



Adaptive Gaming



Benefits of Gaming

Functional Benefits

- Practice physical and cognitive skills that translate to other tasks

Social Benefits

- Build community (in person or online) and foster supportive relationships

Getting Started

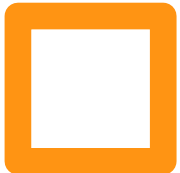
- Identify interests: what kind of games do you want to play?
 - Genre (Racing, Battle, Puzzle, Sports, First Person Shooter, Sandbox, etc)
 - Specific franchises / platforms
- Identify support needs: how might your disability & your level of experience with gaming impact your set up?
 - If motor control is a concern, identify the best access spots
 - Motivation / frustration tolerance

Example: Racing Games



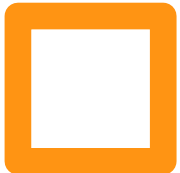
What skills (eg reaction time, precision) or hardware do these games typically require?

Example: Side Scroller Games

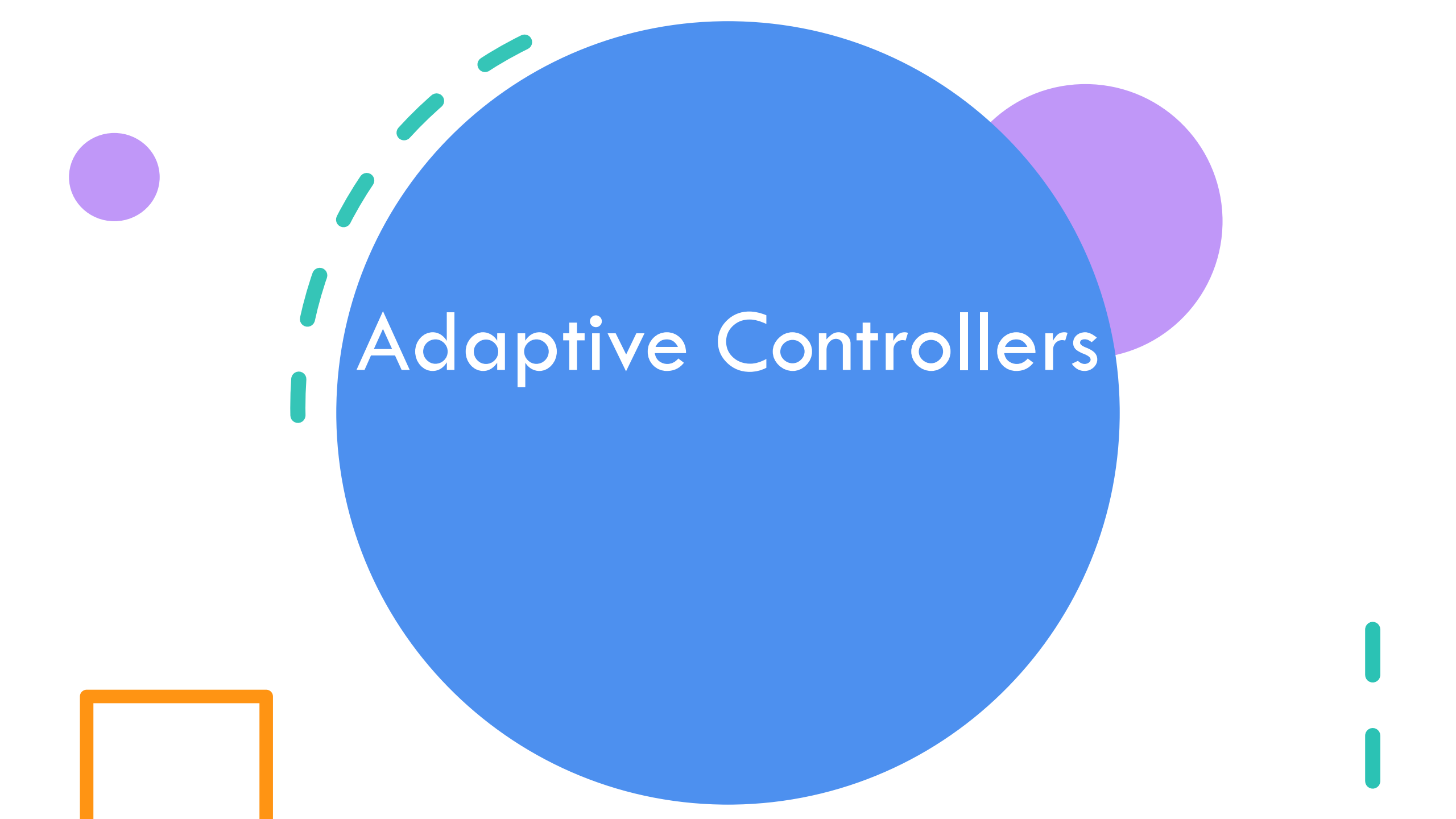


What skills (eg reaction time, precision) or hardware do these games typically require?

Example: First Person Shooter



What skills (eg reaction time, precision) or hardware do these games typically require?



Adaptive Controllers

Xbox Adaptive Controller

- Highly customizable; it's all about the accessories!
- Supports USB and 3.5mm joysticks
- Threaded for mounting
- Compatible with other consoles, you will just need an adaptor



[Xbox Adaptive Controller](#)

New: Xbox Adaptive Joystick



PlayStation Access Controller

- Strong choice for one-handed gamers
- Integrated joystick, can be oriented in any of four directions
- Only offers four switch inputs
- Threaded for mounting



[PlayStation Access Controller](#)

Nintendo HORI Flex



- Offers the choice of built-in buttons or an external switch input
- Works with a limited number of joysticks
- Threaded for mounting
- Only console-based controller that can be paired with eyegaze

[Hori Flex Controller](#)

Other HORI Controllers

Fighting Stick, racing wheels, and flight controls

- separate versions for Nintendo, PlayStation / PC, and Xbox



8BitDo



[8BitDo Lite SE](#) – licensed Xbox wireless controller

[8BitDo Arcade Stick](#) – for Switch and PC



QuadStick

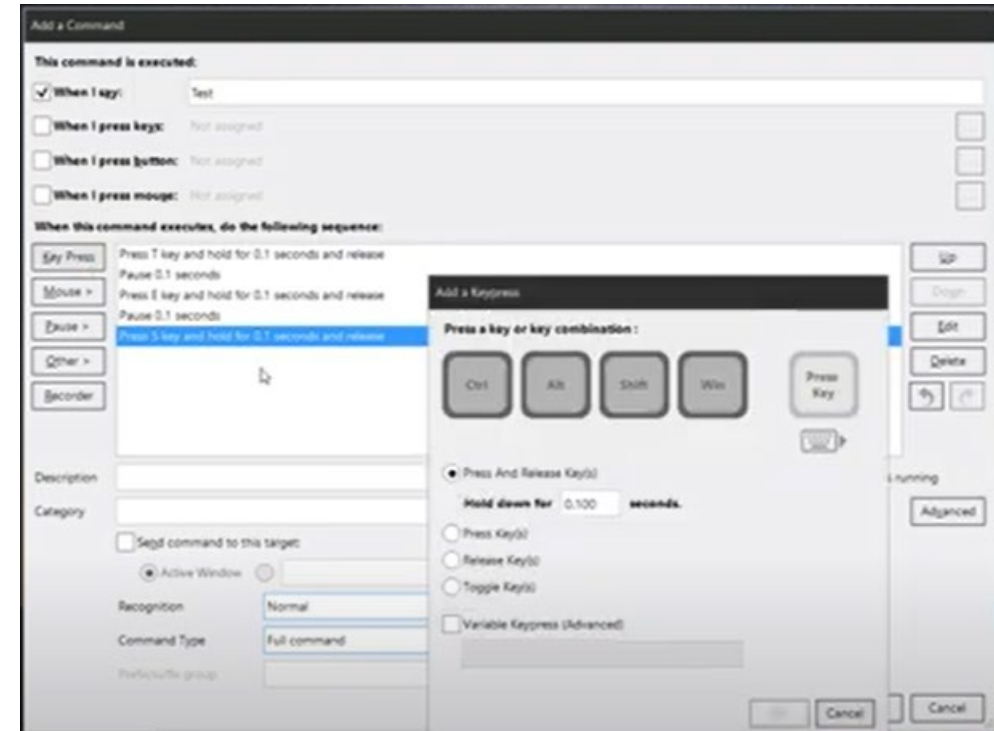
- Combination of mouth-controlled joystick and robust sip-and-puff switch control
- Suits users with limited upper extremity movement
- Highly customizable, although there is a learning curve
- Requires PC software to program



QuadStick

VoiceAttack

- Voice control for PC gamers
 - Note: commands can also be activated with a button click, not just by voice!
- Free trial allows programming of 20 commands



VoiceAttack

Other Third-Party Controllers



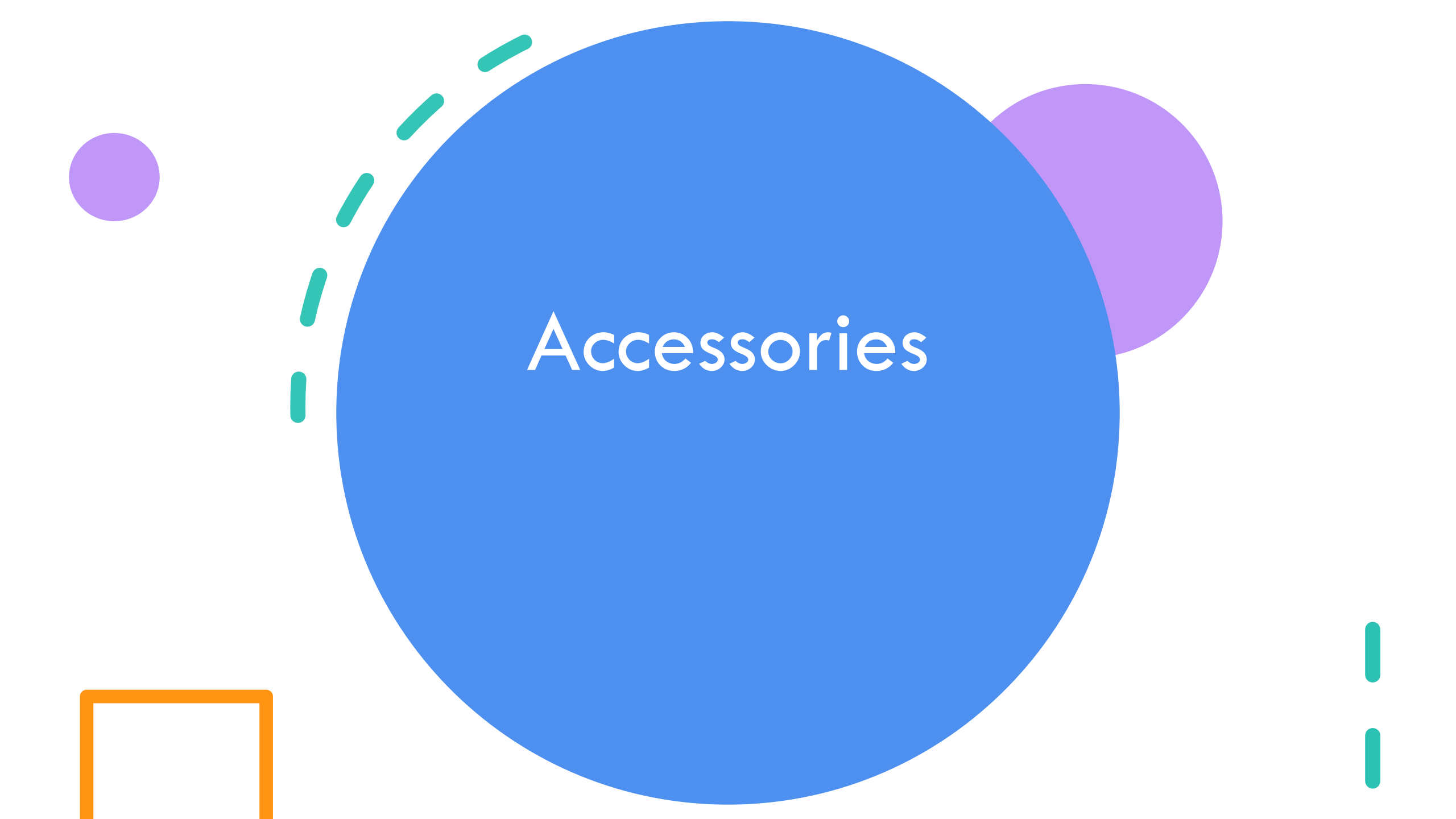
Axis Controller (Xbox)
from [Blue Tip Gaming](#)



The modular [Proteus Controller](#) (Xbox)
from ByoWave



Custom one-handed
controllers (Xbox or PS)
from [Evil Controllers](#)



Accessories

Switches



Any 3.5mm switches will do, but the [Logitech Adaptive Gaming Kit](#) is a good deal.

Joysticks



Joysticks like the [UltraStik](#) and [Zik-Zak](#) come in different grip styles.

Positioning

For each game, prioritize the controls that are:

- Most essential / most frequently used
- Require fastest reaction time
 - e.g. attacking, jumping, dodging



Surfaces



Lap trays like the [Trabasack Cruve Connect](#) offer flexibility.

Consider whether your set up will be:

- On a flat surface like a desk
- Positioned in space around a wheelchair, with mounts

You might need to fasten accessories:

- Dycem or non-slip shelf liner
- Velcro

Mounts

Xbox mounting plate compatible
with QuickClick systems from
[Modular Hose](#)

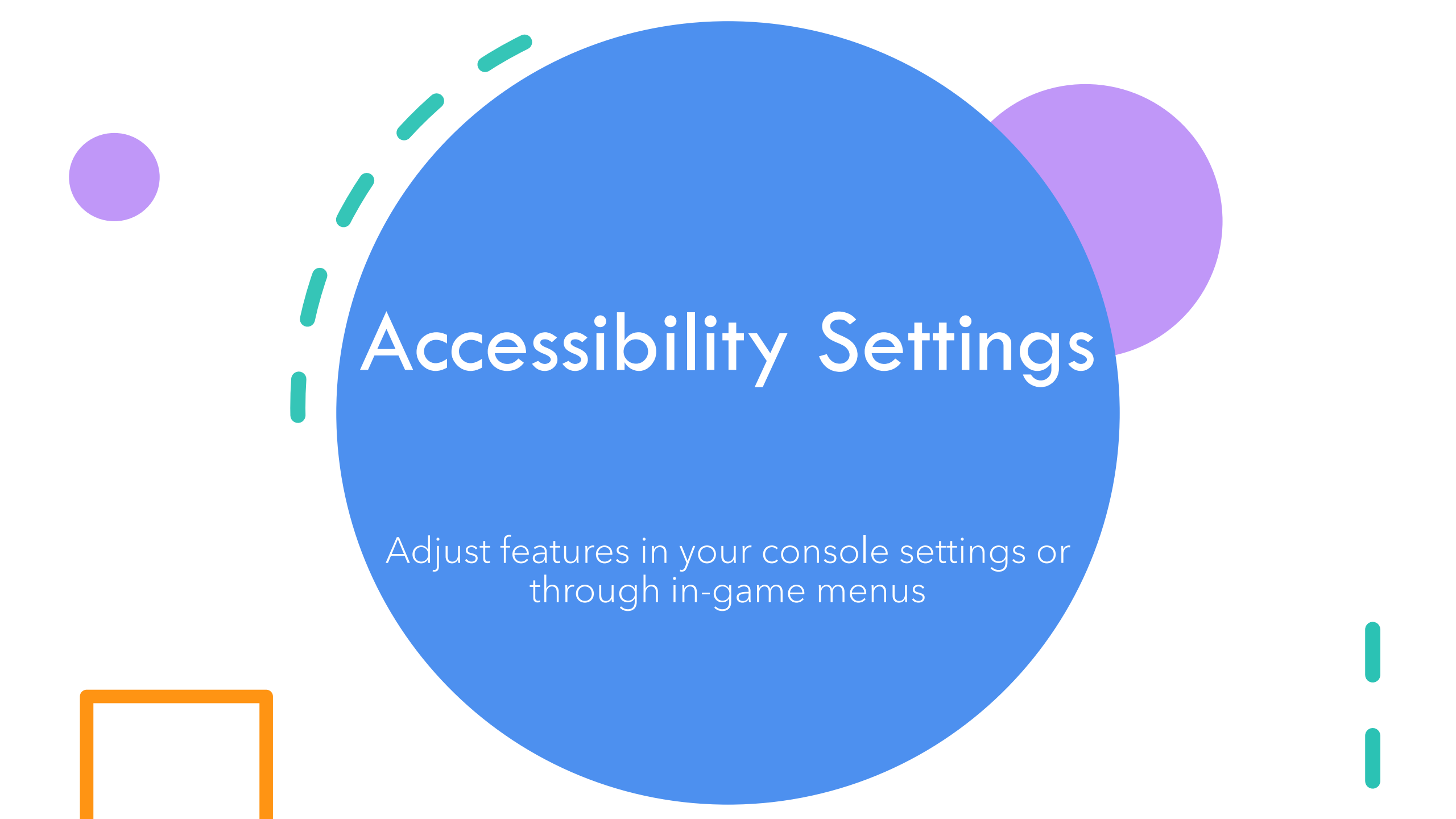
Do you have a mounting
system for your phone or
other tech?



Leg Mount for XAC from
[RAM](#)



Switches mounted
with loc-line

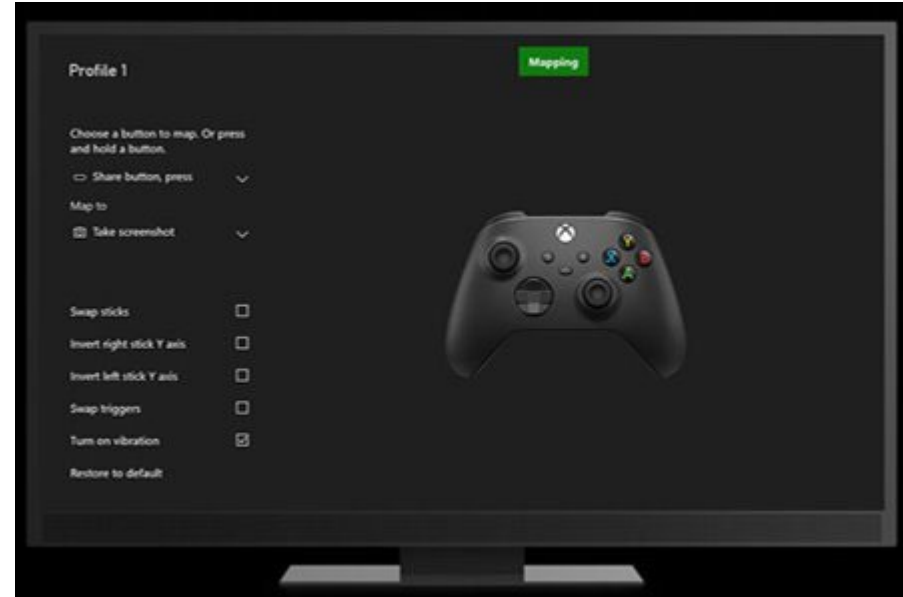


Accessibility Settings

Adjust features in your console settings or
through in-game menus

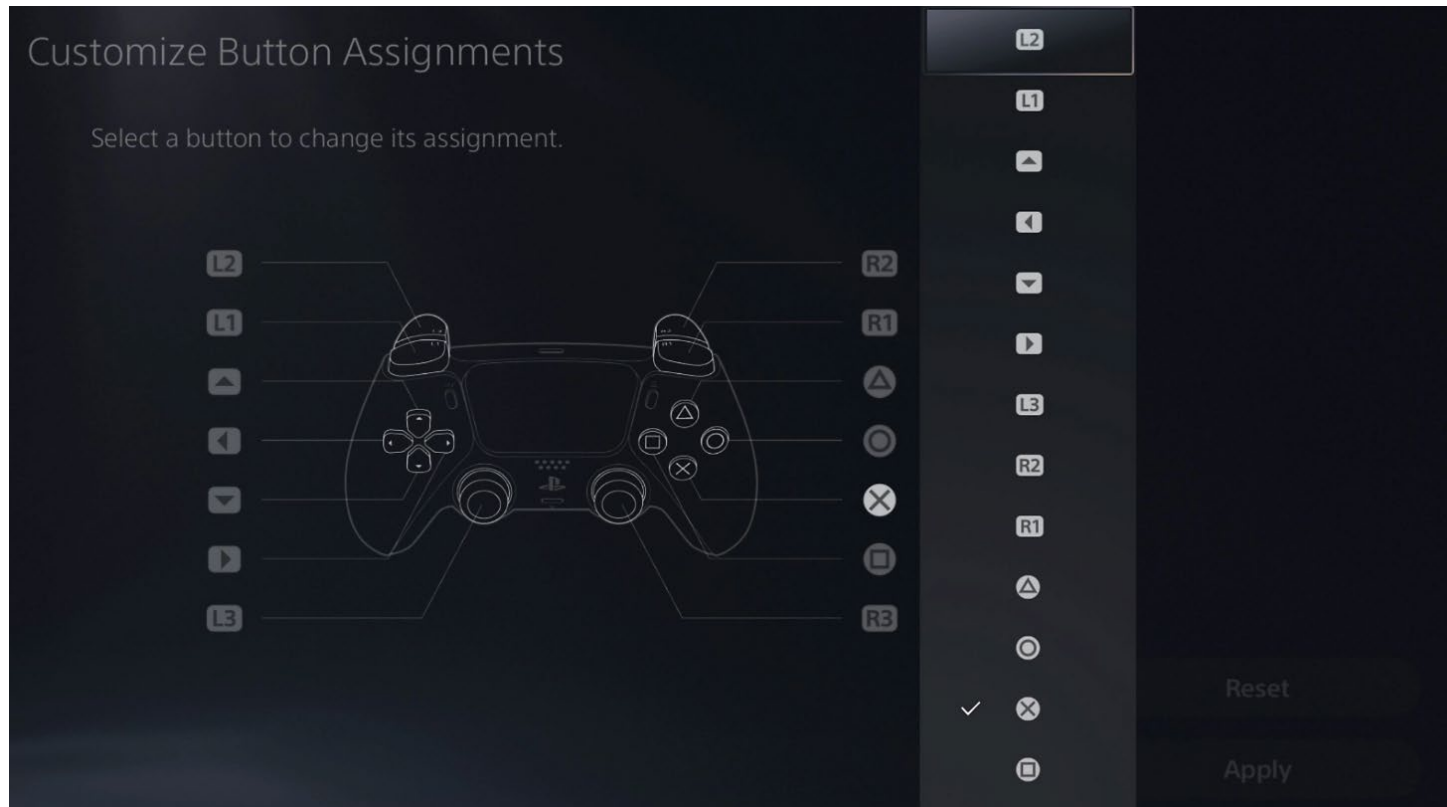
Xbox

- [Controller Assist](#) (formally called copilot)
- Button remapping
- Screen reader, high contrast settings, magnification, etc for navigating the console
- [Disability Answer Desk](#) for support from Microsoft

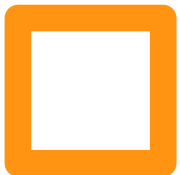




PlayStation

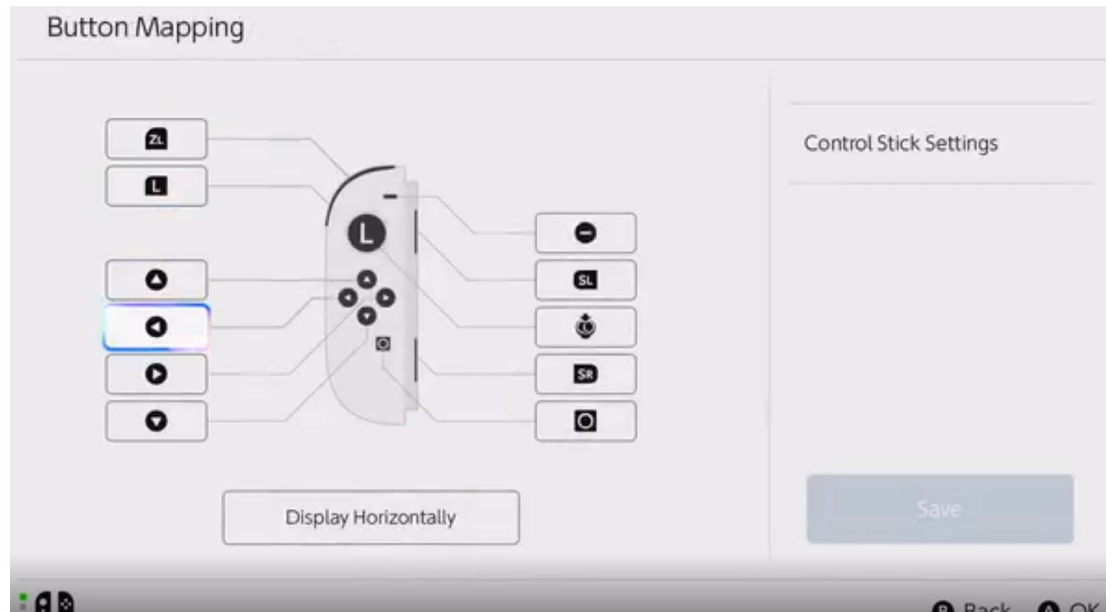


- [Use Assist Controller](#)
- Button remapping
 - Includes toggle options for the Access controller!
- Screen reader, high contrast settings, magnification, etc for navigating the console



Nintendo Switch

- [Button remapping](#) only for the JoyCons and Nintendo's Pro controller
 - Use a PC app to remap the Flex
- Screen reader, high contrast settings, magnification, etc for navigating the console

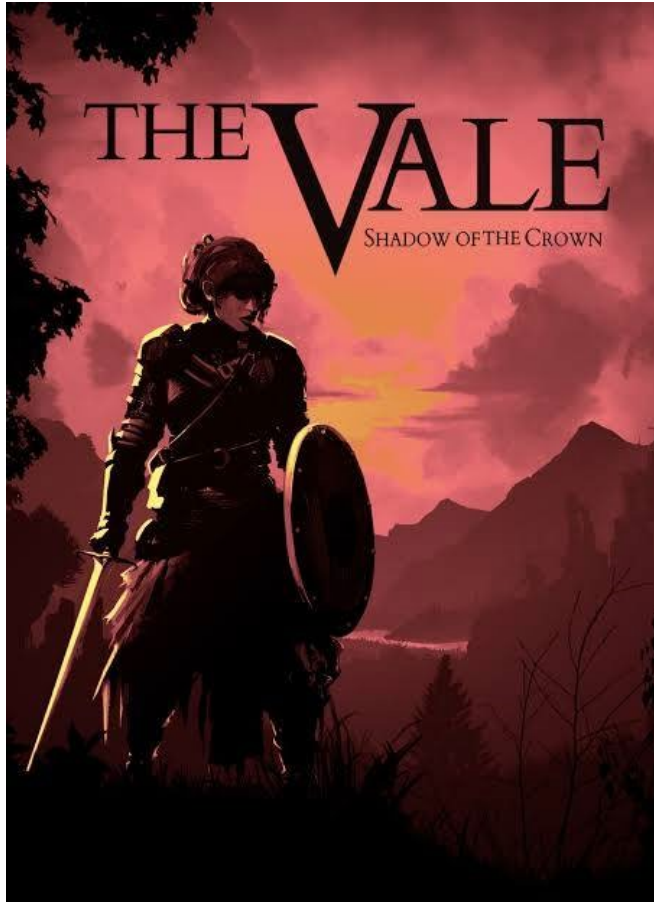


In-Game Settings

- Many accessibility features will depend upon the game, not the console.

Genre	Options to Look for	Examples
Racing Games	Auto-accelerate, steering assist	Mario Kart 8
First Person Shooter	Auto reload, single stick movement / Swap Sticks While Aimed	Gears 5; The Last of Us
Role Playing, Battle, and more	Adjustable difficulty level	Forza; Baldur's Gate; Elder Scrolls
Puzzle and Adventure	Audio panning, colorblind mode	Audio Games

Example: Audio Games



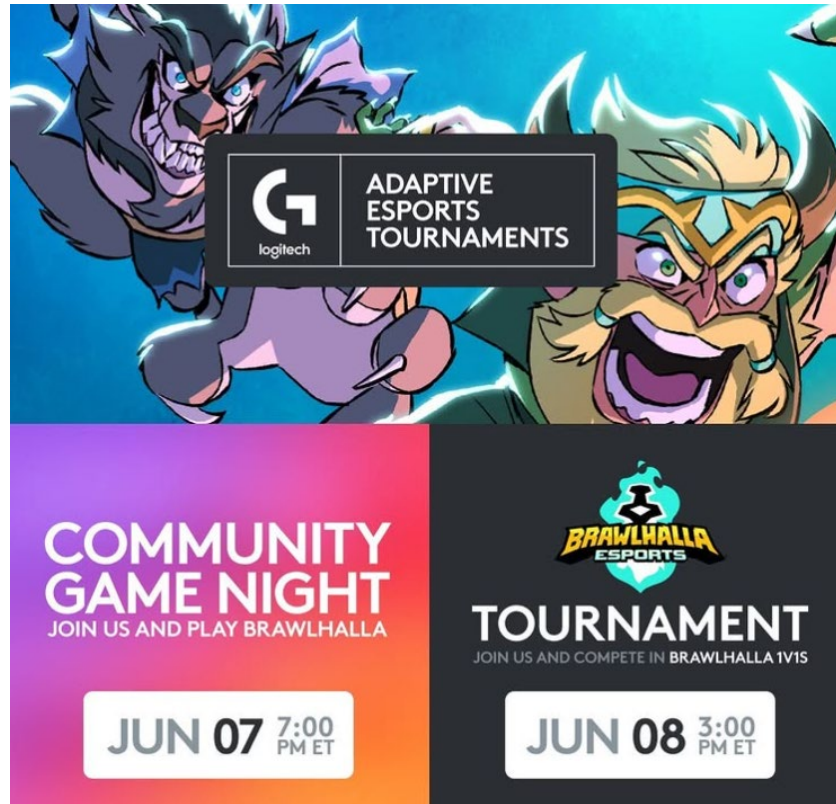


Demos and Acquisition

Gaming Together



Online Play



SpecialEffect

- online multiplayer games for eyegaze and switch users

Adaptive Esports Tournaments

- competitive as well as community events

Additional Resources

AbleGamers

- [Submit a Ticket for Support](#)

DisabledGamers

- [Discord](#) and Reddit community

Gaming Readapted

- [Educational resources](#) on how to choose a controller, a game, etc

Game Review Website	Content
Accessible Games Database	Filter by accessibility features and genre
Can I Play That	Search by keyword. News articles, accessibility reviews, menu deep dives, and developer guides
Game Accessibility Nexus	Search by keyword. Articles on hardware in addition to game reviews
GameAccess Knowledgebase	Search by keyword. Includes hardware reviews, walkthroughs of game settings, etc
Family Gaming Database	Filter by disability* (one-handed, without sight, without hearing) in addition to style of play (competitive, cooperative), age and content. *use the Advanced version of the Game Finder



Funding

Charitable foundations & grassroots networks

- [AbleGamers](#)
- Free 3D printed mods from [The Controller Project](#)

Grants

- Diagnosis-specific grants (e.g. SCI)

Loans

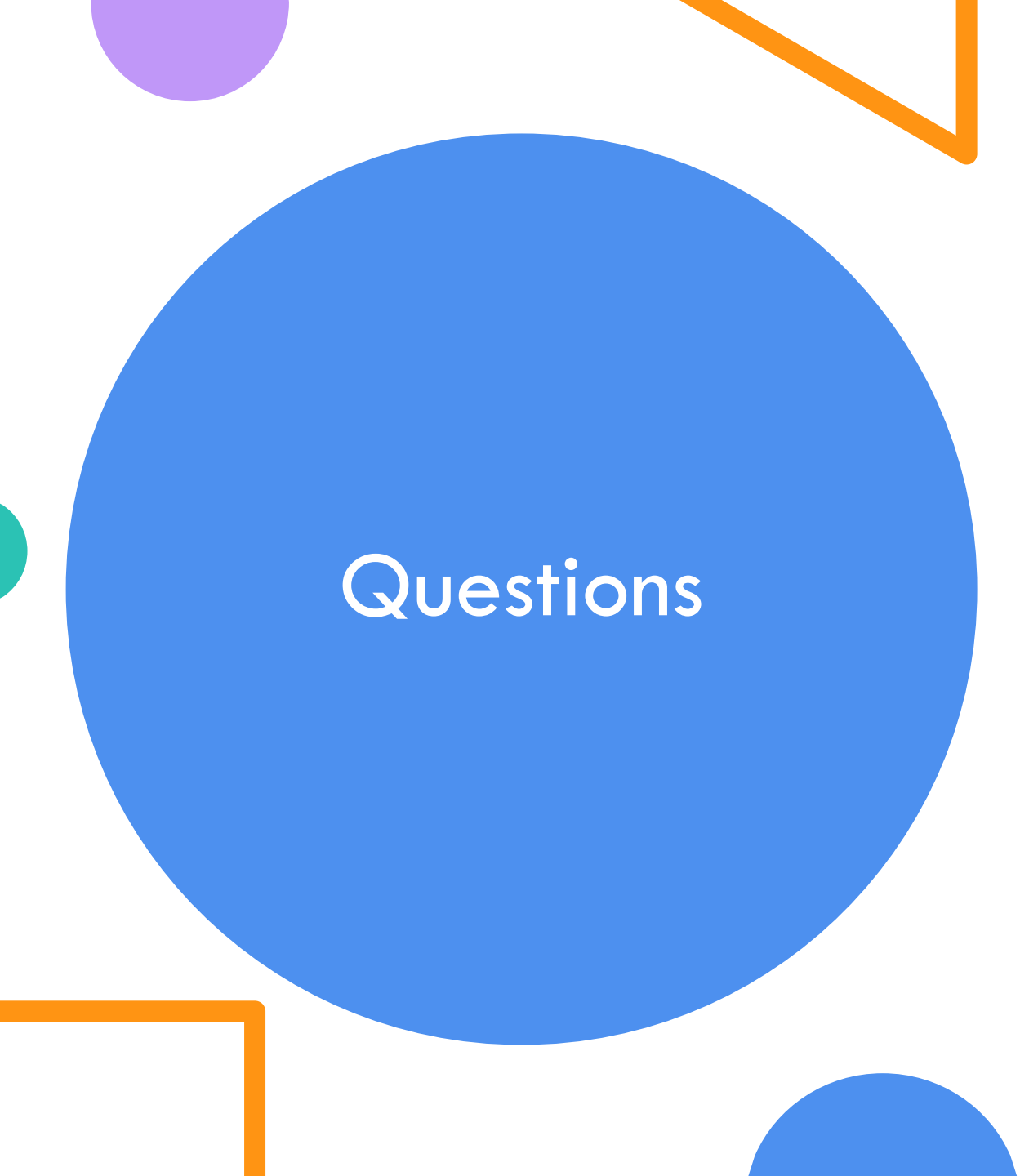
- [Pennsylvania Assistive Technology Foundation](#) or contact your local AT Act Program and ask about alternative financing

Please complete this survey

bit.ly/TechOWLsurvey

Presenter: Caitlin & Jenn
Topic: Gaming





Questions