



MARCH 18-22, 2024
SAN FRANCISCO, CA

Making Games Accessible with Indie Resources

By Matt MacLean
Programmer/Designer/CEO of Generic Lake Monster



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Hello!

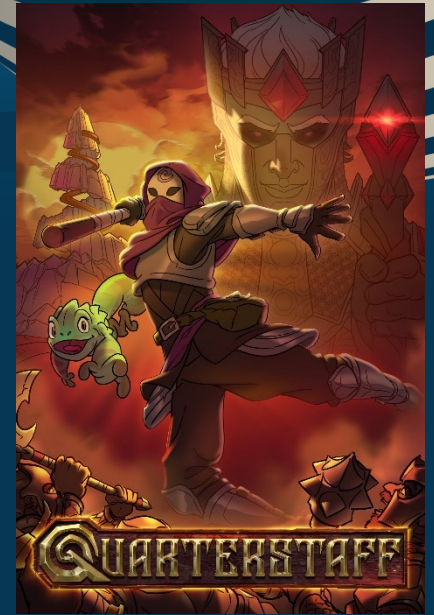
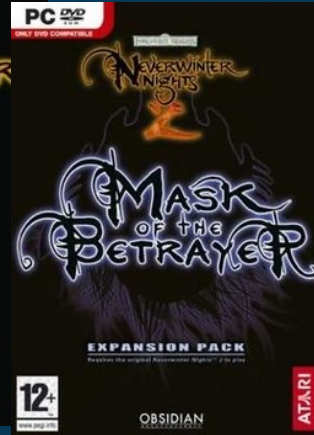
Please silence your devices!

Link to slides available at the end
(note-taking optional)

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2004

2006

2010

2011

2014

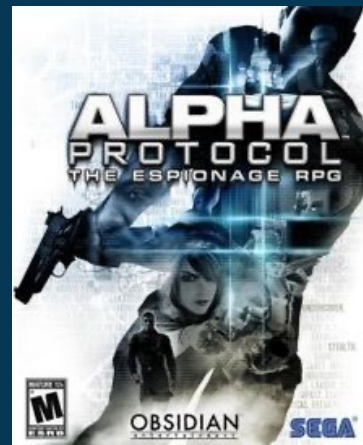
2015

2016

2018

2022

2024

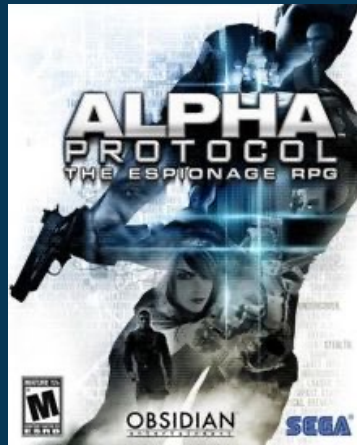


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2004 2006 2010 2011 2014 2015 2016 2018 2022 2024



Branching dialogue + stressful timer?

Players loved it!

Is Accessibility Good?

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2004 2006 2010 2011 2014 2015 2016 2018 2022 2024

FPS in my hex-based RPG?!

Press button to not miss!

Accessibility Is Good!

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2004 2006 2010 2011 2014 2015 2016 2018 2022 2024

Turn based RPG... but with timed inputs for 'engagement'

Success!

Is Accessibility Good?



2004 2006 2010 2011 2014 2015 2016 2018 2022 2024

Text-heavy non-sequel RPG with
tons of proper nouns...

...with tool-tips over those fantasy
names.

Accessibility is Good!



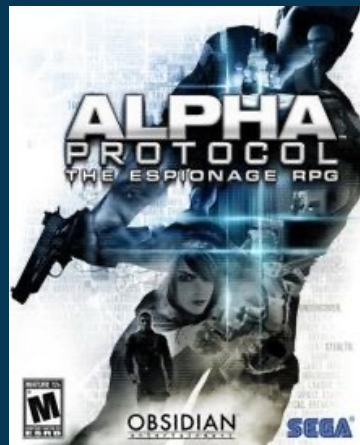
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2004 2006 2010 2011 2014 2015 2016 2018 2022 2024

Accessibility can make good/complex things better/approachable

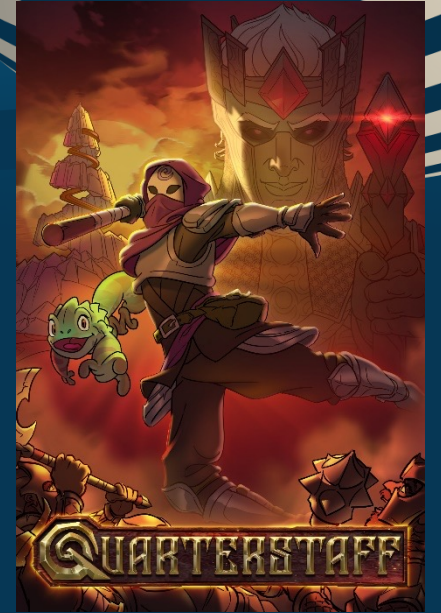
2004 2006 2010 2011 2014 2015 2016 2018 2022 2024



It cost audience size & dev-power to make an inaccessible game.



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2004 2006 2010 2011 2014 2015 2016 2018 2022 2024

What if accessibility is on page 1 of the plan?



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No Blockbuster Failed By Being Too Accessible

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So you want your small resources...

...to reach a large audience



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Reducing Barriers > Making More Roller Coaster



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Big Accessibility with Small Scale Resources

- Planning Early is Essential
- Know where you CAN and CAN'T address concerns
- Have your accessibility goals inform constraints



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Big Accessibility with Small Scale Resources

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Big Accessibility with Small Scale Resources

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 - Pick a hill or two upon which to die
 - Everything else optional/stretch
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Big Accessibility with Small Scale Resources

- Planning Early is Essential
 - Late Realignment Better than None
- Know where you CAN and CAN'T address concerns
 - Pick a hill or two upon which to die
 - Everything else optional/stretch
- Have your accessibility goals inform constraints
 - Don't build content you later struggle to retrofit

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Where to aim your efforts

• Interface Challenges

- Motor
- Cognitive
- Vision
- Hearing
- Speech

• Stress & Pacing

- Difficulty
- Pause/Step-Away
- Save/Come-Back

• Content Opt-Out

- Violence Filters
- Alt Assets
- Skip Moments



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Where to aim your efforts

- **Content Opt-Out**
 - Violence Filters
 - Alt Assets
 - Skip Moments

Can't predict all concerns, use common sense

Don't attempt if you can't QA it



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Where to aim your efforts

- **Interface Challenges**

- Motor
- Cognitive
- Vision
- Hearing
- Speech

Can you build alternate/simplified inputs & UI

Can your team speak to any of these?

Can your idealized players include these?



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Where to aim your efforts

- **Stress & Pacing**

- Difficulty
- Pause/Step-Away
- Save/Come-Back

How much sustained focus does your game demand?

How often can player take short/long breaks?

What is the time/effort cost of a mistake?



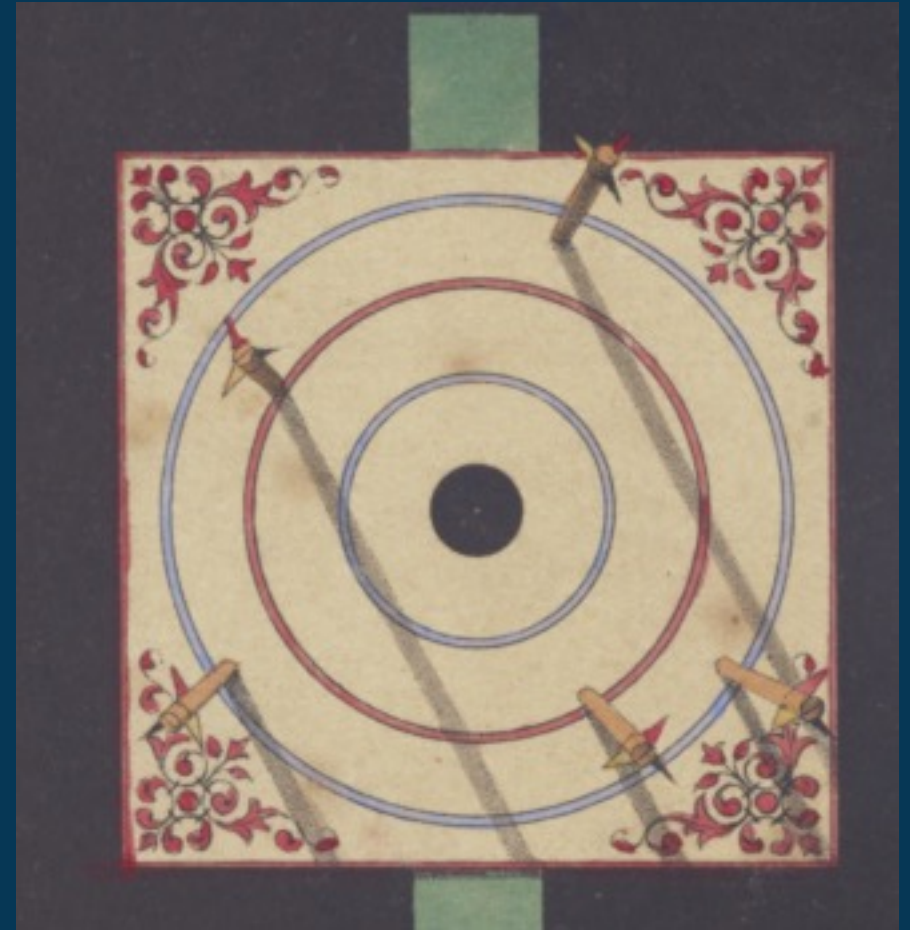
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Where to aim your efforts

Know your **Out-Of-Bounds** criteria

Have a “Bullseye” stretch goal

Have an Achievable Success Criteria



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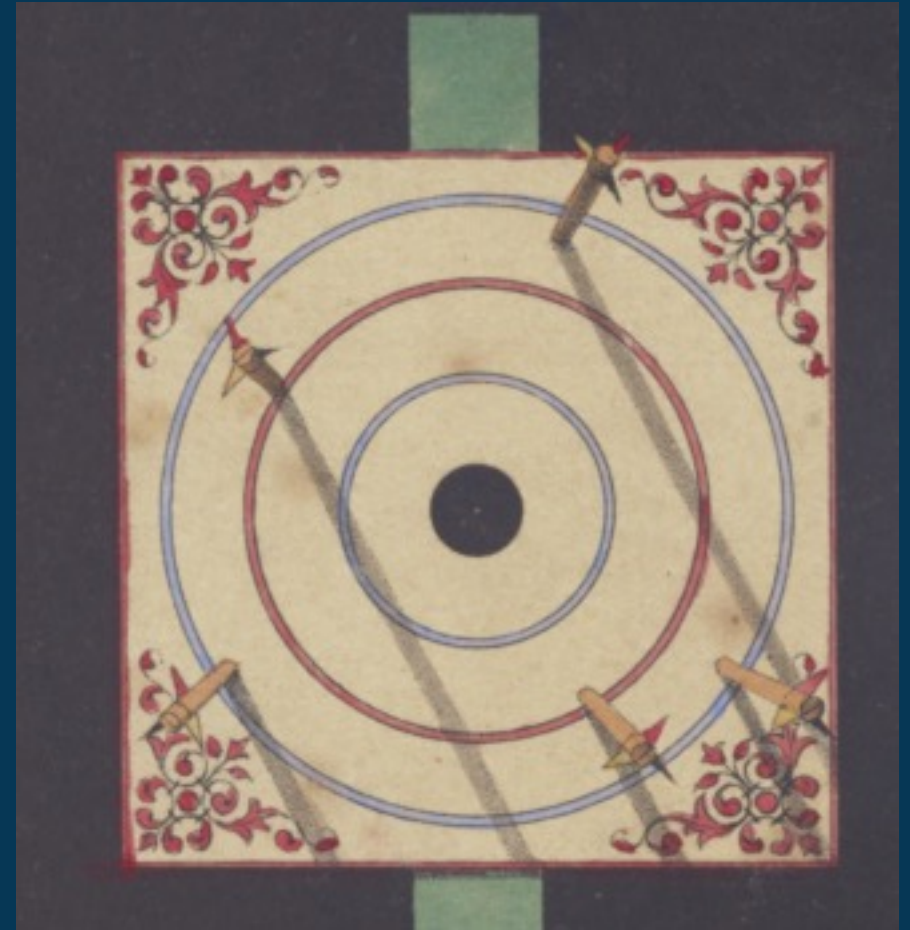


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Where to aim your efforts

You CAN'T predict every possible pain point.

You CAN minimize pain points you invent.



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Where to aim your efforts

Know your **Out-Of-Bounds** criteria

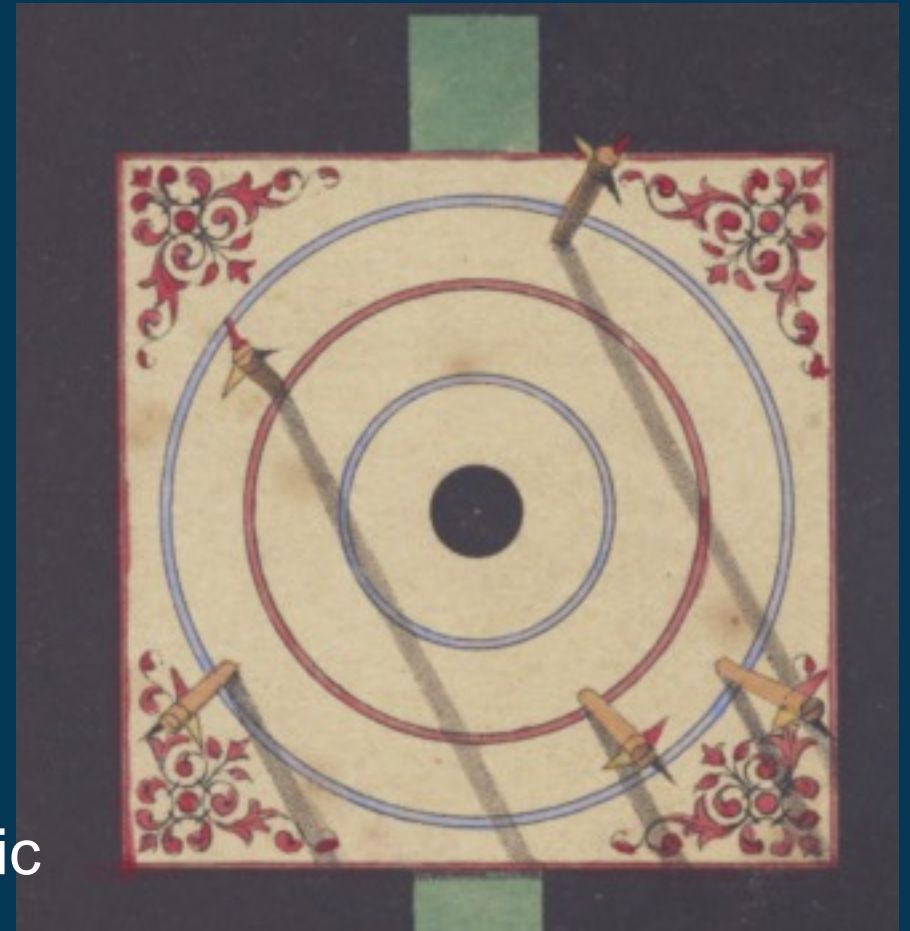
Audio: Sound-only events

Have a “Bullseye” stretch goal

Audio: Bespoke visualization

Have an Achievable Success Criteria

Audio: Subtitles, Captions, Sound Agnostic



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Putting plans into action...

... some examples of how we've been doing it.

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Start with what you know...



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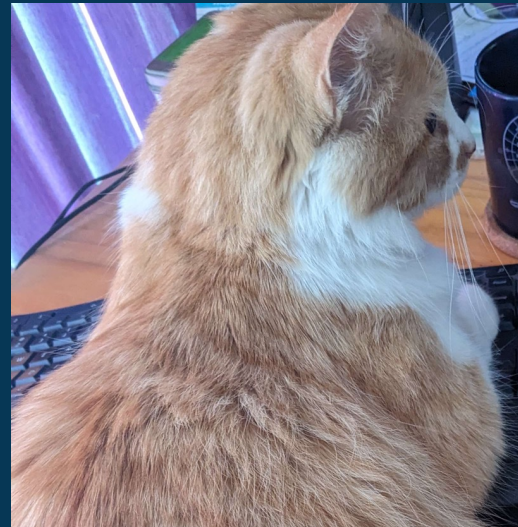


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Start with what you know...

Already familiar with:

- Colorblindness
- Carpel Tunnel
- Cats on Keyboards
- Orc Murder Fatigue
- Other things to do besides die and reload

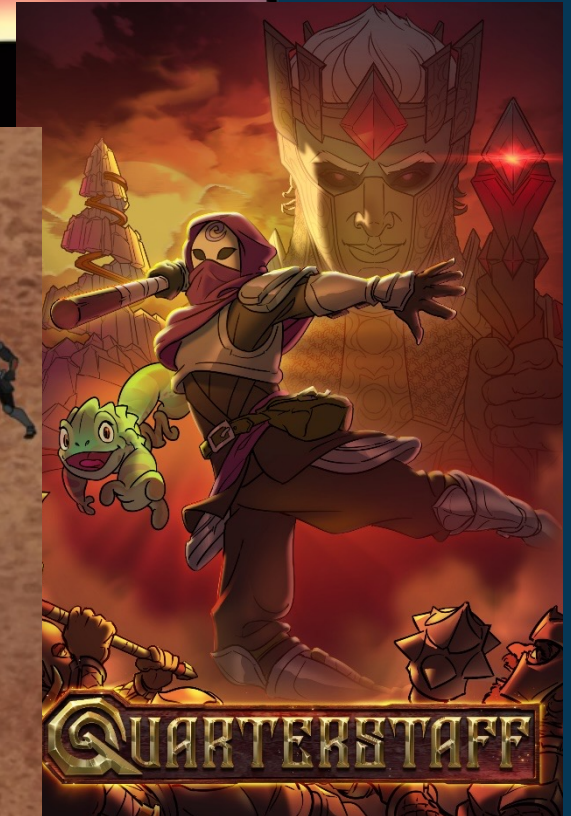




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Make What You Love

Low stress != No Challenge



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Make What You Love

The Toughest Game

You'll Never Hate Playing



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Setting our Sights

- **Interface Challenges**
 - Motor
 - Cognitive ?
 - Vision ?
 - Hearing
 - Speech
- **Stress & Pacing**
 - All in.
- **Content Opt-Out**
 - No Blood/Killing
 - No Charging Interest/Rent



Speech Accessibility in 2 steps:

- Step 1: Don't make game with voice controls
- Step 2: Success!
- Voice Controls = **Great ALT Controls / Bad Main Controls**



Setting our Sights

- **Interface Challenges**

- Motor
- Cognitive ?
- Vision ?
- Hearing
- Speech

- **Stress & Pacing**

- All in.
- Double own.

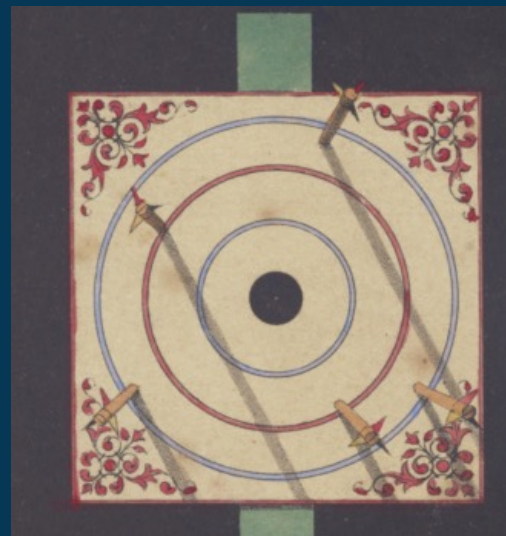
- **~~Content Opt-Out~~**

- No Blood/Killing
- No Charging Interest/Rent
- **Don't make stuff that needs opt-out**



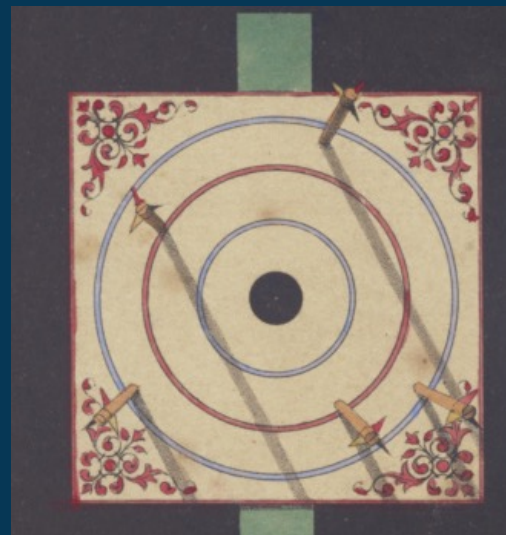
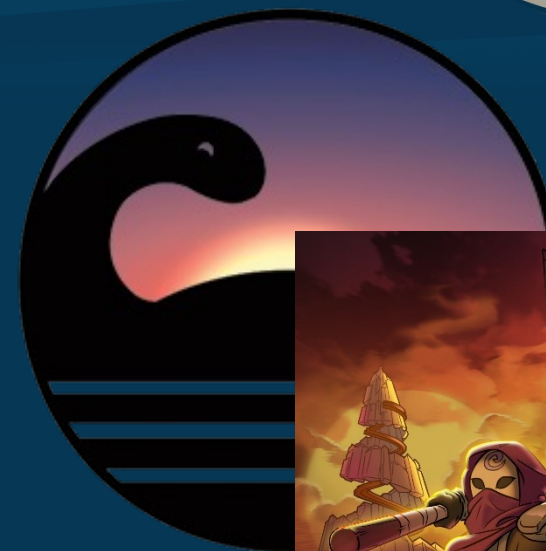
Interface Accessibility Goals:

- **Out of Bounds:**
 - Any input requiring more than one clumsy appendage
 - Any visual that doesn't work in greyscale
- **Aim For:**
 - Minimal eyesight required
 - Resizable UI
- **Achievable Zone:**
 - Fully Remappable Input



Stress & Pacing Goals:

- **Out of Bounds:**
 - Timers of Any Kind
 - Lost Progress
- **Aim For:**
 - Assume ANY Input is Unintentional
 - Reckless Speed Play Supported
- **Achievable Zone:**
 - Layered Info/Tooltips
 - In-Game Knowledge Center



Our Progress So Far

- “You tricked me into playing Turn-Based”
- Accessibility Testing BEFORE full production
 - 9 out 10 Testers reported no total show-stoppers
- In Early Access, Full Launch 2024
 - At least one person’s 1600+ hour hobby



November 22, 2023



elm-bot BOT 11/22/2023 3:13 AM

I am a huge fan of "fights in tight spaces". The fact that you can choose your movements and the way you fight against the enemies has me sunked in for more than 1600 hours so far. I think that you can hit that

Interface Easy(ish) Wins

- **Motor Control:**
 - Remappable Controls
 - Only 1 key at a time
 - No shift/ctrl-click or Double Click
 - No Click-and-Drag
 - Scalable UI Buttons



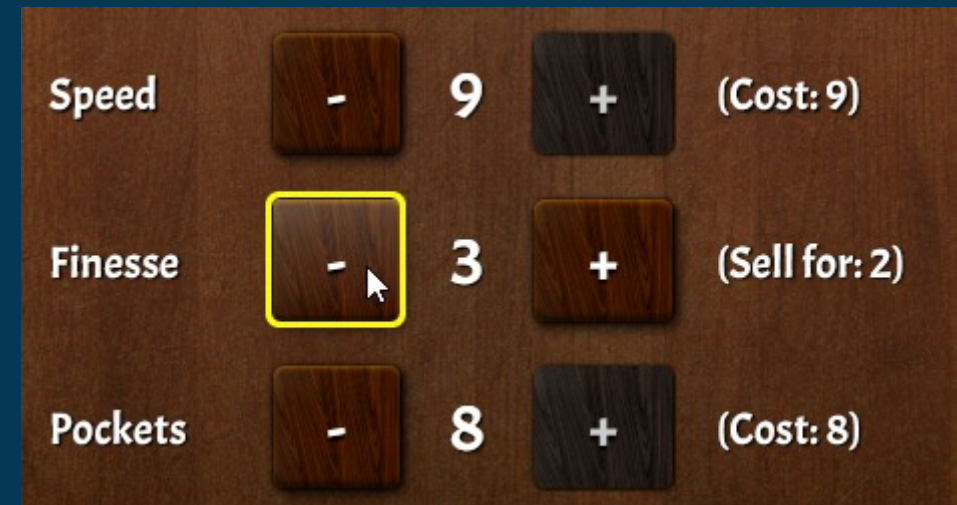
Interface Easy(ish) Wins

- **Vision/Cognitive:**
 - Scalable UI (sorta)
 - Dyslexic-friendly font
 - Show Preview of Every Action



Stress & Pacing Easy Wins

- **Low/No Penalty For Failing:**
 - Completion Easy
 - Optional Bonuses Difficult
- **Retry Anything**
 - No closed-door events
 - No need for save/load



Stress & Pacing Easy Wins

- **The Undo Button:**
 - Undo mistaken inputs
 - Undo to retry/experiment
 - Undo for any reason





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Interface – Challenges Worth Tackling

- Vision:

- **HUGE FONTS!**

- Screen Reader Support



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Interface – Challenges Worth Tackling

- **Motor Control:**
 - Gamepad & Peripheral Support
- **Cognitive:**
 - In-game help index
 - Layers of on-demand additional info



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The Recap Slide!

- Plan Early, Don't Try Solving Everything
- Establish your interface, pacing, and content “Out-Of-Bounds”
- Leverage Peripherals, Screen Reader, Fonts, et al



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Conclusion

Empathy & Flexibility Early

or

Time & Money Later



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Thank You!

- More about Us (and the Slides)
 - Generic Lake Monster: <http://genericlakemonster.com/>
 - Quarterstaff: <https://store.steampowered.com/app/2134060/Quarterstaff/>
- Accessibility Resources
 - Game Accessibility Guidelines: <https://gameaccessibilityguidelines.com/>
 - The Able Gamers Foundation: <https://ablegamers.org/>

This Talk Made Possible With Help From:

- Sunni Pavlovic
- Millie Zandi
- Michie Vargas

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