Gamers commonly ask for min of 4 difficulties
  - Story Mode – Almost impossible to lose, limited achievement unlocks if necessary
  - Easy
  - Normal
  - Hard
- A large of amount of checkpoints is always helpful

MISSION CRITICAL HELP

- Tool Tips
- Highlighting Important Items
- In Game GPS

COLOR BLIND FRIENDLY



- No information based on color alone
- Not just red/green

ASSISTIVE MODES

- Auto aim
- Aim Assist
- Enemy Lock On
- Auto Center

FALLOUT 3 AND VATS

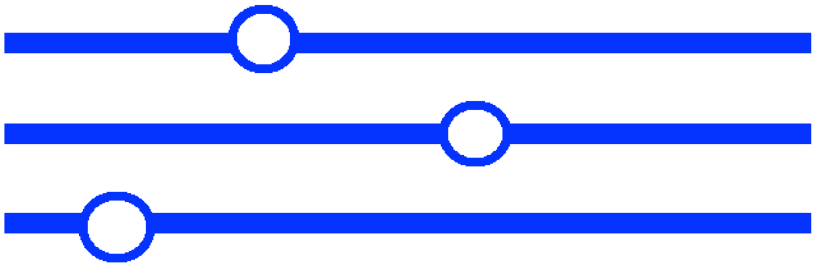
MULTIPLAYER PROFILES

- Provide a way for a gamer to be paired with others okay with their play style

HALO REACH PARTY DETAILS

GTA LOBBY OPTIONS

AUDIO SLIDERS



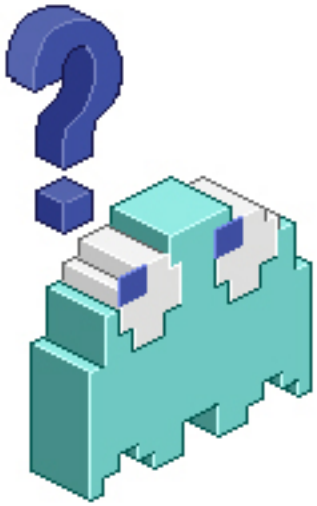
- Allow the player to individually adjust speech, SFX and music

THE ORDER: 1886

DOCUMENTATION

- Let gamers know what features you've added

CAN I PLAY?



- You don't know until you buy
- If you can't you've wasted money

Release Date: Aug 27, 2013

Languages:

	Text	Full audio	Subtitles
English	X	X	
French	X	X	
Italian	X	X	
German	X	X	
Spanish	X	X	

See all 8 supported languages

TEEN T CONTENT RATED BY ESRB

Blood
Mild Language
Violence

Online Interactions Not Rated by the ESRB

- Single-player
- Multi-player
- Captions available
- Partial Controller Support
- Steam Trading Cards

Visit the website

View update history

Read related news

JUST PUT IT ON YOUR WEBSITE.

PLAN EARLY.

- Any of these features when planned early are not hard to implement or massively time consuming
- Trying to retrofit some of these features can be incredibly hard.

RECAP THE FEATURES

- Subtitles/Closed Captions
- Sound Alternatives
- Remappable Controls
- Control Options
- Difficulty Levels
- Bypass Mode for QTE/ Button Mash
- Mission Critical Help
- Colorblind Friendly
- Training Mode/Tutorials
- Assistive Modes
- Timer Free Text Prompts
- Multiplayer Profiles
- Audio Sliders
- Documentation

WHERE TO GO

Game Accessibility Guidelines

Includifaction from AbleGamers

With 100 features and best case examples from accessibility experts

Easy to follow checklist with challenges to make you think about your designs

WHY ARE THESE GREAT?

BASIC

INTERMEDIATE

ADVANCED

MORE, MORE, MORE

QUESTIONS?

@LadieAuPair