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Greater Accessibility

with Fewer New Features and Less Scope

Presented by Francisco Souki
and Alexis Miller

#GDC22

Meet your presenters:

Alexis Miller (she/her)

Director of Product Management

Schell Games

Francisco Souki (he/him)

Principal Design Manager

Schell Games

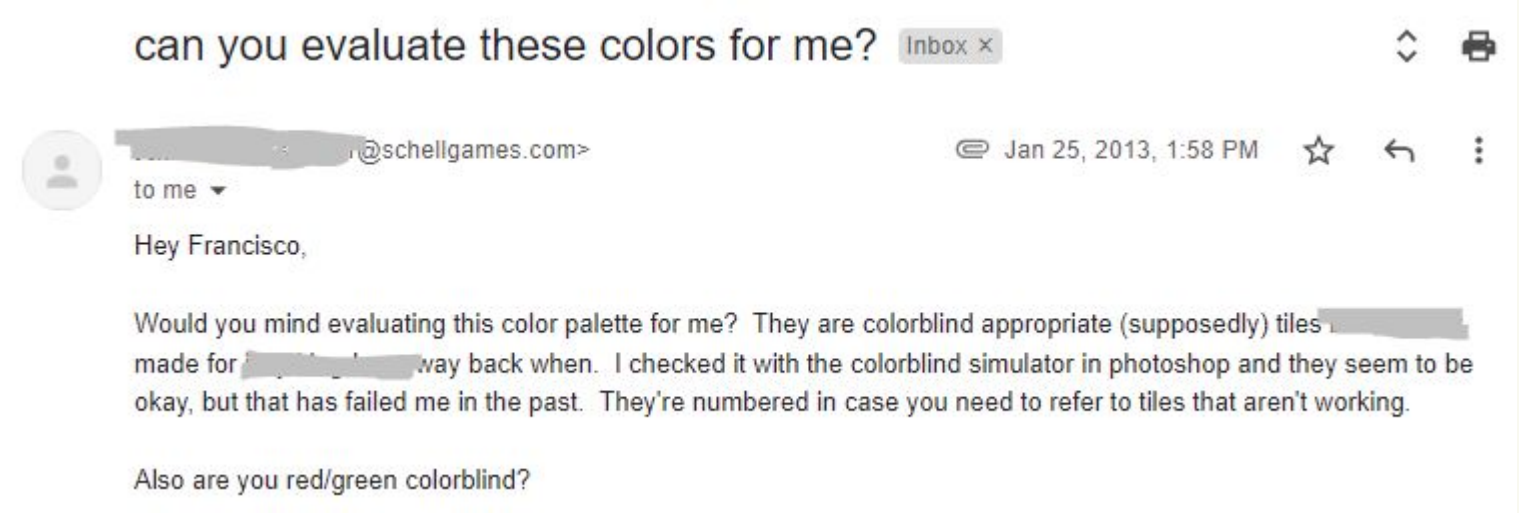
This Talk Covers

- Why we care about accessibility
- Our past attempts at accessibility
- Techniques and steps for using our Accessibility Matrix tool
- Case studies from one of our games
- Link to our Accessibility Matrix tool
- Open discussion / Q&A

Benefits of greater accessibility

- Allows as many people as possible to enjoy our games
- Makes the world a better place
- Fuels innovation

Life before the Accessibility Matrix



can you evaluate these colors for me? Inbox ×

[redacted]@schellgames.com> Jan 25, 2013, 1:58 PM

to me

Hey Francisco,

Would you mind evaluating this color palette for me? They are colorblind appropriate (supposedly) tiles [redacted] made for [redacted] way back when. I checked it with the colorblind simulator in photoshop and they seem to be okay, but that has failed me in the past. They're numbered in case you need to refer to tiles that aren't working.

Also are you red/green colorblind?

Life before the Accessibility Matrix

Accessibility Family	Accessibility Issue	Checklist Question (Check out linked notes for more info)	The Product Meets this Metric (N/A/Y/N/P?)	Clarifying notes on answer	Why This Matters (This is the same content as in the hover notes on the Checklist Questions Column)	Link 1 (A source that gives more explanation about this.)
Comfort		**bodily and mental comfort, including issues like simulation sickness, sensory overload, etc.**				
Comfort	Sensory Overload	The game allows players to avoid bright flashing lights.			Intense flashing light could trigger	
Comfort	Sensory Overload	The game avoids sudden changes in audio volume which may startle guests.			Some guests with sensory-related	
Comfort	Sensory Overload	The game allows adjustment of overall audio volume.			In most cases, guests will have a	
Comfort	Sensory Overload	The game allows adjustment of relative volume of audio (vo, sfx, music, etc.)			Loss of hearing can affect certain ha	
Comfort	Sensory Overload	The game allows adjustments to haptic feedback intensity.				
Comfort	Sensory Overload	The game allows way to turn off or hide background movement.			some guests may struggle to pick up	Game Accessibility Guidelines
Comfort	Motion Sickness	If in VR, the game includes systems to support reducing simulation sickness during continuous locomotion (vignetting, etc.) or mechanics to bypass locomotion (teleportation, etc.)			Simulator sickness or motion sickne	
Comfort	Motion Sickness	If in 3D, the game uses an appropriate field of view for expected viewing environment or allows the FOV to be adjusted.			If the game's FOV for a 3D game is	FOV in Games
Comfort	Green Room	If in VR, the game includes an opening scene (a "green room") with low intensity interactions where players can acclimate to controls, environment, and VR (often the game's opening menu).			Allows guests to test their ability to	
Comfort	Green Room	If in VR, the game has a "green room" space that allows the player to try out full complexity of the game's inputs			Allows guests to test their physical	
Comfort	Green Room	If in VR, the game has a "green room" space that allows the player to test the full range of mobility and movement required in the game.			Prevents players from being surpris	
Comfort	Content Comfort	If the game contains mature content, the game clearly telegraphs the inclusion of any mature content or difficult themes upfront.				
Comfort	Content Comfort	If the game includes graphic or disturbing content, the game allows the player to avoid this graphic content while still experiencing the core game (e.g., a setting to disable blood & gore)				
Comfort	Content Comfort	If the game contains mature language, the game allows the player to avoid this mature language while still experiencing the core game (e.g., enable censored versions of dialogue)				
Comfort	Content Comfort	If the game involves players interacting with one another, the game protects players from abuse by other players.				
Mobility & Body Mechanics		**issues related standing/sitting, movement, handedness, sonbot dexterity, height, etc**				
Mobility	Height	If using VR/AR or physical space, the game provides adjustments to the height of important objects to accommodate players of differing heights.				
Mobility	Height	If using VR/AR or physical space, the game sightlines are workable for players of differing heights.			In some VR games, sight lines may	
Mobility	Handedness	The game's can comfortably accomodate both left-handed or right-handed players. (consider controls, UI, and game-world layout)			If the game enforces certain control	
Mobility	Handedness	The game has no two-hand only interactions.			Two-handed interactions are particu	
Mobility	Handedness	The game controls can accommodate the use of a single controller			Some players can only use one hand	
Mobility	Body Position	The game does not require players to bend over to play.				
Mobility	Body Position	The game does not require full rotation of the head in any direction.				
Mobility	Body Position	The game does not require the player to squat down to play.				
Mobility	Body Position	The game can accommodate players being seated in a chair or wheelchair.			There are many reasons why player	
Mobility	Tracking Body	If using sensors to track the player's body, the game can accomodate different player body types as well as the use of assistive tools such as a wheelchair, chair, or brace.			Often body tracking systems struggl	Game Accessibility Guidelines
Mobility	VR Locomotion	The game does not require physical walking to play.			For guests who rely on a wheel chai	
Mobility	VR Pickup	If in VR, the game does not require player to carry objects in both hands.			For guests who only have the use o	
Mobility	VR Pickup	If in VR, the game provides a comfortable place for the player to put down/put away objects.			For guests who have only one hand	
Mobility	VR Pickup	If in VR, the game provides a form of reach assistance to reduce the range of motion necessary to pick up objects.			For guests with limited mobility, it ca	
Mobility	Menu Access	The game's important menus and settings are quick to access from the game.			For guests with mobility issues, it he	
Mobility	Menu Access	The game's UI can be resized/moved to make access easier for players with different needs.				
Mobility	Controls	The game allows controls to remapped or reconfigured.			For guests with motor issues due to	
Mobility	Controls	The game consistently uses the same input method for all parts of gameplay and UI.			When games that primarily use one	
Mobility	Dexterity	If using a touch input, the game accommodates stray multiple touches.			When touchscreen experiences bec	
Mobility	Dexterity	The game does not require extended repetitive motion.			Repetitive motions may be difficult f	
Mobility	Dexterity	The game does not require extremely fast motions (button mashing, fast body motion)			Very fast motions may be difficult fo	
Mobility	Dexterity	The game does not require sustained motions (such as holding hand in the air for a long time.)				
Mobility	Dexterity	The player can turn off or bypass quicktime events				Game Accessibility Guidelines
Mobility	Dexterity	The game provides pre-made or customized macros (or supports external automation tools) to allow players to set up and repeat complex sequences of actions through a single input.				

Cognitive		Issues related to Memory, Comprehension, Skill, Attention		
Cognitive	Difficulty	The game's difficulty can be adjusted.		
Cognitive	Difficulty	The game's difficulty can be adjusted during active play without restarting the player.		
Cognitive	Difficulty	When the player fails in the game, they can retry from right before failure point without retreading significant gameplay effort.		
Cognitive	Difficulty	The game includes a way to practice without failure, such as a practice level or sandbox mode.		
Cognitive	Difficulty	The player can save anywhere in the game (or the game auto-saves)		
Cognitive	Difficulty	The game supports the ability to skip or unlock difficulty content		
Cognitive	Difficulty	The game does not present essential information in written text alone.	Some guests with dyslexia or have	Game Accessibility Guidelines
Cognitive	Difficulty	The game provides assist systems to reduce complexity for players with difficulty or mobility needs/preferences (ex: aim-assist in a fps, driving assists that handle gas and brakes in driving games)		
Cognitive	Difficulty	The game includes tutorials.		
Cognitive	Difficulty	The game gives clear cues about what in game is interactive.		
Cognitive	Difficulty	The cam includes contextualized in-game help/guidance/hints/tips.		
Cognitive	Complexity	The game supports a way to quickly start playing without requiring a lot of configuration or menu navigation.	For some guests, complex menus w	Game Accessibility Guidelines
Cognitive	Memory	The game provides easy access to reminders of controls/inputs.		
Cognitive	Memory	The game provides reminders about current objectives during game.		
Cognitive	Memory	If using a long, overarching narrative, the game provides summary/reminders of narrative so far in game.		
Cognitive	Memory	The game highlights important words in text.		
Cognitive	Memory	The game allows all narrative content to be replayed.		
Cognitive	Memory	The game allows all instructions to be replayed.		
Cognitive	Memory	If including multiple saved-games functionality, the game provides ways to clearly differentiate saved game slots (e.g., unique thumbnail, custom save name)	Guests with memory related issues	
Context		**wherehow long the game is played and for what purpose besides just play.**		
Context	Classroom Support	The game supports an external moderator being able to see & hear what the player is experiencing in order to provide assistance	Players in a classroom setting or pl	
Context	Classroom Support	The game supports short play sessions (< 10 minutes)		
Context	Classroom Support	The game supports fast, easy switching between players. (including the ability to reorigger important calibrations or access player-specific settings)	In a classroom or group setting, gue	
Context	Classroom Support	The game supports whole-class play.	Often in a classroom setting, the cla	
Context	Moderation	The game supports ability to lock the player into particular areas of the game.		
Context	Platform	This game can be played on more than one platform.		
Context	Platform	The game supports play in both landscape and portrait mode on mobile devices.	Some guests have devices mounte	Game Accessibility Guidelines
Context	General	The game supports saving of settings profiles, either with save games or separately.	If a game is to be used in a space w	
Context	Non-Players	The game supports "tourism mode" where guest can experience the game space in an open way without needing to perform gameplay interactions		
Context	Space Constraints	The game is playable by players with minimum physical space available for VR Play.		
Language & Communication		**in-game text, VO, language shoice, subtitles, etc**		
Language	In-game Text	The game's reading level has been checked and is appropriate for the target player audience(s)		
Language	In-game Text	The game can accomodate players who read slowly.		
Language	In-game Text	The game allows the player to make text visually bigger (change font size or bring text closer to face, etc)		
Language	In-game Text	The game's font and text presentation have been evaluated for readibility for dyslexic guests		
Language	In-game Text	The game allows the player to control the speed of on-screen text.		
Language	Subtitles	The game provides subtitles for ALL dialogue.	Sometimes subtitles are only provid	
Language	Subtitles	The game provides descriptive subtitles for sound effects and other non-dialogue audio.		
Language	Subtitles	The game's subtitles are synchronized well with the game content. (including not showing dialog reacting to an event before it has happened.)		
Language	Subtitles	The game's subtitles stay on screen long enough for players to read comfortable (~0.3 s /word)		
Language	Subtitles	The game provides a slight visual gap when switching between subtitles.	Without this flash, players may miss	
Language	Subtitles	The game's subtitles make it clear whowhat is talking		
Language	Subtitles	The game's subtitles (or other text) have a comfortable line length (~40 characters for subtitles)		
Language		The game's subtitles (or other text) are large enough to read quickly or		

Sensory		Issues related to multi-modal feedback , colorblindness, etc		
Sensory	Visual	The game provides depth perception cues		
Sensory	Visual	The game always pairs color cues with non-color cue information, such as a unique icon.		For players who are colorblind or ha
Sensory	Visual	The game provides additional visual assists to aid players in visually tracking and differentiating important game elements. (ex: a visually unique marking over enemy characters to distinguish from other characters)		
Sensory	Visual	The game provides a built-in high-contrast mode.		
Sensory	Visual	The game's visual elements use colors that are clearly distinguishable by guests with color-blindness. (There are 3 kinds)		
Sensory	Audio	The game avoids having critical information conveyed exclusively through sound.		
Sensory	Audio	The game provides a way for non-dialogue audio cues to be visualized to the player.		For example, in a FPS, guests can t
Sensory	Audio	The game uses distinct sounds for each audio cue.		
Sensory	Audio	The game audio has been tested with both headphones and speakers, and is both effective and sounds good in both conditions.		some players don't have access to s
Sensory	Audio	If audio is in stereo, the game provides a mono/stereo toggle.		For players with unilateral hearing lo
Inclusive Playtesting		**Testing with guests impacted by accessibility issues**		
Playtesting	Simulator Sickness	The game has been playtested by individuals sensitive to motion sickness (or VR sickness)		
Playtesting		The game has been playtested by individuals who are left-handed vs right-handed		
Playtesting		The game has been playtested by individuals who are shorter or taller than average players		
Playtesting		The game has been playtested by individuals who need to play from a wheelchair or otherwise seated position		
Playtesting		The game has been playtested by individuals with motor-control issues that impact parts of the body needed for input (typically hands)		
Playtesting		The game has been playtested by individuals with hearing impairments		
Playtesting		The game has been playtested by individuals with speaking impediments		
Playtesting		The game has been playtested by individuals with limited verbal language in game's language(s)		
Playtesting		The game has been playtested by individuals with limited literacy in game's language(s)		
Playtesting		The game has been playtested by individuals who are eye-sight impairments (near-sighted, far-sighted, tunnel vision, non-binocular vision, bifocals)		
Playtesting		The game has been playtested by individuals who are at the age extremes of the expected audience of players		
Playtesting		The game has been playtested by individuals with color-blindness (there are three kinds)		
Playtesting		The game has been playtested by individuals with sensory disorders (sometimes present in Autism)		
Playtesting		The game has been playtested by individuals who fatigue easily		
Playtesting		The game has been playtested by individuals who have dyslexia		
Playtesting		The game has been playtested by individuals who are unfamiliar with the game's platform technology. (e.g., haven't used VR before, don't usually play console games, etc)		Particularly for relatively new platfor
Playtesting		The game has been playtested by individuals who are unfamiliar with the game's genre. (e.g., haven't played this type of game before.)		Players used to a particular genre h
Interoperability		**interaction with other assistive technology hardware/software**		
Interoperability		The game supports alternative controllers.		
Interoperability		The game supports the use of 3rd party screen-readers, including for any menus and installers.		
Interoperability		The game supports the use of an oversized virtual keyboard.		particularly important if game uses k
Interoperability		The game provides a control scheme that is simple enough to be compatible with assistive technologies such as switches or eye tracking.		Some players with significant motor
Interoperability		The game supports automated high-contrast modes on platforms and devices.		Game Accessibility Guidelines
Inclusive Representation		**Issues of Representation, Customization**		
Inclusive Representation		If the player has a human customizable character, the game supports customizations that support multiple gender options.		
Inclusive Representation		If the player has a human customizable character, the game supports customizations that support multiple ethnic representation (skin tone, hair styles, etc)		

Life before the Accessibility Matrix

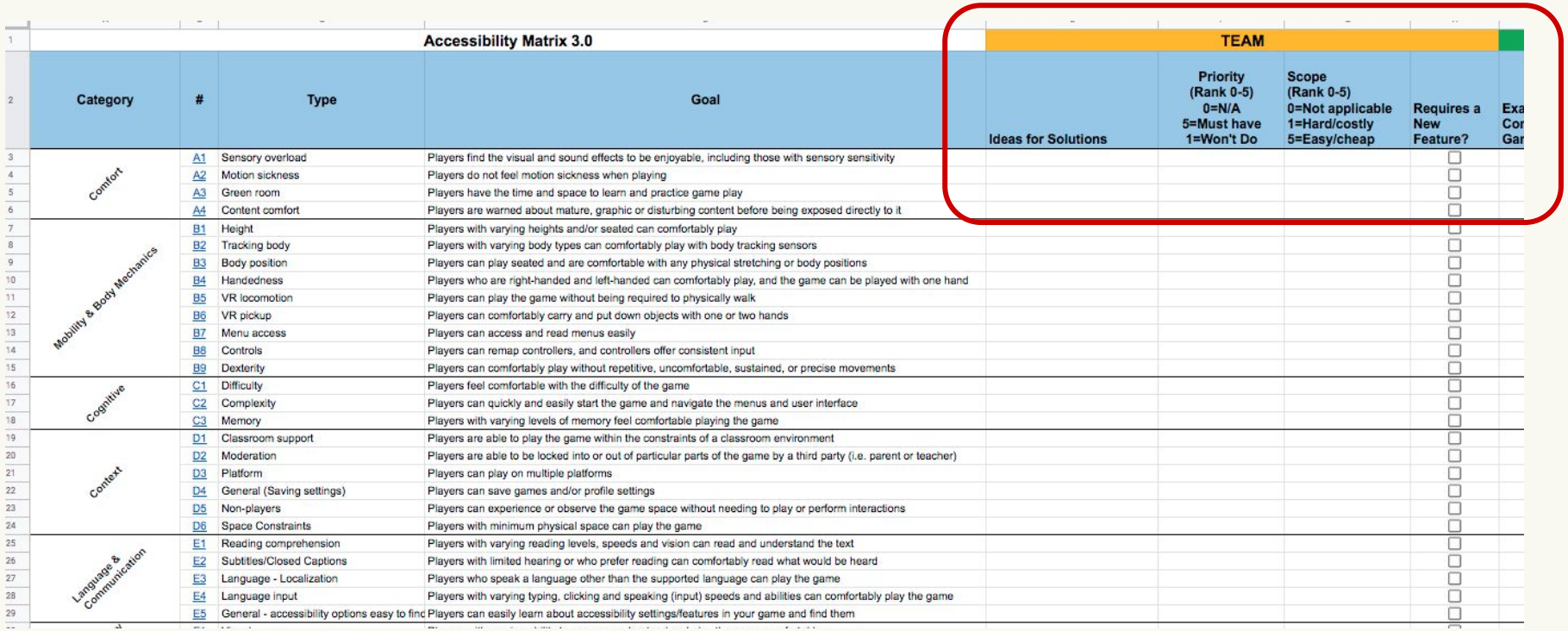
Knowing our budgets are limited, is there a way we can:

- Identify the highest impact and most attainable accessibility goals for a given title,
- Brainstorm creative solutions,
- Budget for attainable features and design our games to meet goals without needing new features

			Accessibility Matrix 3.0		**TEAM**				**PRODUCT/MARKET RESEARCH**	
Category	**#**	**Type**	**Goal**	**Ideas for Solutions**	**Priority (Rank 0-5) 0=N/A 5=Must have 1=Won't Do**	**Scope (Rank 0-5) 0=Not applicable 1=Hard/costly 5=Easy/cheap**	**Requires a New Feature?**	**Examples from Competitors or Our Games**	**Industry Standard (Score 0-5) 0=Not applicable 1=Rare 3=Common 5=Expected)**	
Comfort	A1	Sensory overload	Players find the visual and sound effects to be enjoyable, including those with sensory sensitivity				☐			
	A2	Motion sickness	Players do not feel motion sickness when playing				☐			
	A3	Green room	Players have the time and space to learn and practice game play				☐			
	A4	Content comfort	Players are warned about mature, graphic or disturbing content before being exposed directly to it				☐			
Mobility & Body Mechanics	B1	Height	Players with varying heights and/or seated can comfortably play				☐			
	B2	Tracking body	Players with varying body types can comfortably play with body tracking sensors				☐			
	B3	Body position	Players can play seated and are comfortable with any physical stretching or body positions				☐			
	B4	Handedness	Players who are right-handed and left-handed can comfortably play, and the game can be played with one hand				☐			
	B5	VR locomotion	Players can play the game without being required to physically walk				☐			
	B6	VR pickup	Players can comfortably carry and put down objects with one or two hands				☐			
	B7	Menu access	Players can access and read menus easily				☐			
	B8	Controls	Players can remap controllers, and controllers offer consistent input				☐			
	B9	Dexterity	Players can comfortably play without repetitive, uncomfortable, sustained, or precise movements				☐			
Cognitive	C1	Difficulty	Players feel comfortable with the difficulty of the game				☐			
	C2	Complexity	Players can quickly and easily start the game and navigate the menus and user interface				☐			
	C3	Memory	Players with varying levels of memory feel comfortable playing the game				☐			
Context	D1	Classroom support	Players are able to play the game within the constraints of a classroom environment				☐			
	D2	Moderation	Players are able to be locked into or out of particular parts of the game by a third party (i.e. parent or teacher)				☐			
	D3	Platform	Players can play on multiple platforms				☐			
	D4	General (Saving settings)	Players can save games and/or profile settings				☐			
	D5	Non-players	Players can experience or observe the game space without needing to play or perform interactions				☐			
	D6	Space Constraints	Players with minimum physical space can play the game				☐			
Language & Communication	E1	Reading comprehension	Players with varying reading levels, speeds and vision can read and understand the text				☐			
	E2	Subtitles/Closed Captions	Players with limited hearing or who prefer reading can comfortably read what would be heard				☐			
	E3	Language - Localization	Players who speak a language other than the supported language can play the game				☐			
	E4	Language input	Players with varying typing, clicking and speaking (input) speeds and abilities can comfortably play the game				☐			
	E5	General - accessibility options easy to find	Players can easily learn about accessibility settings/features in your game and find them				☐			
Sensory	F1	Visual	Players with varying ability to see can understand and play the game comfortably				☐			
	F2	Audio	Players with varying ability to hear can understand and play the game comfortably				☐			
Playtesting	G1	Range of abilities/play styles	Players with varying abilities to see, hear, walk, speak and read as well as different heights and body shapes have been included in playtesting				☐			
	G2	Diverse playtesters	Players with varying race, ethnicity, gender, sexual orientation and cultures have been included in playtesting				☐			
Interoperability	H1	Interoperability with existing tools	Players are able to use their existing tools and assistive technology to play the game				☐			
Inclusivity	I1	Inclusive representation	If including human-like characters in the game, the game has a true diversity of genders, races, cultures, sexual orientation, and body types and avoids stereotypes				☐			

Category	#	Type	Goal	Id
Comfort	A1	Sensory overload	Players find the visual and sound effects to be enjoyable, including those with sensory sensitivity	
	A2	Motion sickness	Players do not feel motion sickness when playing	
	A3	Green room	Players have the time and space to learn and practice game play	
	A4	Content comfort	Players are warned about mature, graphic or disturbing content before being exposed directly to it	
Mobility & Body Mechanics	B1	Height	Players with varying heights and/or seated can comfortably play	
	B2	Tracking body	Players with varying body types can comfortably play with body tracking sensors	
	B3	Body position	Players can play seated and are comfortable with any physical stretching or body positions	
	B4	Handedness	Players who are right-handed and left-handed can comfortably play, and the game can be played with one hand	
	B5	VR locomotion	Players can play the game without being required to physically walk	
	B6	VR pickup	Players can comfortably carry and put down objects with one or two hands	
	B7	Menu access	Players can access and read menus easily	
	B8	Controls	Players can remap controllers, and controllers offer consistent input	
	B9	Dexterity	Players can comfortably play without repetitive, uncomfortable, sustained, or precise movements	
Cognitive	C1	Difficulty	Players feel comfortable with the difficulty of the game	
	C2	Complexity	Players can quickly and easily start the game and navigate the menus and user interface	
	C3	Memory	Players with varying levels of memory feel comfortable playing the game	

First, the Dev Team Gets Creative



	Accessibility Matrix 3.0				TEAM			
Category	#	Type	Goal	Ideas for Solutions	Priority (Rank 0-5) 0=N/A 5=Must have 1=Won't Do	Scope (Rank 0-5) 0=Not applicable 1=Hard/costly 5=Easy/cheap	Requires a New Feature?	Exa Cor Gar
Comfort	A1	Sensory overload	Players find the visual and sound effects to be enjoyable, including those with sensory sensitivity				☐	
	A2	Motion sickness	Players do not feel motion sickness when playing				☐	
	A3	Green room	Players have the time and space to learn and practice game play				☐	
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Mobility & Body Mechanics	B1	Height	Players with varying heights and/or seated can comfortably play				☐	
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Cognitive	C1	Difficulty	Players feel comfortable with the difficulty of the game				☐	
	C2	Complexity	Players can quickly and easily start the game and navigate the menus and user interface				☐	
	C3	Memory	Players with varying levels of memory feel comfortable playing the game				☐	
Context	D1	Classroom support	Players are able to play the game within the constraints of a classroom environment				☐	
	D2	Moderation	Players are able to be locked into or out of particular parts of the game by a third party (i.e. parent or teacher)				☐	
	D3	Platform	Players can play on multiple platforms				☐	
	D4	General (Saving settings)	Players can save games and/or profile settings				☐	
	D5	Non-players	Players can experience or observe the game space without needing to play or perform interactions				☐	
	D6	Space Constraints	Players with minimum physical space can play the game				☐	
Language & Communication	E1	Reading comprehension	Players with varying reading levels, speeds and vision can read and understand the text				☐	
	E2	Subtitles/Closed Captions	Players with limited hearing or who prefer reading can comfortably read what would be heard				☐	
	E3	Language - Localization	Players who speak a language other than the supported language can play the game				☐	
	E4	Language input	Players with varying typing, clicking and speaking (input) speeds and abilities can comfortably play the game				☐	
	E5	General - accessibility options easy to find	Players can easily learn about accessibility settings/features in your game and find them				☐	

Step by Step - Dev Team Part

	TEAM			
	Ideas for Solutions	Priority (Rank 0-5) 0=N/A 5=Must have 1=Won't Do	Scope (Rank 0-5) 0=Not applicable 1=Hard/costly 5=Easy/cheap	Requires a New Feature?
				☐
				☐
				☐
				☐

1. Team <u>brainstorms</u> potential solutions to all relevant goals
2. Team ranks <u>priorities</u> of goals
3. Team provides rough estimates of <u>scope</u> for each solution
4. Team identifies where a <u>new feature</u> would be a requirement

Then Add Product/Market Research

	Accessibility Matrix 3.0	TEAM				PRODUCT/MARKET RESEARCH	
Type	Goal	Ideas for Solutions	Priority (Rank 0-5) 0=N/A 5=Must have 1=Won't Do	Scope (Rank 0-5) 0=Not applicable 1=Hard/costly 5=Easy/cheap	Requires a New Feature?	Examples from Competitors or Our Games	Industry Standard (Score 0-5) 0=Not applicable 1=Rare 3=Common 5=Expected)
Sensory overload	Players find the visual and sound effects to be enjoyable, including those with sensory sensitivity				☐		
Motion sickness	Players do not feel motion sickness when playing				☐		
Green room	Players have the time and space to learn and practice game play				☐		
Content comfort	Players are warned about mature, graphic or disturbing content before being exposed directly to it				☐		
Height	Players with varying heights and/or seated can comfortably play				☐		
Tracking body	Players with varying body types can comfortably play with body tracking sensors				☐		
Body position	Players can play seated and are comfortable with any physical stretching or body positions				☐		
Handedness	Players who are right-handed and left-handed can comfortably play, and the game can be played with one hand				☐		
VR locomotion	Players can play the game without being required to physically walk				☐		
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Menu access	Players can access and read menus easily				☐		
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Dexterity	Players can comfortably play without repetitive, uncomfortable, sustained, or precise movements				☐		
Difficulty	Players feel comfortable with the difficulty of the game				☐		
Complexity	Players can quickly and easily start the game and navigate the menus and user interface				☐		
Memory	Players with varying levels of memory feel comfortable playing the game				☐		
Classroom support	Players are able to play the game within the constraints of a classroom environment				☐		
Moderation	Players are able to be locked into or out of particular parts of the game by a third party (i.e. parent or teacher)				☐		
Platform	Players can play on multiple platforms				☐		
General (Saving settings)	Players can save games and/or profile settings				☐		
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Language - Localization	Players who speak a language other than the supported language can play the game				☐		
Language input	Players with varying typing, clicking and speaking (input) speeds and abilities can comfortably play the game				☐		
General - accessibility options easy to find	Players can easily learn about accessibility settings/features in your game and find them				☐		
Visual	Players with varying ability to see can understand and play the game comfortably				☐		
Audio	Players with varying ability to hear can understand and play the game comfortably				☐		
	Players with varying abilities to see, hear, walk, speak and read as well as different heights and body shapes have				☐		

Step by Step - Product/Market Research Part

1. Product shares <u>examples</u> from competitors or other internal games that have met each goal
2. Product ranks each goal by <u>industry standards</u> (rare - expected)
3. Product provides support to team on <u>prioritizing</u>

I	J
PRODUCT/MARKET RESEARCH	
Examples from Competitors or Our Games	Industry Standard (Score 0-5) 0=Not applicable 1=Rare 3=Common 5=Expected)


WINE GLASS ETIQUETTE
PINOT NOIR
CHAMPAGNE
CHABLIS
RIESLING
SAUTERNES
CALL

Using the Accessibility Matrix in IEYTD2

The Accessibility Matrix allowed us to accomplish more than expected with a minimal accessibility budget

The AM is Approachable

- Before IEYTD2 I was hesitant to engage in Accessibility discussions for fear of “getting it wrong”
- The matrix helped us understand who we were designing for
  - *“Oh! I didn’t know that was preventing players from enjoying the game”*
- **Biggest win: it helped us make “free” decisions that can have a big impact**

Specific decisions

- Full game, including all achievements, can be completed one-handed
- Test with and support as many body types as we can
- Not rely exclusively on color for puzzle solving
- Not require fast extreme or sustained physical movements of the body. When beneficial to move that way we will always provide an alternative
- The game will be in its vast majority stationary. Very minimal camera movement.
- Have a diverse cast of characters
- Fully seated experience
- Not require players to understand or remember the story to complete any puzzles
- Hire a sensitivity reader

Upholding the decisions

Master Design Guide

- A document with over 60 items that “make a level feel like a IEYTD level”
- To be used as a checklist by the design team at each stage of each level’s development
- Accessibility considerations are given the same weight as every other item on the checklist

For more info: Check out The Design Direction of IEYTD2 in the GDC Vault

Upholding the decisions

Accessibility		
Have you noticed guests experience any discomfort, for any reason whatsoever?	- Pulling the rope repeatedly is called out as a repetitive action that can get tiring - Some far-away objects are hard to hit/grab	Mostly bugs with colliders + TK at this point; we got rid of the rope, which was a big sticking point. There are other things to smooth out, but nothing huge.
Can the level be completed while sitting on the couch? (without turning around)	In theory	In theory!
Do the level's interactions and wearables account for all body types?	Mask needs some work; it's too tight to the head	Masks still need work, but it's on the docket for the next few sprints
Can the level be completed one-handed?	Yes	Yes

“Aren’t you giving up cool stuff?”

Tl;dr: Nope

We made a great game. The alternative was a different great game that fewer people can play. The choice seems clear.

Moments of tension

Idea: let's allow players to control the jet by directly manipulating the jet's wing

Tension: that action would result in potentially severe motion sickness

Result: A different puzzle involving interacting with the jet wing

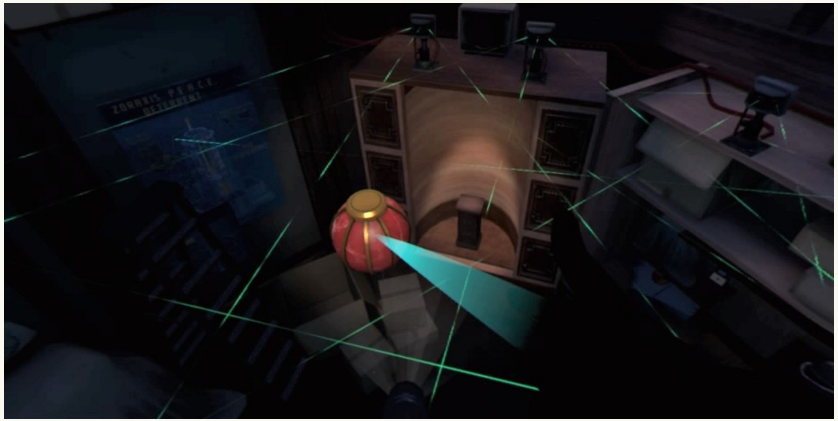
Moments of tension

Idea: Let's create more complex objects that require use of two hands. Steering wheels! Heavy objects! Accordions!

Tension: Every item in our game should be able to be operated one-handed. Hard no.

Result: We have a plethora of fun one-handed items in the game

Moments of tension



Idea: Let's enter the level from above in a little drop-down contraption. Should be easy enough.

Tension: Sound awesome. Let's playtest it until we have absolute confidence that it won't result in motion sickness for most players

Result: Way more iterations than expected, but we did make it work

Moments of tension

Idea: Our speedrun challenges could be more challenging if we use two hands!

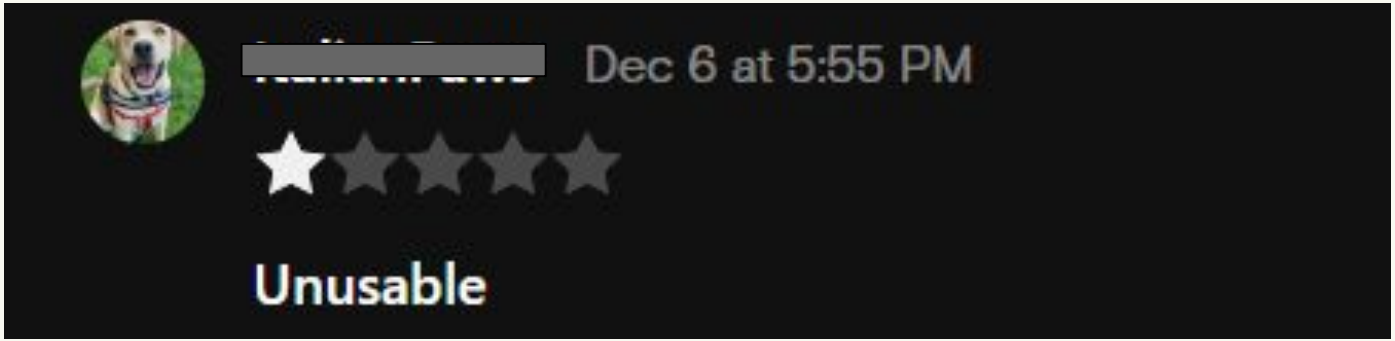
Tension: Full game, including all achievements, should be completed one-handed

Result: All content can be completed one-handed, including achievements

Strategies that Work

1. Start talking about accessibility EARLY!
2. Have a WRITTEN guide too.
3. Approach accessibility like other features in your game: you can't do it all. It's ok to PRIORITIZE.

Let’s work together to NEVER see this review



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Link to Accessibility Matrix template

bit.ly/SGmatrix

SCHELL GAMES

#GDC22