

Accessibility on a shoestring

Ian Hamilton

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1. Fundamentals
2. Indie Vs AAA
3. Techniques
4. Tools
5. Player input
6. Communication

1. Fundamentals

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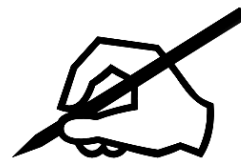








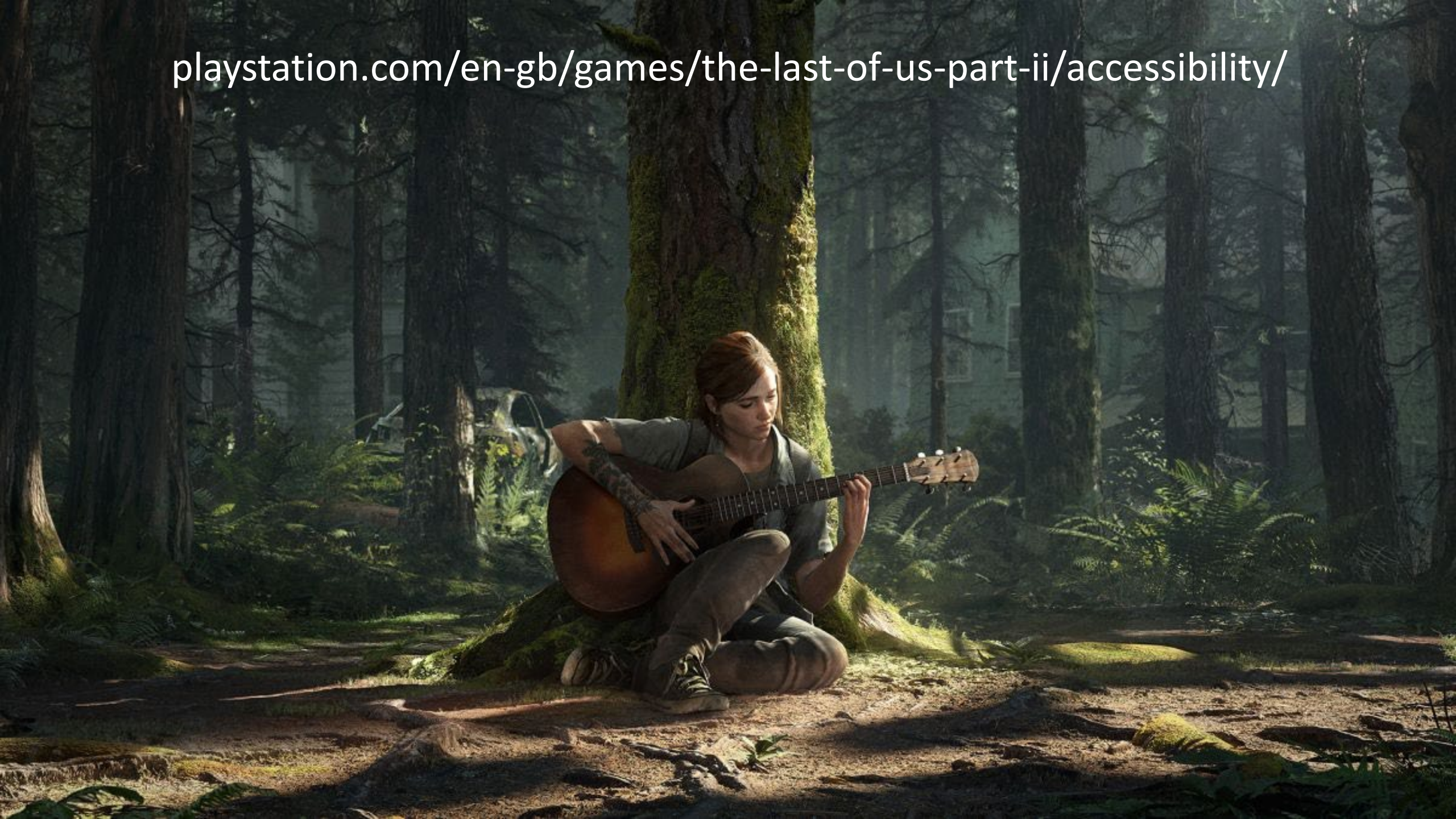
Down's Syndrome Deafness Colour Blindness
Cerebral Palsy ADD Spina Bifida
Dyspraxia Autism Multiple Sclerosis Muscular Dystrophy
Aspergers Essential Tremor Albinism
Blindness Auditory Processing Disorder
Dyslexia ADHD Global Developmental Delay
Dyscalculia Visual Processing Disorder
Cataracts Glaucoma Epilepsy Alzheimer's
Parkinsons





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playstation.com/en-gb/games/the-last-of-us-part-ii/accessibility/







“Accessibility is difficult and expensive, and means diluting my vision. Making the game less enjoyable for everyone, just to benefit a tiny niche group”



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- Story
- Multiplayer
- Extras
- Options**

Accessibility

Camera Assist	◀	Off	▶
Vehicle Camera Assist	◀	Off	▶
Aim Mode	◀	Hold	▶
Lock-on Aim	◀	Off	▶
Sticks While Aiming	◀	Default	▶
• Repeated Button Presses	◀	Hold	▶
Subtitles	◀	Off	▶

Reset Defaults

Complete minigames by either tapping the prompt button rapidly or holding it down.

⊙ Back | ⬮ Change

1
MIO CARO AMICO

VUOLIO PROVARE SE I CARATTERI NOVI SCOLPISANO
MOLTO COL LI INCHOSTRO O COL LA CARTA NERA
ASPETTANDO DI SENTIRE LA VOSTRA DECISIONE LULTI
MA VOLTA CHE VI FOCI SCRIVERE DON ANGELO AVE
VA TANTA PRETTA CHE MI CONVENNE LASCIARE DI
RISPONDERVI A MOLTE COSE MA SE PORSO VUOLIO

SUPPLIRE DA ME E VERO QUANTO DETE CHE IO FLO
RO DETTO HA MI SEMBRA CHE ABBIAI INTESO GALE PER
CHE INTERROGO IN DOVERE RISPONDERE ALLE VOSTRE

L'ETTERA ACCETTA ANANTI CORTIA E LA SUA MENTE

1
MIO CARO AMICO

VUOLIO PROVARE SE I CARATTERI NOVI SCOLPISANO
MOLTO COL LI INCHOSTRO O COL LA CARTA NERA
ASPETTANDO DI SENTIRE LA VOSTRA DECISIONE LULTI
MA VOLTA CHE VI FOCI SCRIVERE DON ANGELO AVE
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SUPPLIRE DA ME E VERO QUANTO DETE CHE IO FLO
RO DETTO HA MI SEMBRA CHE ABBIAI INTESO GALE PER
CHE INTERROGO IN DOVERE RISPONDERE ALLE VOSTRE

L'ETTERA ACCERTA AVANTI CORTIA E LA SUA MENTE





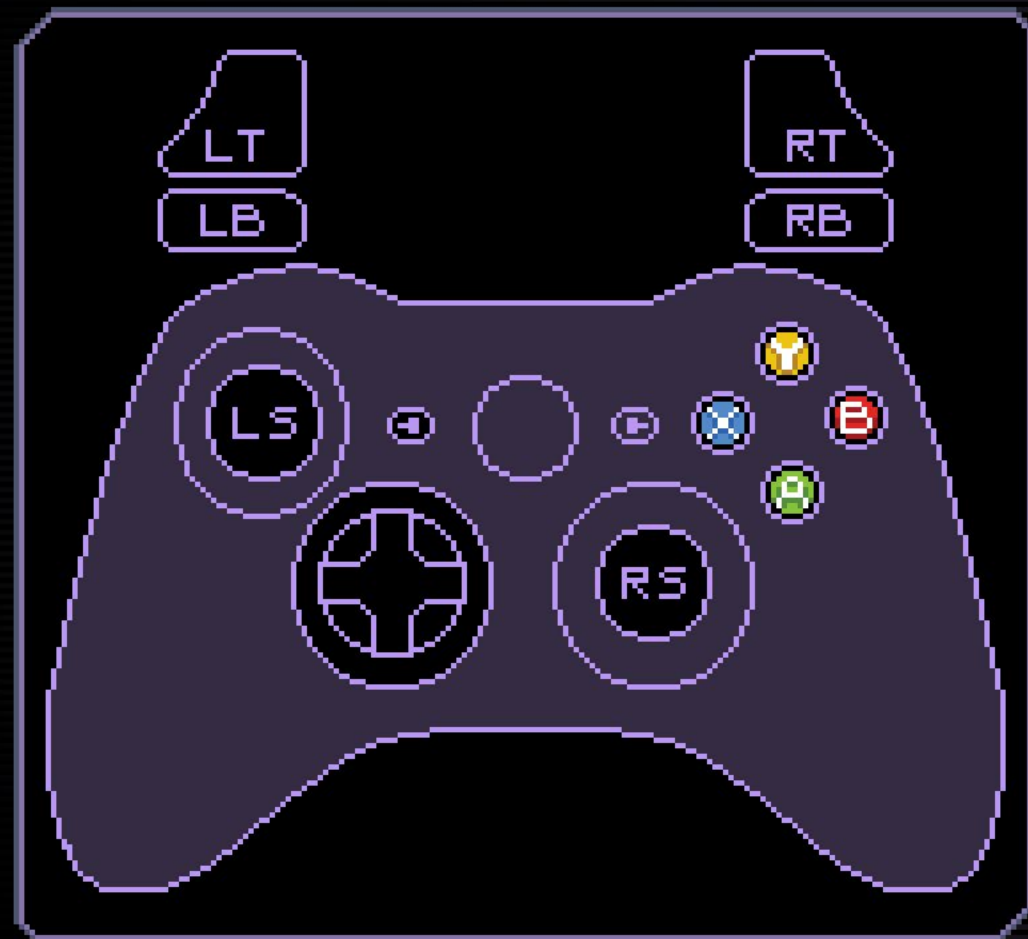
1. Text size
2. Remapping
3. Colourblindness
4. Subtitling
5. Intensity of camera & effects



Hey, it's my old Wormhole Engine prototype!
You can use it to get to the next area.



CONTROLS



➤ BACK

RESET DEFAULTS

VIBRATION



PARRY



CHECK / SHOVE



SUPER MOVE



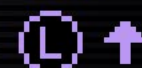
DASH



DODGE



MOVE UP



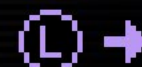
MOVE LEFT



MOVE DOWN



MOVE RIGHT



 SELECT

 BACK





May you hold on one moment. I'm busy attending to my
clockwork farm

|accessibility

High Contrast



Color



Light



Colorblind



Screenshake



Animate Background



Image sensitivity option

ON

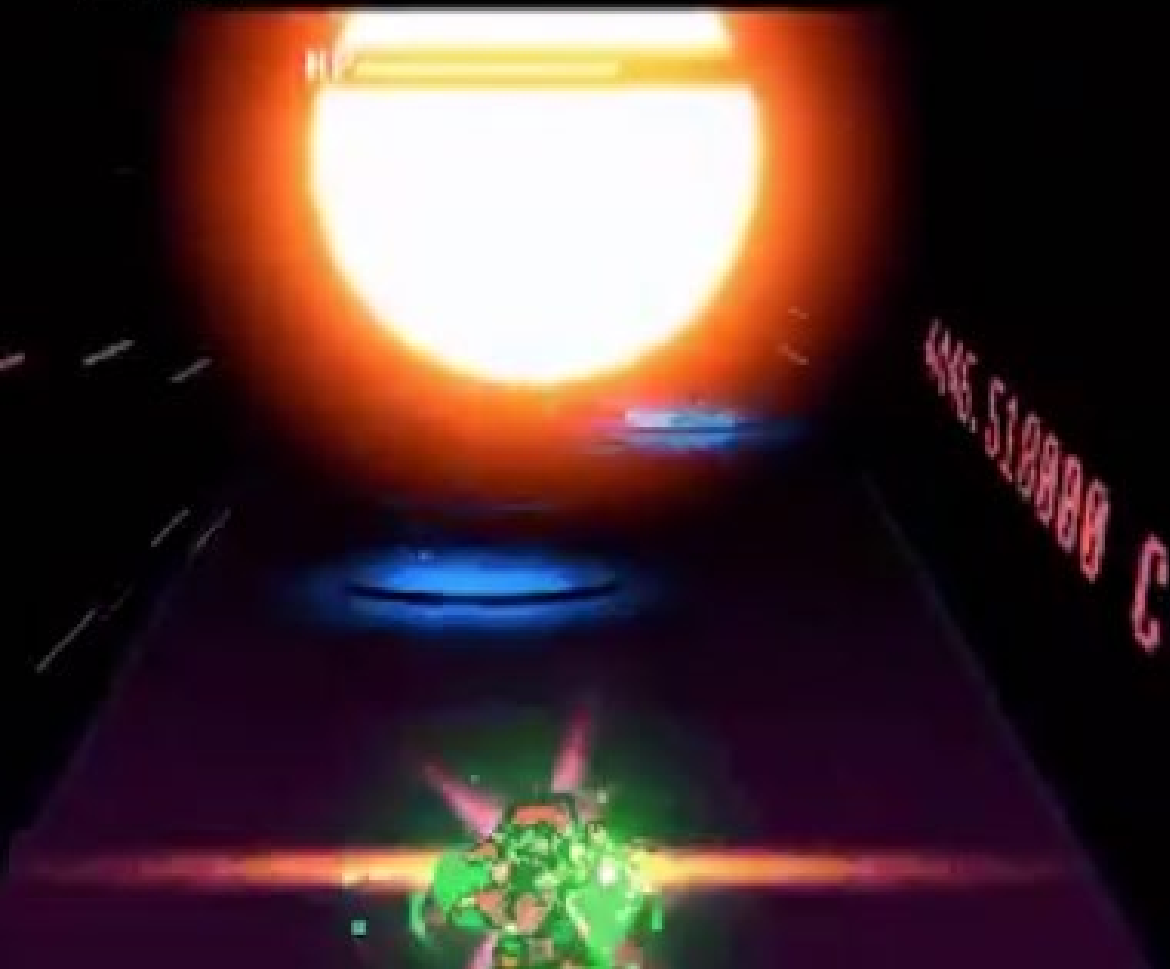


OFF



Image sensitivity option

ON



OFF



tinyurl.com/gag-triggers

- Any sequence of flashing* images that lasts for more than 5 seconds
 - More than three flashes* in a single second, covering 25%+ of the screen
 - Moving** repeated patterns*** or uniform text****, covering 25%+ of the screen
 - Static repeated patterns*** or uniform text****, covering 40%+ of the screen
-























* an instantaneous high change in brightness/contrast (including fast cuts), or to/from the colour red

** includes changing direction, oscillating, flashing or reversing























*** more than 5 static or 8 moving high contrast repeated stripes – parallel or radial, curved or straight, in any orientation

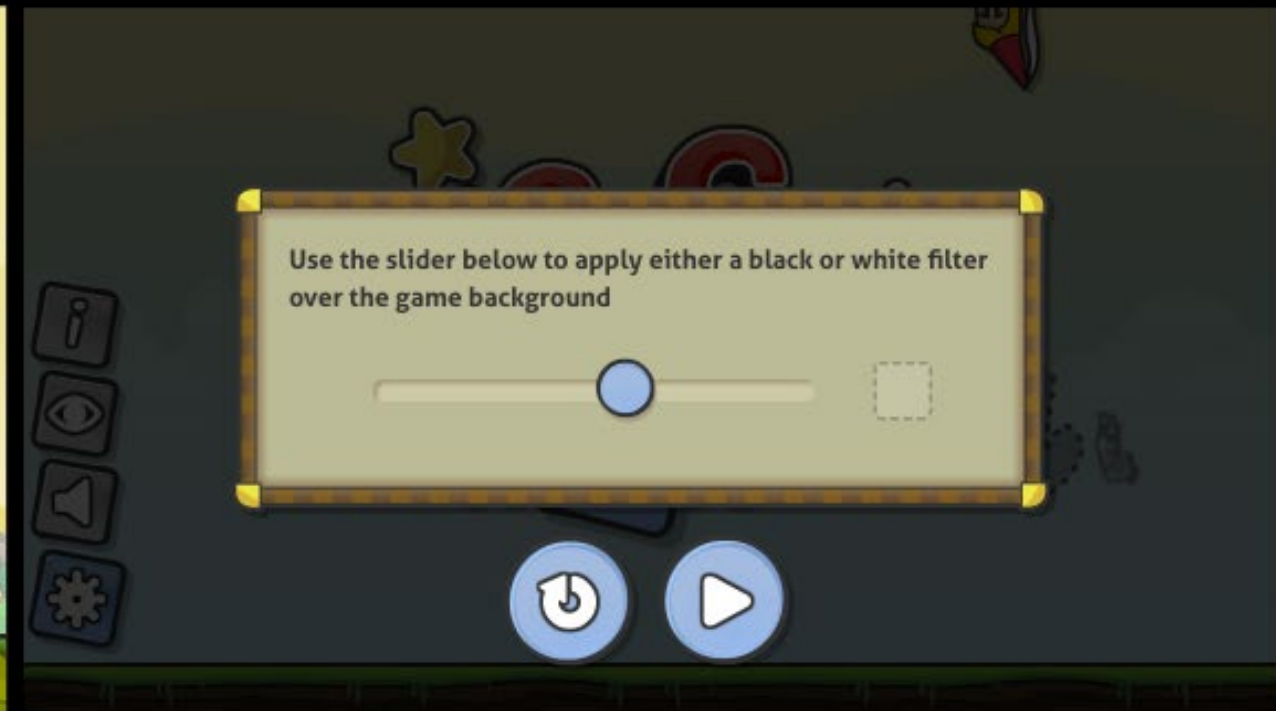
**** lines of text formatted as capital letters only, with not much spacing between letters, and line spacing the same height as the lines themselves, effectively turning it into at least 5 static / 8 moving high contrast evenly alternating rows

Accessibility

Dyslexic-friendly Font		
Font Size		
Black Behind Dialogue		
White Dialogue		
Type Speech		
Show Speaker Name		
Auto Progress Speech		
Colour Blind Mode		
Camera Noise		
Screen Shake		
Interact Toggle		
Platforming Assist		
Back		

Accessibility

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ASSIST MODE

Game Speed < 100% >

Infinite Stamina < OFF >

Air Dashes < Default >

Dash Assist < OFF >

Invincibility < OFF >

- [] No Screen Flashes
- [] No Screen Shakes
- [] Float Movement
- [] No Dying
- [] Pass-through Gates
- [] Low Quality
- ▶ [] Sound FX Captions
- [] Helper Blocks
- [] Milder Energy
- [] No-Hold Shield Lock
- [] Cloud Indicator
- [] Disable 3D Overworld

Displays captions when important sound effects play.

C key: Confirm
X key: Cancel



ASSIST MODE

Game Speed < 100% >

Infinite Stamina < OFF >

Air Dashes < Default >

Dash Assist < OFF >

Invincibility < OFF >



Celeste is intended to be a challenging and rewarding experience.
If the default game proves inaccessible to you, we hope that
you can still find that experience with **Assist Mode**.



igda-gasig.org/how/sig-top-ten/

tinyurl.com/xbox-access-vids

gameaccessibilityguidelines.com

“It's almost as if there's a race among developers to see who can make the most accessible game. And I know a little bit about racing. It's honestly a race where everybody wins”

- Jon Knoles, design director, Turn 10

pastebin.com/WgajzNc8

Barbearian
Bubbles the Cat
Cadence of Hyrule
Celeste
Chicken Police
Combo Postage
Cook Serve Delicious 3
Cross Code
Eagle Island
Ear Hockey
Ekstase
Even the Ocean
Freedom Finger
Hades
Haven

Hyperdot
Ikenfell
Infernium
Jetlancer
Lair of the Clockwork God
Little Hope
Loop Hero
Moving Out
Overwhelm
Paradise Killer
Path of Giants
Phoenotopia
Pig Eat Ball
Puzzle Retreat
R-Coil

Revita
Scourgebringer
Sequence Storm
SOLAS
Spin Rhythm
The King's Bird
Trine 4
Untitled Goose Game
Ultrakill
Untold
Vacation Simulator
Veritas
Wandersong
Way of the Passive Fist
Wildfire

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igda-gasig.org/how/for-developers-researchers/

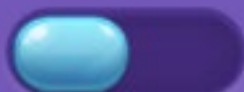
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“Nothing about us without us”

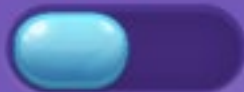
Disability rights mantra

Accessibility Options

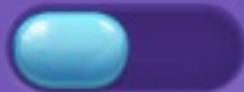
Reduce Camera
Scrolling



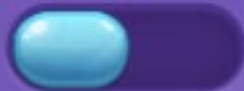
Reduce Screen
Shake



Reduce Particle
Effects



Disable Hints



Restore default
settings



Send us your
accessibility feedback



Visuals

Dim backdrop

0%



Disable lighting



Outline characters



Outline platforms



Disable screenshake

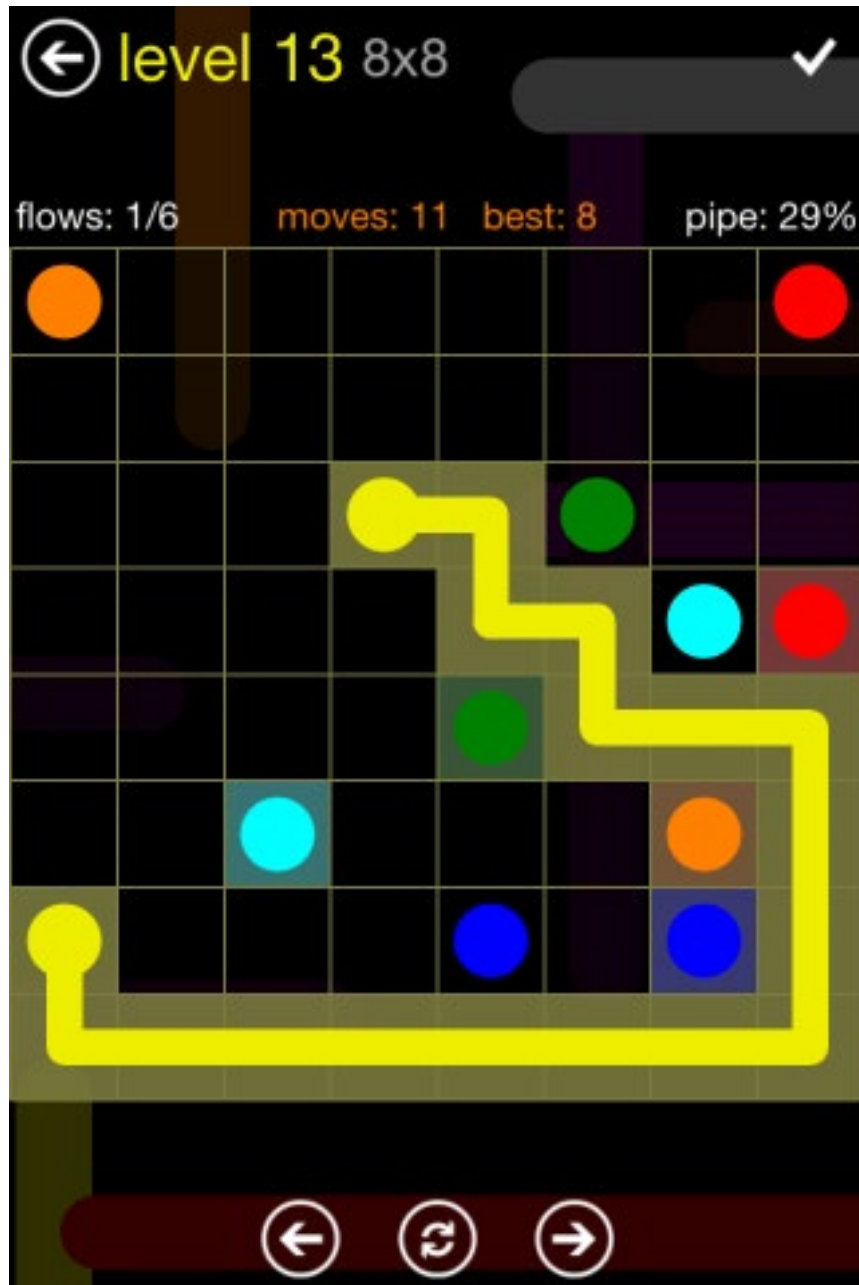
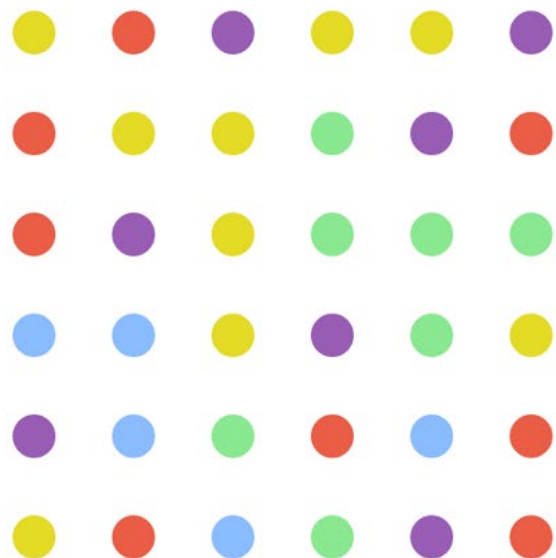


Save

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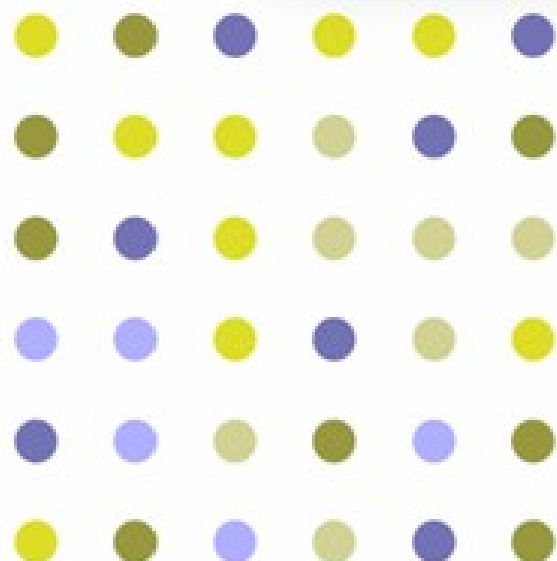
Time 51

Score 0



Score 0

Deuteranopia

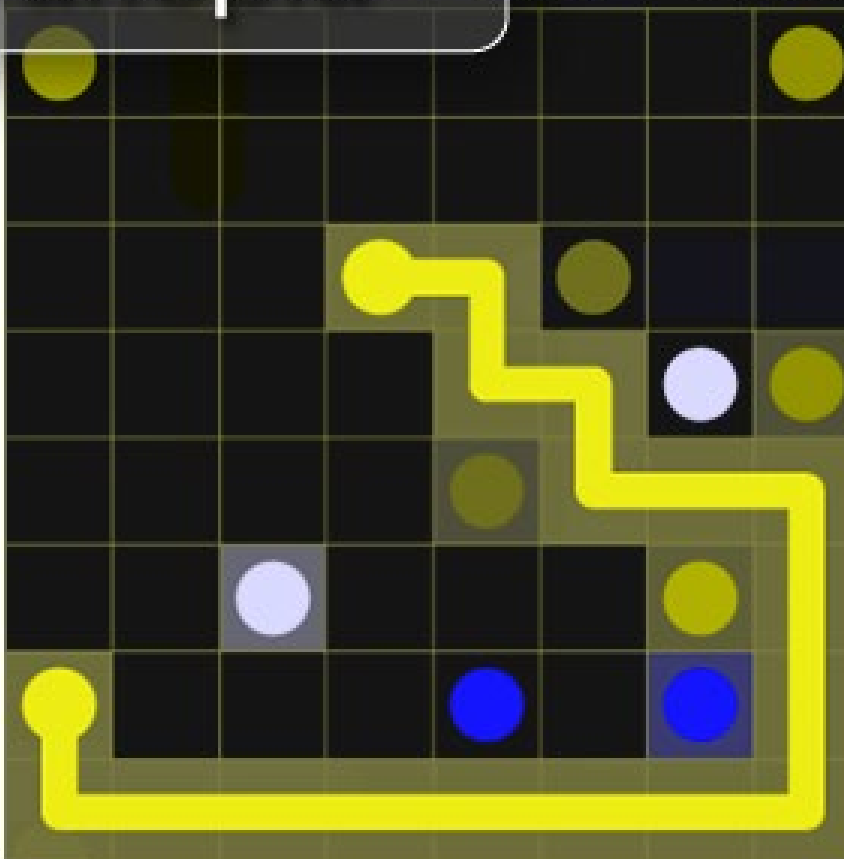


← level 13 8x8



anopia

pipe: 29%





Sara Lang
@SaraLang

I finally downloaded Dots, only to find that I'm far too colorblind to actually be good at this.



Mikah Ragos
@Mykah09

Addicted to Dots even though I'm making a fool of myself! :D #colorblind
pic.twitter.com/IdKHZ91g9i



Nick O'Brien
@nickobrien22

Playing dots. This game really discriminates against us color blind people. I won't stand for this! #FightForWhatsRight



nico diaz
@nicodayss

I downloaded this Flow app game thing and no matter how many times I tried playing, I kept losing. Then I remembered I was color blind #awk



Rebecca Koehler
@mikyway

Was going to thank @ijandrew for letting me play Flow, but then he laughed when I tried to connect red and orange dots. #colorblind

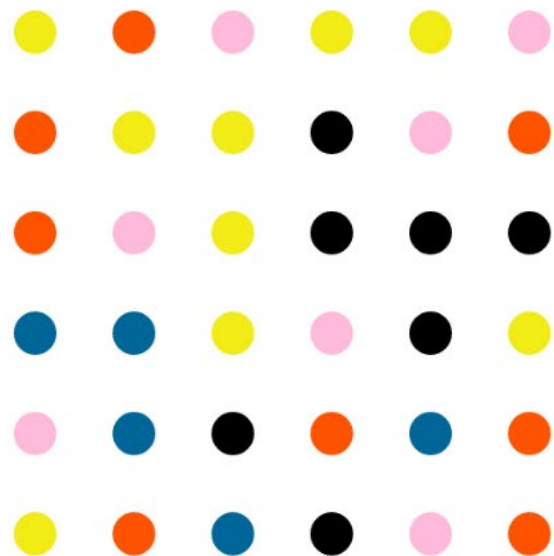


L@ne
@Lane_Simpson

Terrible at Flow free because I'm colorblind

Time 58

Score 0



board 1 5x5

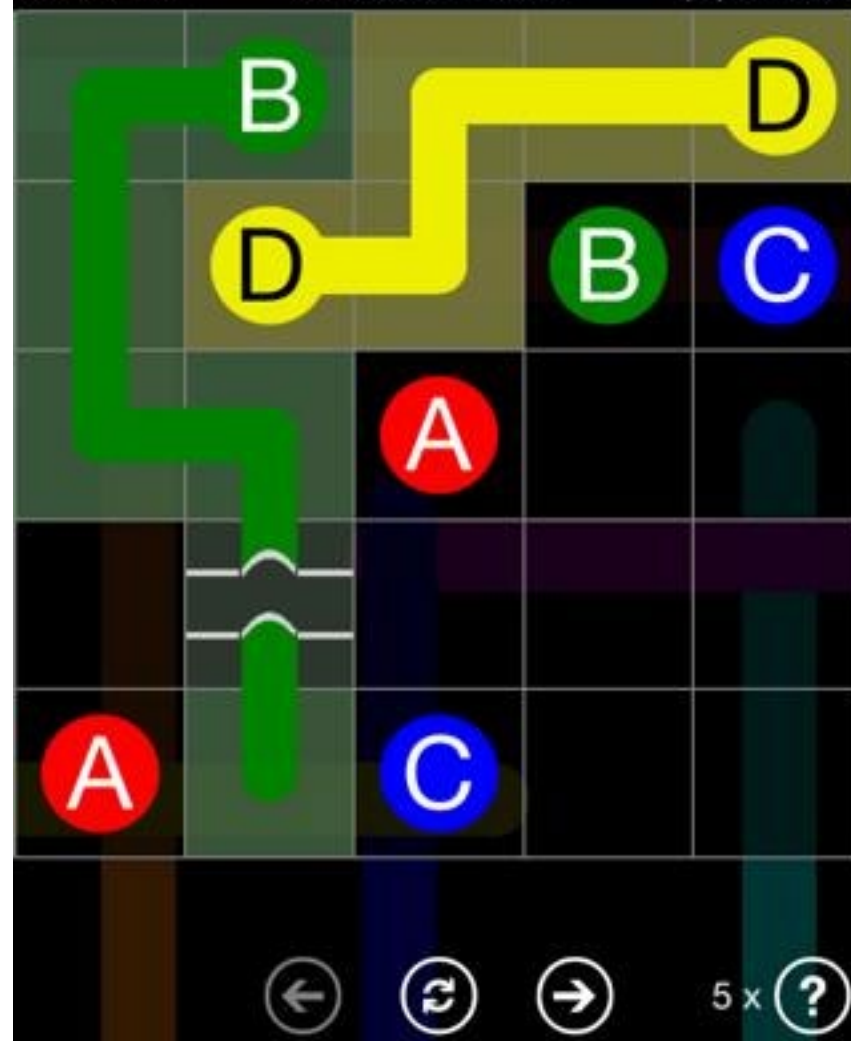
0:56

flows: 1/4

solved: 0

best: -

pipe: 45%





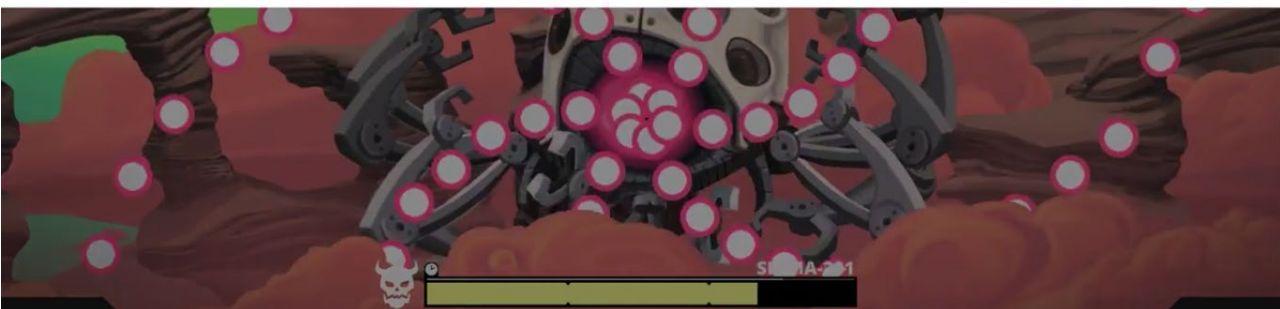
EXTENSIVE ACCESSIBILITY OPTIONS



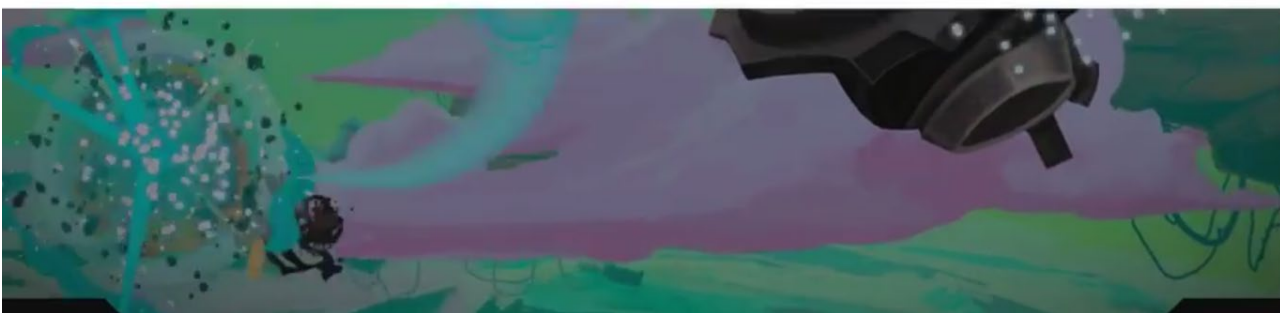
COLORBLIND MODE



AUTOFIRE SWITCH



ADJUSTABLE GAME SPEED




GROWHOUSE

TEAM DEATHMATCH

Close quarters on-foot combat. Your team's objective: eliminate the enemy and secure the area.



 Having a hard time seeing different colors on your HUD? Toggle through Colorblind settings in the Options menu.

NEWS

BREAKING NEWS

BREAKING NEWS

BREAKING NEWS

BREAKING NEWS

BREAKING NEWS

CAL GROWHOUSE EXPLODES INTO VIOLENCE..."DID NOT EXPECT THIS

to rank 56. The next item you will unlock is ENFORCER LOADOUT SLOT 3. The assignment you are closest to completing is SMG Owners

The background is a pixel art illustration of a forest. On the right, a character with dark hair and a red headband stands on a wooden platform, looking towards a blue doorway with a yellow diamond pattern. The forest has various shades of green and brown trees and foliage.

Resume

Store

Options

Quit

The **OPTIONS** menu holds a host of **ACCESSIBILITY OPTIONS**. You can change things like how text is displayed, or how the camera moves.

PLATFORMING ASSIST lets you modify platforming settings to suit your specific needs.

There is no penalty for using this slider.

There is also a **COLOUR BLIND MODE**, which we recommend you enable if needed, as it tweaks the game's two colour-based puzzles.

- Full colourblind support, using symbols as a colour aid.


CRITIC REVIEWS

Positive:  21

Mixed:  10

Negative: 0

100


Gaming Age 

Sep 9, 2016

Bravo to the developers for taking the feedback and helping make the game more accessible. There's a ton to like about this game and I hope more people will hear about it and give it a try.

[All this publication's reviews](#) | [Read full review](#) 

90

We Got This Covered 

And one last thing...

Thanks!

Ian Hamilton

@ianhamilton_ // i_h@hotmail.com

Resources: igda-gasig.org/how/for-developers-researchers

Indie accessibility superstars: pastebin.com/WgajzNc8