

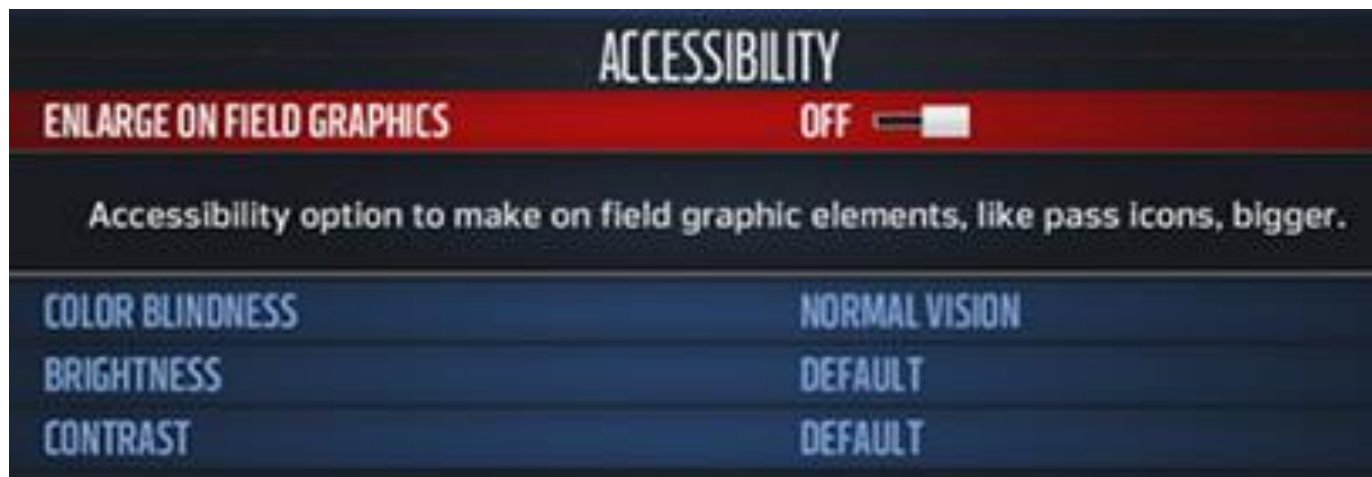
Triple A Gaming While Blind

Karen Stevens
EA SPORTS Accessibility Lead



Backstory

- Madden NFL 17 had accessibility features covered in GDC 2017 talk “Practical Visual Fixes from EA’s Madden NFL Franchise”





Backstory

- EA news blog advertised update
- Original feedback channels
 - AccessibilityFeedback@ea.com
 - Twitter: [@ea_accessible](https://twitter.com/ea_accessible)





User Feedback

- “I’m blind, but was able to play past versions of Madden NFL. Changes were made to the kick meter that are making it harder to play, can you help?”

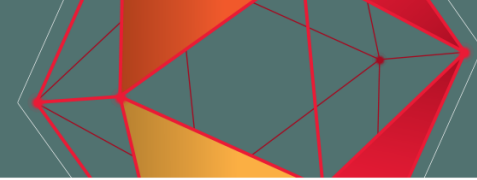




User Feedback

- I'm blind and I can play UFC, but am having trouble with submission mechanics
- I'm blind and I can play NHL, but have trouble knowing when the puck is about to hit the ice
- I'm blind and I can play Need for Speed, but I sometimes go off map and get lost





User Feedback

- I can play UFC
- I can play NHL
- I can play Need for Speed





How's Sightless Gaming Possible?

- 3d sound design – realism = playable
- Reaction indications – select option, attack, etc
- Cued menu wrapping – audio location landmarks
- Haptic feedback – controller rumbles = clues
- Deterministic menus – randomness is confusing
(for everyone)





Sightless Gaming Aids

- Comprehensive written tutorials – not ideal, but can help get people into your game quickly
- OCR technology via computer application or translation pen to read text



NV Access

Empowering lives through non-visual
access to technology





Madden NFL





Madden NFL - Commentary

- The game's commentary provides extremely detailed information as to where players are on the field and what they are doing
 - Information on the opposing team's positions
 - Current yard line number and down number
 - Feedback on team members actions





Madden NFL - How to Move

- Default camera = goal was to always move “up”
- AIs steer players until directed by user





Need For Speed





Need For Speed

- Realistic sound design
 - Different sounds for driving on pavement, dirt, grass
 - Whooshing sounds while passing obstacles
 - Directional sound for surrounding cars
 - Engine pitch helps determine speed





Need For Speed

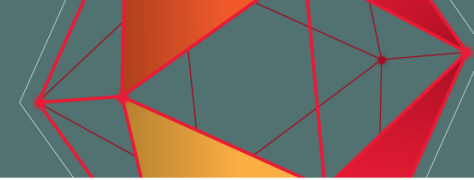
- Controller rumble (vibrations)
 - Useful for collision feedback
 - Indicates when going off track





NHL





NHL

- Detailed Audio
 - Commentary announces when the goalkeeper needs to make saves
 - Players movements are audible, i.e. scraping ice





NHL

- There are 10 different camera options available in NHL 18, some with fixed orientation





NHL

- Assistive shot aiming & passing





UFC





UFC

- Commentary also provides contextual clues to opponent's actions
 - “Wow what a great transition. What a right hand”
- Trial and error determined a pattern between rumbles and reactions
 - When you successfully complete a move, the controller rumbles with a particular intensity





Next : Support & Improvements

- Soliciting feedback is key to identifying low hanging fruit
- Many of our titles have yearly releases, which promotes continuous improvements
- Two games have already shipped features
 - Madden NFL 18
 - UFC 3





Madden NFL 18 : New Feature

- Vision Assist accessibility option adds optional controller rumbles to the game
 - Play type: kick, pass, run, etc
 - Kick meter: power, accuracy
 - Ball snap occurrence
 - Ball in air from being passed





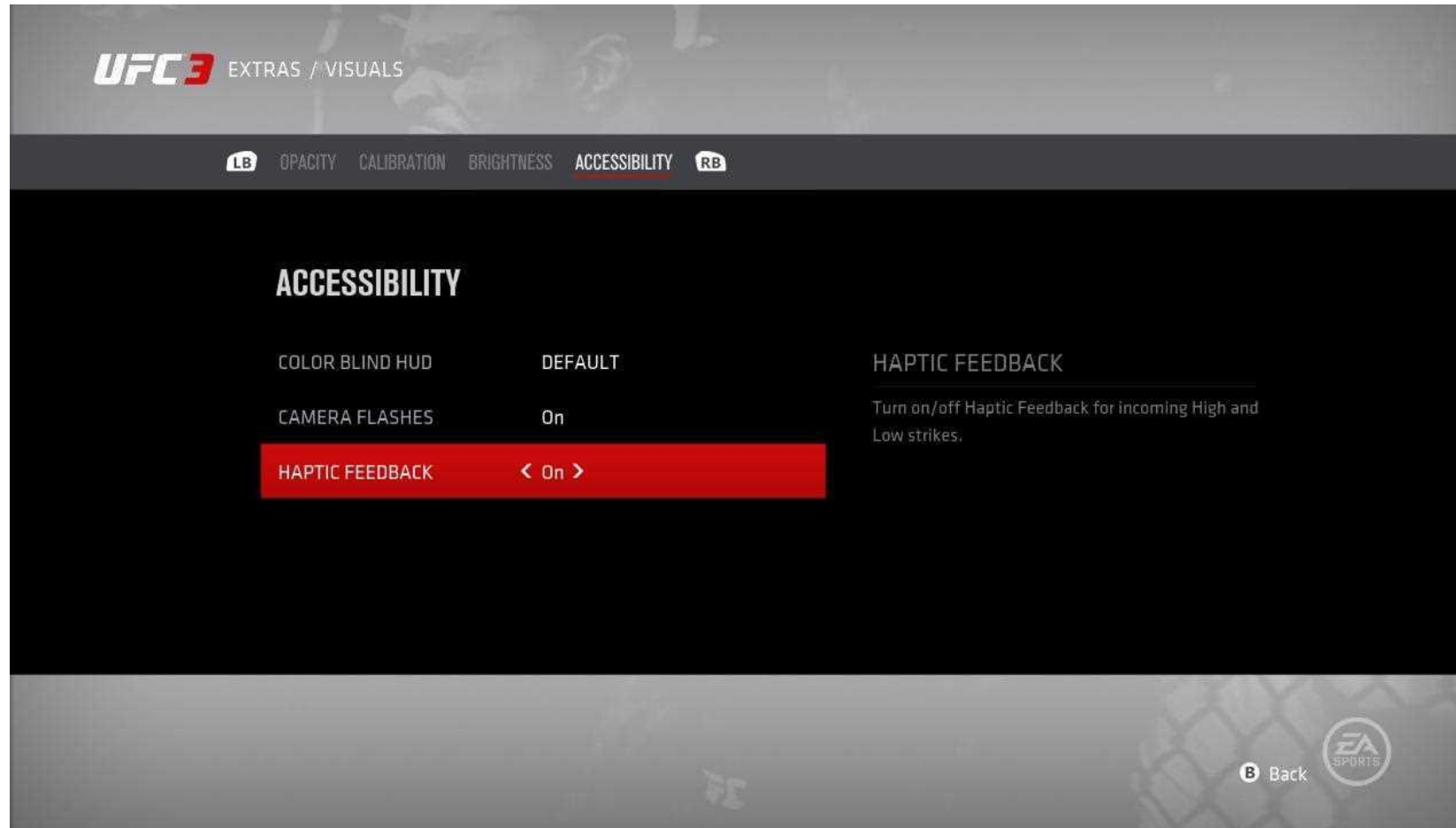
Madden NFL 18 : New Feature

- Longshot story mode underwent minor modifications to ensure no events which required eyesight would block story advancement





UFC 3 : New Feature





UFC 3 : New Feature

- Controller rumble option for opponent attacks
 - If the right motor rumbles, your opponent is throwing a high strike
 - If the left motor rumbles, they are throwing a low strike
 - The intensity of the rumble tells you how far away your opponent was when they threw the strike





Accessibility Portal - ea.com/able

- Contains guides for the blind and visually impaired, text manuals, and feature details





UFC 3 – Text Manual Screenshot **STRIKING: TAKEDOWNS**

- Single leg: L2 + right stick right
- Double leg: L2 + right stick left
- Power single leg: L1 + L2 + right stick right
- Power double leg: L1 + L2 + right stick left





Madden NFL 18 – Guide

- Extensive text-only guides have been written
 - Base concept of American football
 - Explains first sign in, set up, key available user options, and how to update options – including resetting all options to default
 - Provides guidance to story mode quick time events
 - Provided in a key-by-key format, covering both consoles





Madden NFL 18 – Guide Screenshot

From the main menu:

- On the left stick, press right 4 times, then down 2 times to reach the practice menu icon.
- Press A to enter practice menus
- The next menu has 3 options, normal, offense only, and kick-off. For now, let's practice kicking. Press down twice, then A





Ongoing Effort

- The general goal, for all forms of accessibility: every time a feature is updated, it must never regress, only improve
- Low-hanging fruit can quickly unblock large portions of your audience
- Ask your audience for its pain points





Let's Make Games People Can Play

- Audiogames.net is a great place to meet your audience
- Additional content available: <http://ea.com/able>
- Contact @[ea_accessible](https://twitter.com/ea_accessible), able@ea.com
- Questions?

