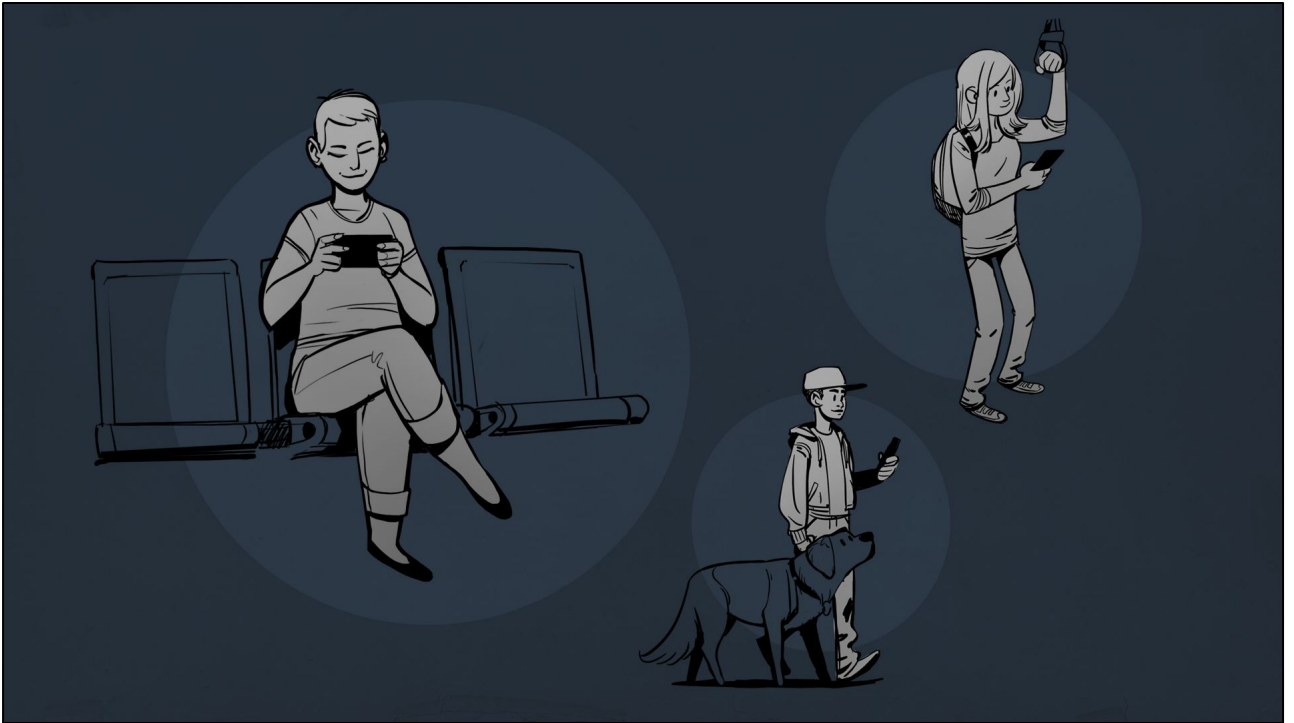Good afternoon, lovely audience! This is my first GDC Talk, so whether you think it was terrible or decent, please do fill out your forms. Also. please mute your phones. My name is Marie Jasmin, I've been in Game UI design for 10 years now...
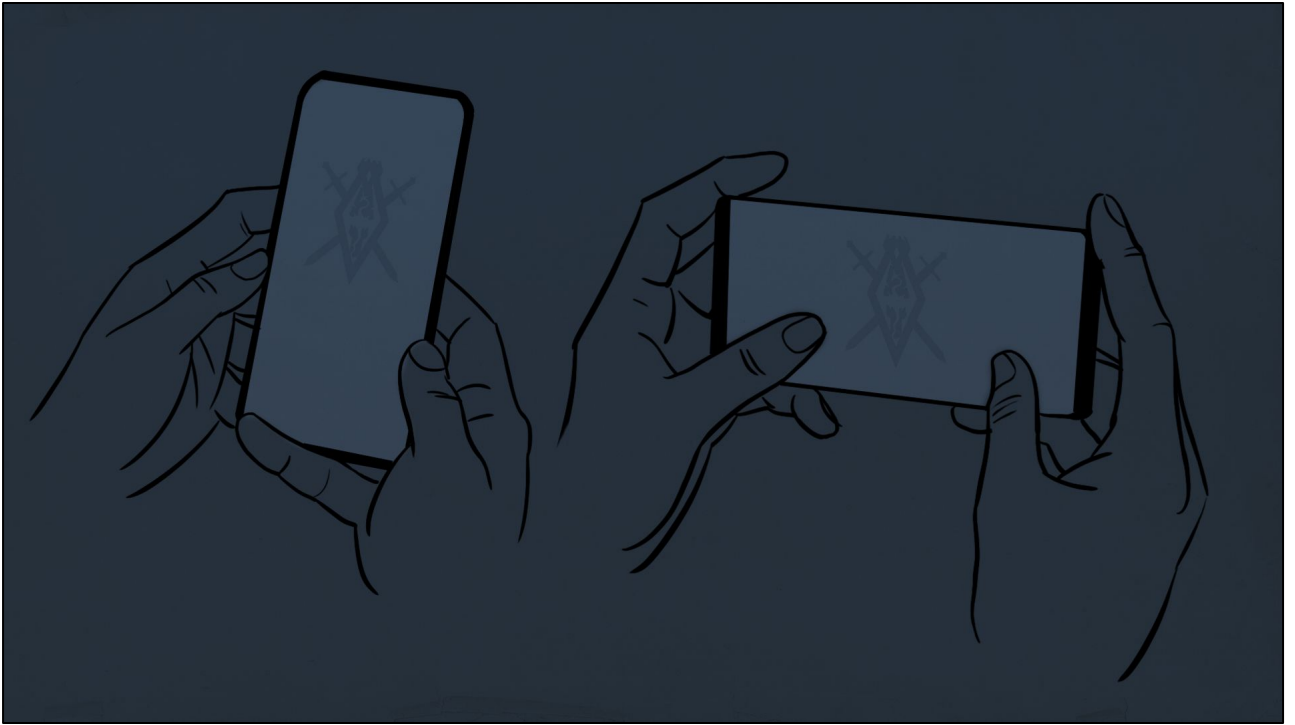
… and last year, I joined a team at Bethesda Game Studios with an interesting mandate: to create an **Elder Scrolls experience** for **your phone**.

The **vision** for the Elder Scrolls: Blades was to create **role playing** game systems with depth and intricacy set in environments that would push **the edge of visual quality** on the small devices...

...all while fully embracing **portability** and accessibility. Now, it may not be apparent at a glance, but this vision for Blades contains a dilemma:

Should the game be build for **portrait, or for landscape?**

the Vision

the UI Design Process

the Player Response

Blades ended up being built for both, and today we'll dig a little deeper into **the vision** that has led us to dual orientation support, then we'll look at **the UI design process** and what it took to make it happen, and finally we'll analyse **the player response** we have so far, and see if it was all worth it...

So, we're building an **Elder Scrolls** game **on mobile**.

In essence, mobile gaming **liberates the context of play** from the living room or home PC and takes it anywhere: on the couch, at the park, on the bus, at the airport, on the toilet, in a meeting (or a GDC talk).

Notice a few things here:

- In some of these contexts, people only have **one free hand**: so if gaming is to be made even possible there, the portrait mode is a must.

> **Bethesda** ✔
> @bethesda
>
> Following ⌄
>
> Portrait mode in The Elder Scrolls: Blades is perfect for UFC Champ @robwhittakermma
>
> #Blades #E32018
>
> 4:49 PM - 12 Jun 2018

- In fact, for some players, the 'one hand' situation is a little more persistent. For other players, it might even be permanent.
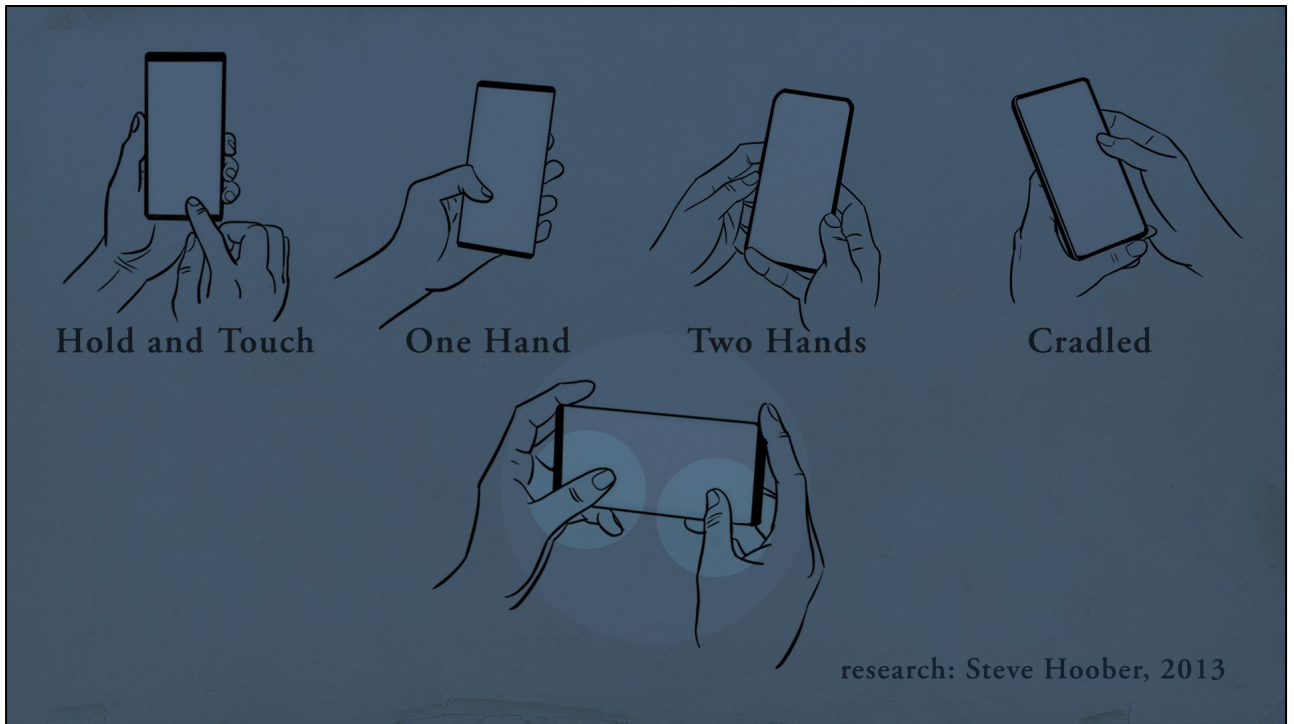
- In other contexts, **the public eye** is upon our player. In those situations, holding the device in portrait mode can act as a "stealth mode" in which players may not **appear to be playing**. Our creative director Todd Howard affectionately calls it **"the meeting mode".**

So, looking at the context of play, we conclude that if **mobility** is a requirement, then the portrait orientation is the only way to go… HOWEVER…

Remember that, for Blades, navigation in stunning environments ia also a must.

Hold and Touch   One Hand   Two Hands   Cradled

research: Steve Hoober, 2013

External research done on the way we hold our devices reveals that while portrait holds are relatively diverse, the landscape hold is almost universal: both thumbs firmly placed on each side of the screen, towards the bottom.

The ergonomy of the landscape hold enables us to separate the navigation controls in two: camera, and movement. Separate controls feel a lot more natural than the **one-finger "tap to move"** scheme of the **portrait mode**, which, inevitably, **binds the camera** to movement direction: essentially reproducing the feeling of walking with a very stiff neck.

And perhaps more importantly, navigation options for humans (and khajiit and argonians alike) are usually **lateral**: above and below being sky or ceiling; ground or floor. As a result, when viewing environments in landscape, multiple path options can be visible at once, giving players a sense of agency.

In portrait, **the same environment** can only expose **one door** at a time: people effectively need to "scroll" to see doors. To borrow a term from web design, the player's options become hidden "under the fold". This, combined with the "stiff neck' phenomenon, creates feelings of claustrophobia. Hence, we come to the groundbreaking revelation of the day:

Landscapes are better experienced in Landscape.

Landscapes are better experienced in landscape.

Furthermore, in landscape we can have the character's **weapon** visible at all times on screen: an important element to ground players into the game world.

In the portrait mode, the middle of the screen need to remain obstruction free so players can tap to navigate or fight; but this means **nothing** of the player's avatar is visible: a heavy concession to make when it comes to immersion.
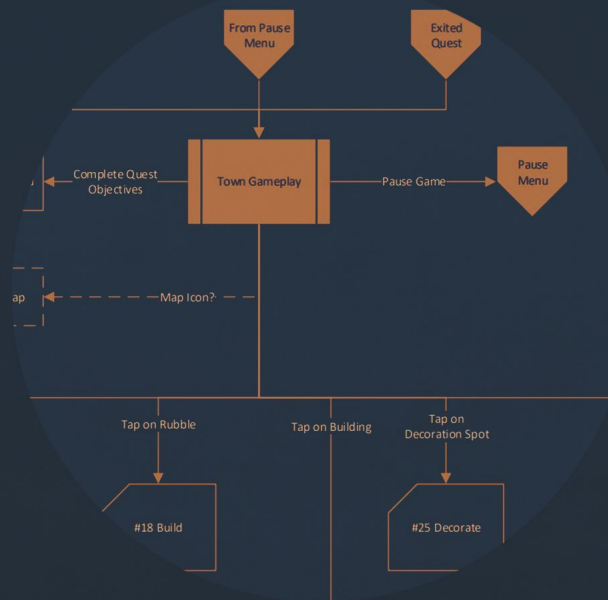
Landscape?

So let's do a little experiment: if **you** had to choose which device orientation would better serve Blades, which one would you go for? The **portrait mode**, with greater mobility and accessibility? Or the more immersive **landscape mode**?

Lack of consensus =

Opportunity for Player Agency!

Hmm, we don't have a consensus here! Let's seize this as an opportunity! Let's give our players the **agency** to flip their phones whenever they please!

the Design Process

Yes, it'll be expensive! And painful! And we've never done this before! What are we waiting for? Let's get started!
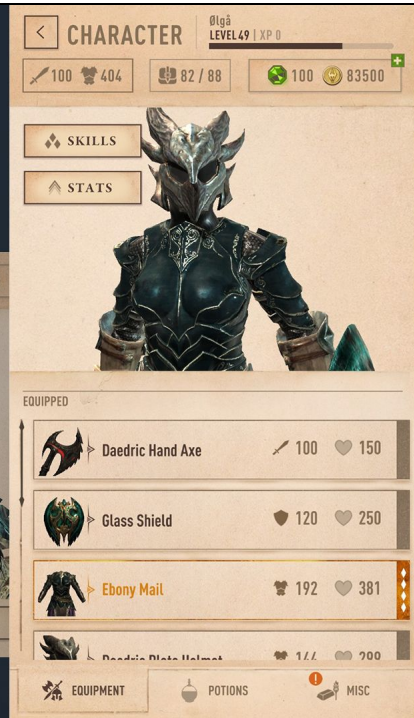
To begin with, we make design documents and menu flows: we make **ONE set** of them. To preserve our sanity, we try as much as possible to keep the information provided and options presented **identical** in both orientations:

both modes are a little like mirror images, only the **layout** changes. So the overhead cost of dual orientation support on design and UX is minimal, but the **UI team** does have to produce each mock-up **twice.**
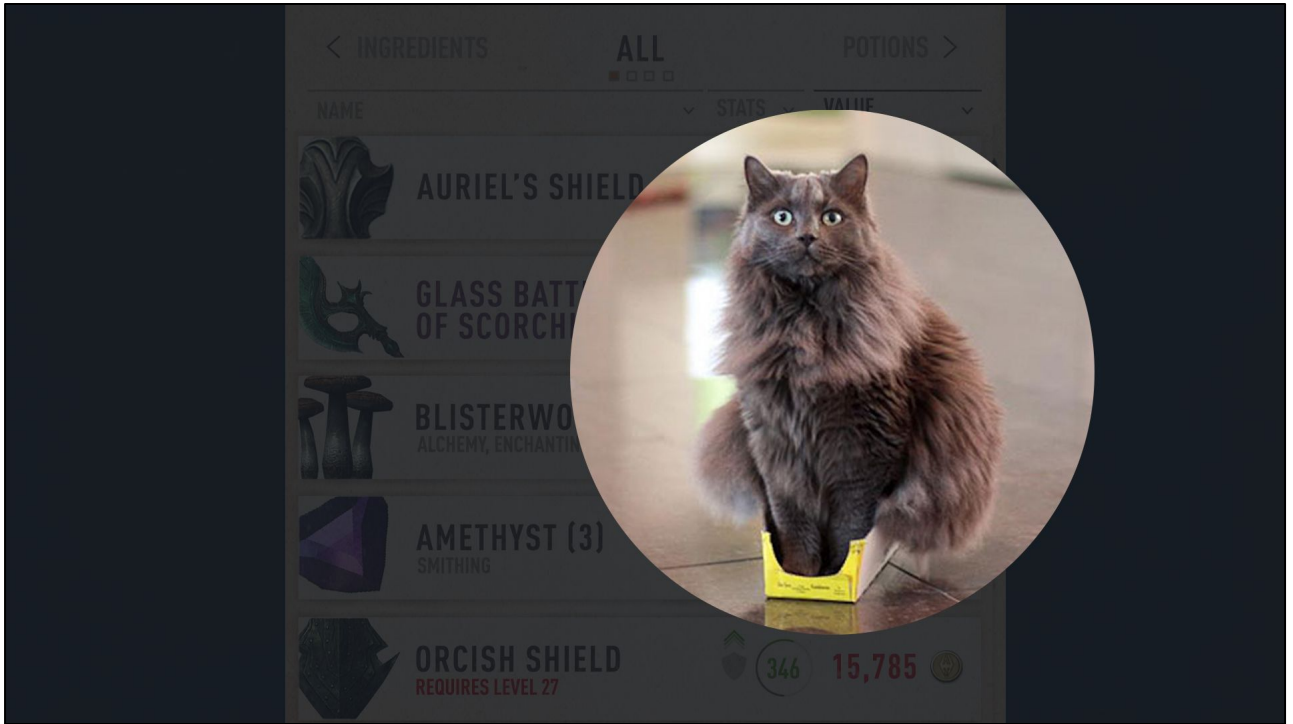
On Blades, this added about 20 to 60 % time to UI conception. It doesn't double the time because when tackling the alternate mode, most visual communication problems have already been solved.

But the extra time invested in conception did yield some early benefits.

BUILDING TYPE		COST	INGREDIENTS

TOWN NAME TOWN LEVEL 2 | 1600 PRESTIGE   94   125,000

134   2,450   43   134

BLACKSMITH
+ 1250 PRESTIGE | TAKES UP 2 LOTS

20,000   345   50   750   12

ALCHEMIST
REQUIRES TOWN LEVEL 5

MODEST TOWN COTTAGE NAME IN GERMAN
+ 1250 PRESTIGE

6,450   8   24   12

HALF-TIMBER   STONE   CASTLE

To provide an example, here in these Building and Crafting menus, we list all the required materials and try to be as generous with information as space will allow, so that players can make their own crafting decisions. And paper tests were relatively successful: "Can you build the Smithy?" "Aaaaaaaaaa……. No! I'm missing lumber and… potatoes?"

But then came the time to adapt our layouts to **portrait**, and while our lists now nicely held a good number of items; there was **no way** all the information conveyed in landscape would fit the narrow space.

So we adapted our UI systems to disclose **different information depending on context**: instead of showing everything all the the time, we show the item's condition only in the "repair" section; in the crafting menu we favor the materials.

Notice, also, how the full recipe is now only disclosed in the details page: the information held in lists has been distilled to a binary red X or green checkmark.
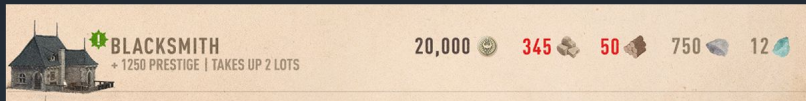
"Can you craft the Steel Dagger?"

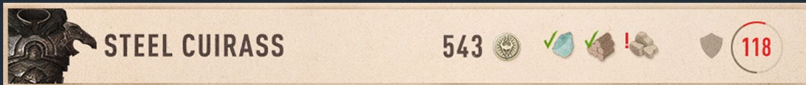|			
Steel Battleaxe	🗡 45	🔨 ✗	990 🪙
Steel Dagger	🗡 31	🔨 ✓	737 🪙
Steel Greatsword	🗡 45	🔨 ✗	990 🪙

Interestingly, when paper testing the "distilled" portrait layout, responses were noticeably more confident: "Can you craft the steel dagger?" "Sure, but it's not worth it, it has bad stats!" We realized that the "compromises" we had made for portrait were actually more efficient designs, so they were adopted for the landscape mode as well.

Extra constraints -> More Iteration -> Design improvements

V1
BLACKSMITH
+ 1250 PRESTIGE | TAKES UP 2 LOTS
20,000   345   50   750   12

V7
STEEL CUIRASS
543   118

V12
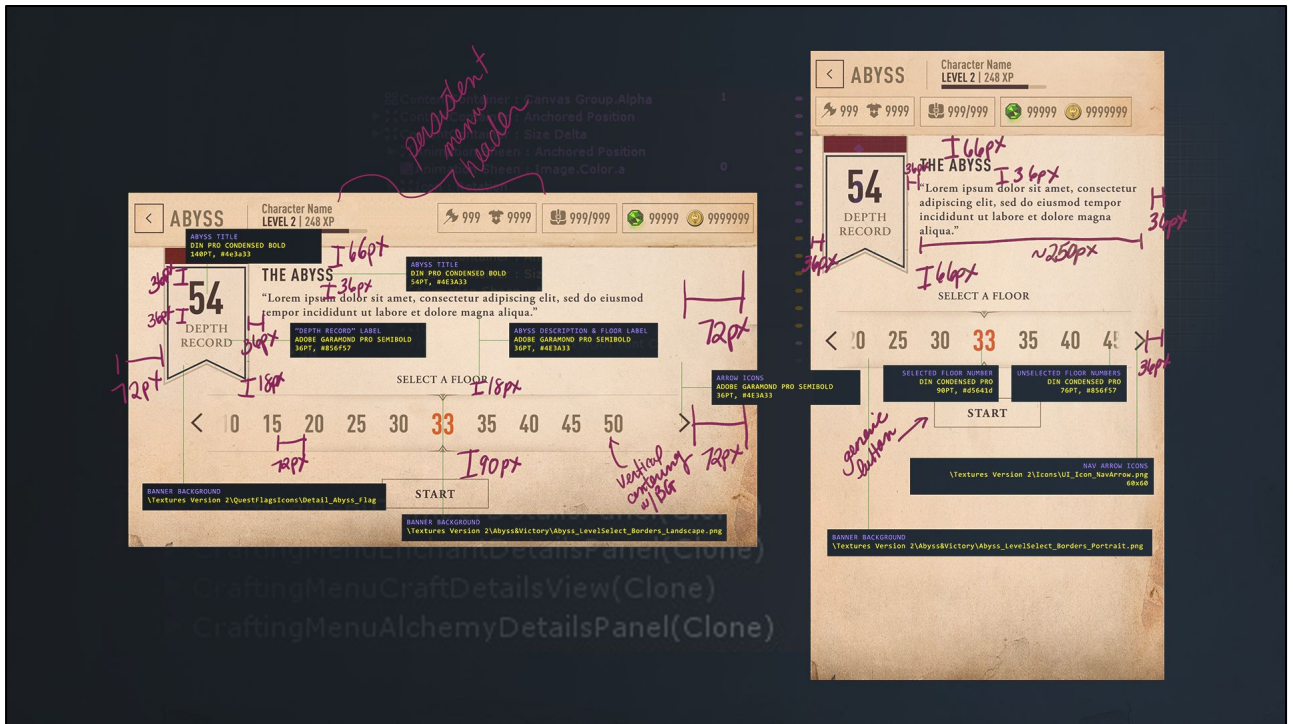Steel Battleaxe   45   ✗   990
Steel Dagger   31   ✓   737

The takeaway here is that the extra constraints on the UI team allowed Blades to **identify** certain issues early on, and saved us some time **down the line**. And thank heavens it did, because "down the line" is where time became excessively scarce.

Implementation **was** time consuming: first, dual orientation still means each of the 2 layout needs to **adapt** to the various aspect ratios, notches, (and now hole-punches?) of the mobile market today. All our documents were produced in the 16:9 aspect ratio, but the actual UI needed to stretch horizontally on newer phones, or vertically on tablets; and vice versa for the portrait mode;

Our integration notes got quite complex, and our prefabs in Unity got even more so.

But the real dual-orientation party happened in **Quality Assurance**. Remember that players not only own differently shaped devices; they are also **free** to rotate their devices any time they damn well please. Which means QA had to test this, in every possible game situation: during loadings, in the middle of a combat move, during animations, between a button press and release…

Emmanuelle Hardy-Senecal 10:05 AM
Thanks for the very zen UI guys!

Image from iOS ▾

👤 2

Soooo clean

...yes, bug festival ensued.

Fixing them was a tedious and delicate affair. Our systems were sometimes redundant, meaning fixing issues needed to be done twice; sometimes inter-dependent, meaning a fix for one mode could break the other.

We did get the interface to work, though, in a first playable demo: it wasn't polished, but it functioned **in both orientations**. Getting the game in some human hands as early as possible was **crucial** to the dev process of Blades. **Don't retro-fit dual orientation!** You will uncover flaws in yous designs, and you need to have enough time ahead of you to course-correct.

To provide an example here, we have a shield icon smack in the middle of the screen, and this is the interface for a critical combat mechanic allowing players to block with their shield.

This icon was terribly positioned, and my punishment for not having noticed earlier, was to be forced to **stand completely silent** as watched players struggle to even reach it... **and die**! One of the many ways I've killed people with UI...

SETTINGS

GAMEPLAY

Shield Location (Landscape)

<   LEFT   **MIDDLE**   RIGHT   >

Enable Virtual Joysticks ☐

Invert Horizontal Axis ☐

Invert Vertical Axis ☐

Look Sensitivity (Stick)

CANCEL   RESTORE   CONFIRM

We moved the shield, adding a few **player options** in the process, so the left-handed could enjoy the game as much as anyone else.

Our first hands-on demo also opened our minds to an **opportunity** we had with the two different screen modes: we could cater to different **playstyles**. As a design experiment, we began optimizing the landscape mode for **immersion**, allocating a good portion of screen real-estate to NPCs, 3D models, and the player's avatar. In the portrait mode, we got rid of the craftsperson NPC entirely...

...and cluttered the 3D model with non-essential, but useful, information: portrait became our "gameplay first" mode. The diverging layouts allowed us to be **bolder** in our design decisions, since we catered to a narrower subset of our players in each mode.
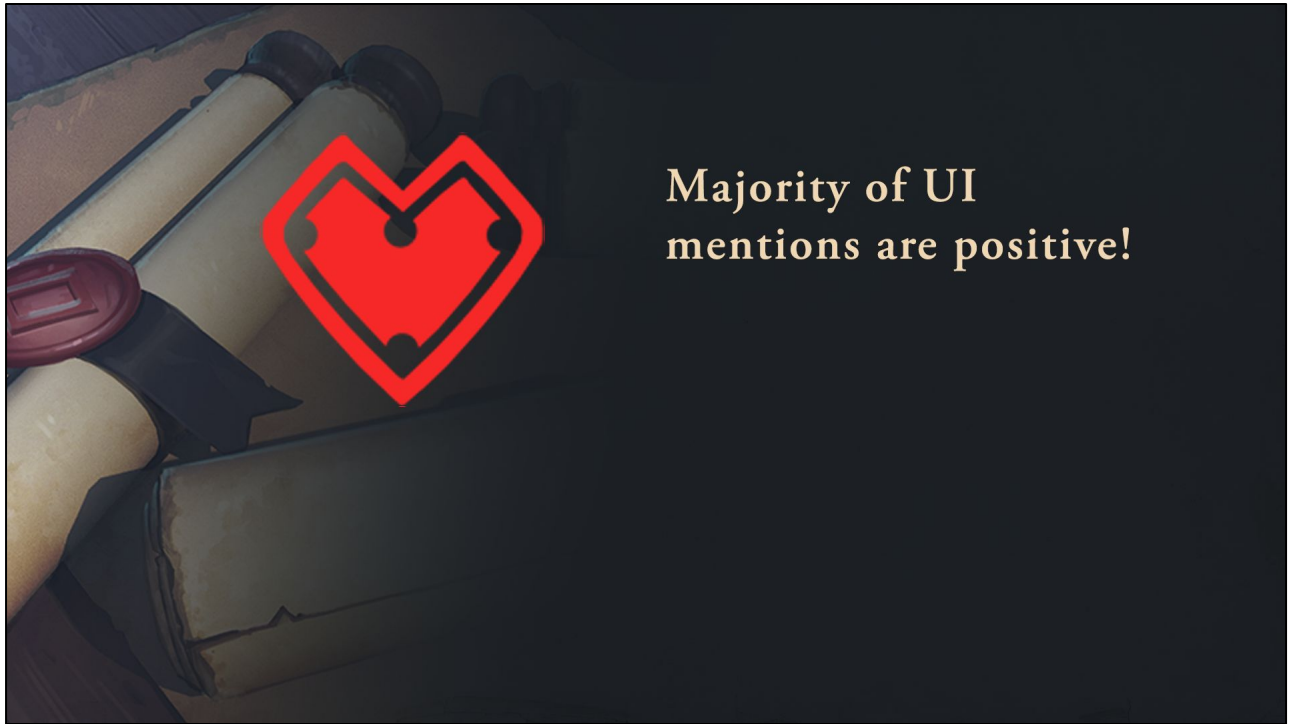
While it's still early to draw any conclusions as to whether this grand dual orientation experiment was all worth it...

the Player Response

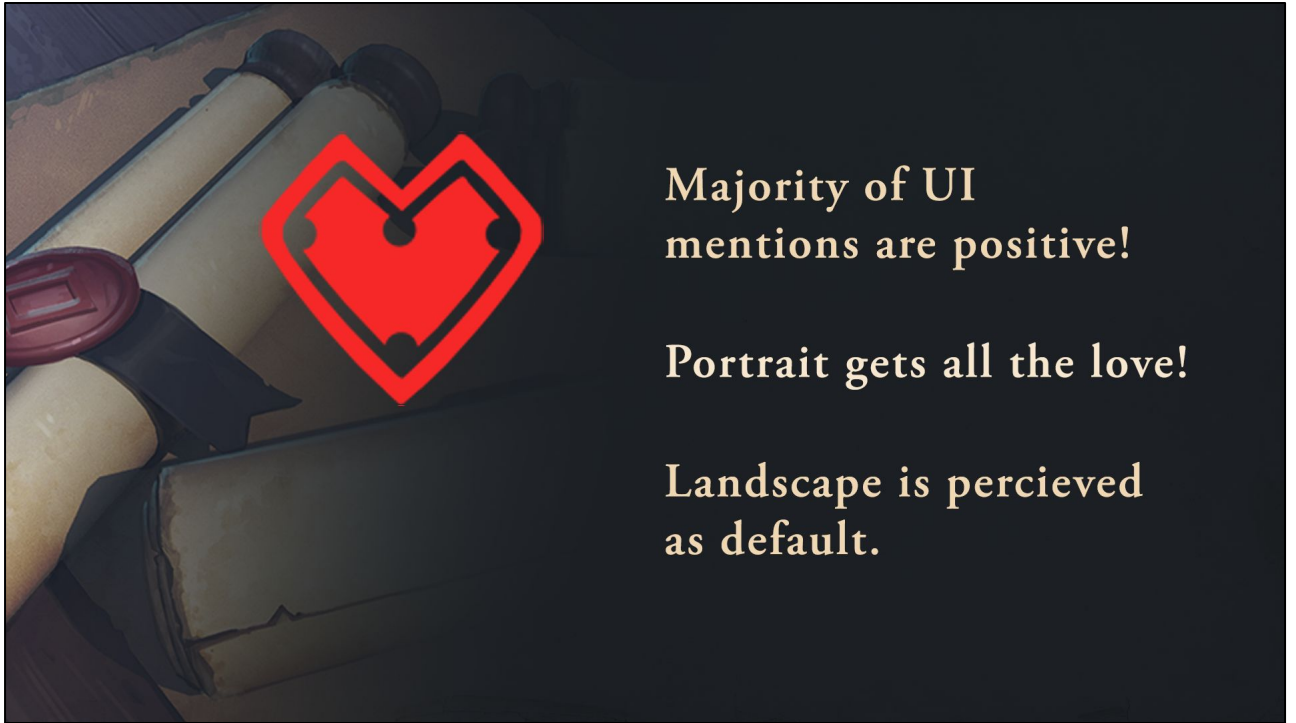...the results we have so far are interesting!

First, if we take a look at the freeform comment our closed beta players are sending us through a generic feedback email, we witness something unprecedented:

Majority of UI mentions are positive!

apart from bugs, in the majority of mentions, **the UI is mentioned positively.**

From my past experience, what typically happens in freeform comment is that good UI doesn't get noticed or ever mentioned, and when people do, it is to tell the developper what's wrong with it.

Majority of UI
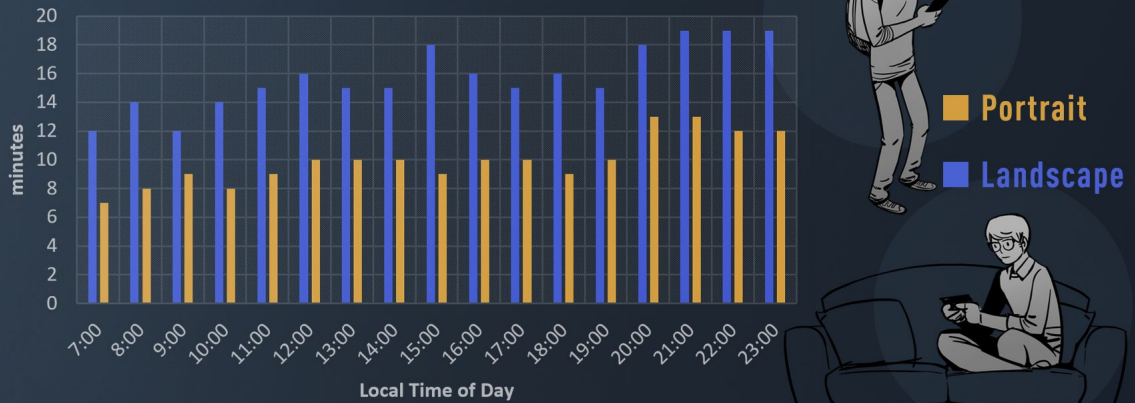mentions are positive!

Portrait gets all the love!

Landscape is percieved
as default.

What's interesting is that for Blades, in freeform comment, the **landscape** mode gets the usual treatment: people don't mention it. It is the **portrait** mode that gets all the love. Our players seem to perceive it as a **bonus mode,** while landscape is considered default.

Different modes
depending on **context.**

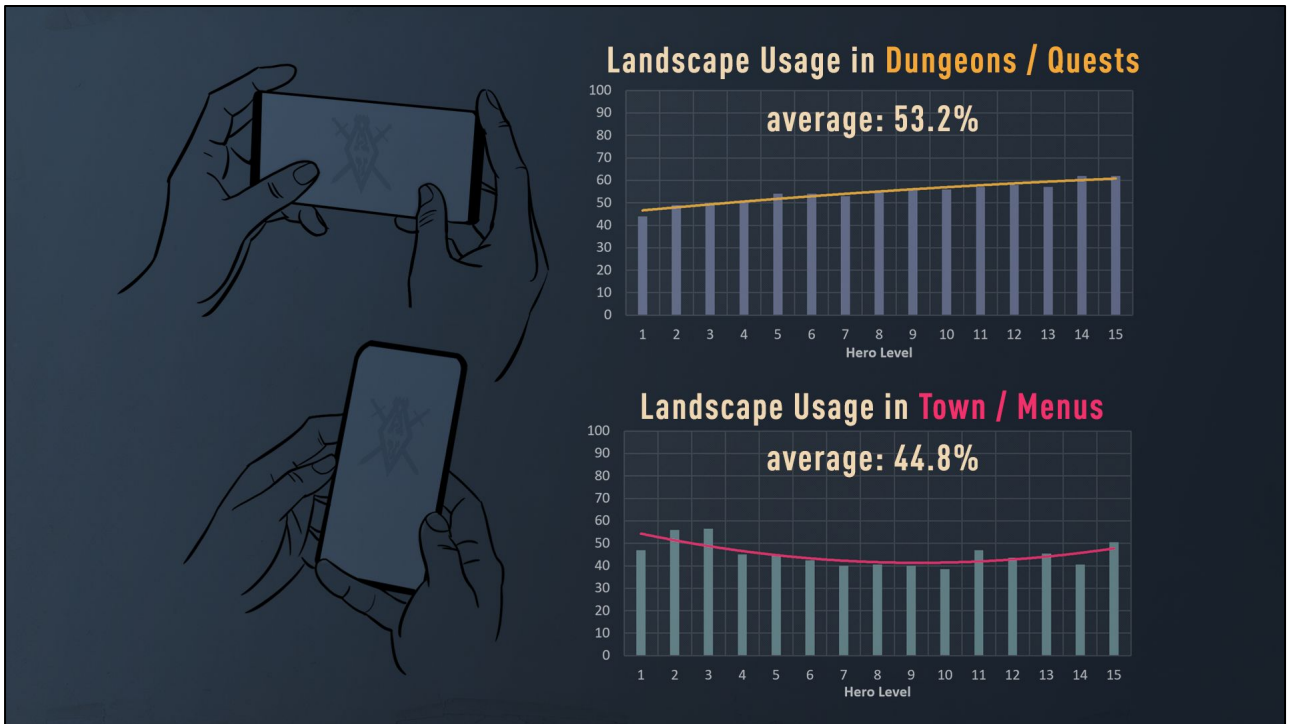~~Different modes
for different playstyles.~~

Digging a little further into our letters of portrait mode appreciation, we realize that our design assumptions about people with different playstyles choosing the mode that best suits them were partly wrong: quite a few of our playtesters have gone to great length to describe their use of the portrait mode, and it's all about **the context** of play. Associated keywords include "going" and "walking".
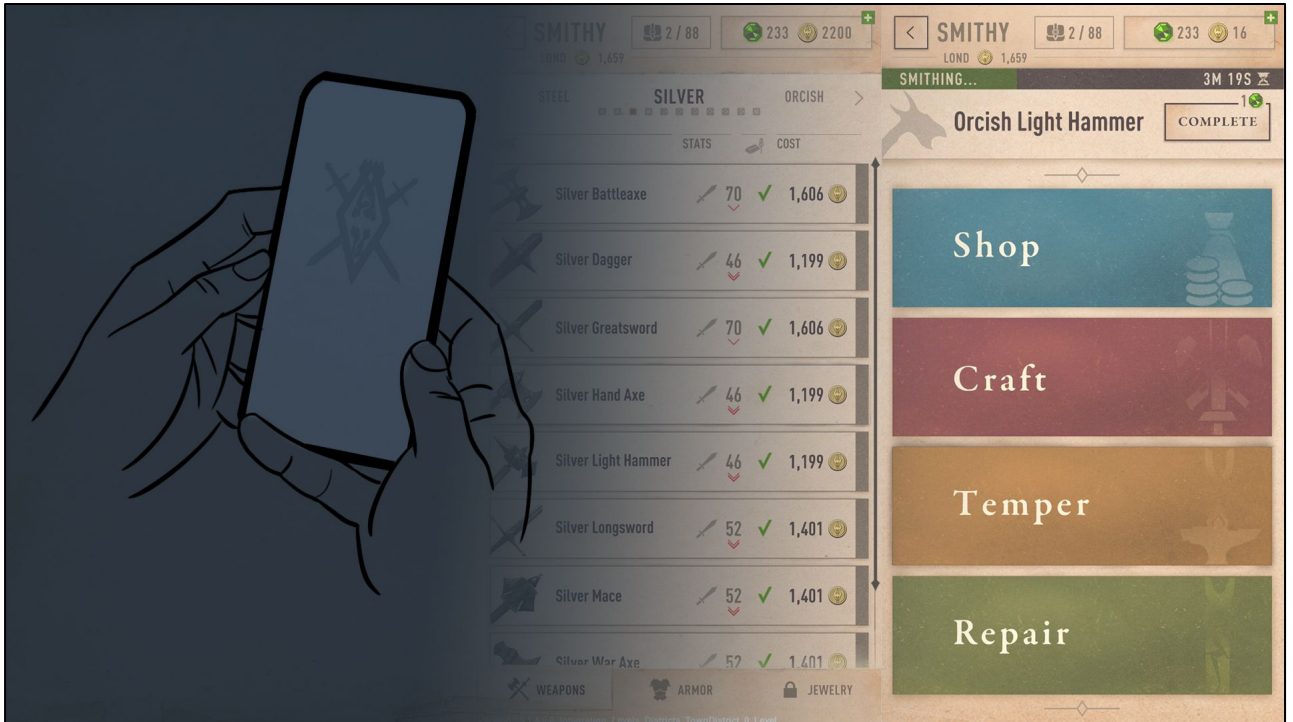
Telemetry data confirms this: for instance, we clearly see that **session length** is on average much shorter in Portrait, and also overall slightly shorter in the daytime, when people are going about their daily business, versus longer sessions in Landscape, past 8:00 PM local time, when players are more likely to be at home on the couch.

Landscape Usage in Dungeons / Quests — average: 53.2%
Landscape Usage in Town / Menus — average: 44.8%

One curious finding from digging into our device orientation telemetry data is the **gradual adoption of the landscape mode**, by the same players, over time: it's as if our players naturally realized the landscape experience is simply better, going back to the design principles explained earlier in this talk.
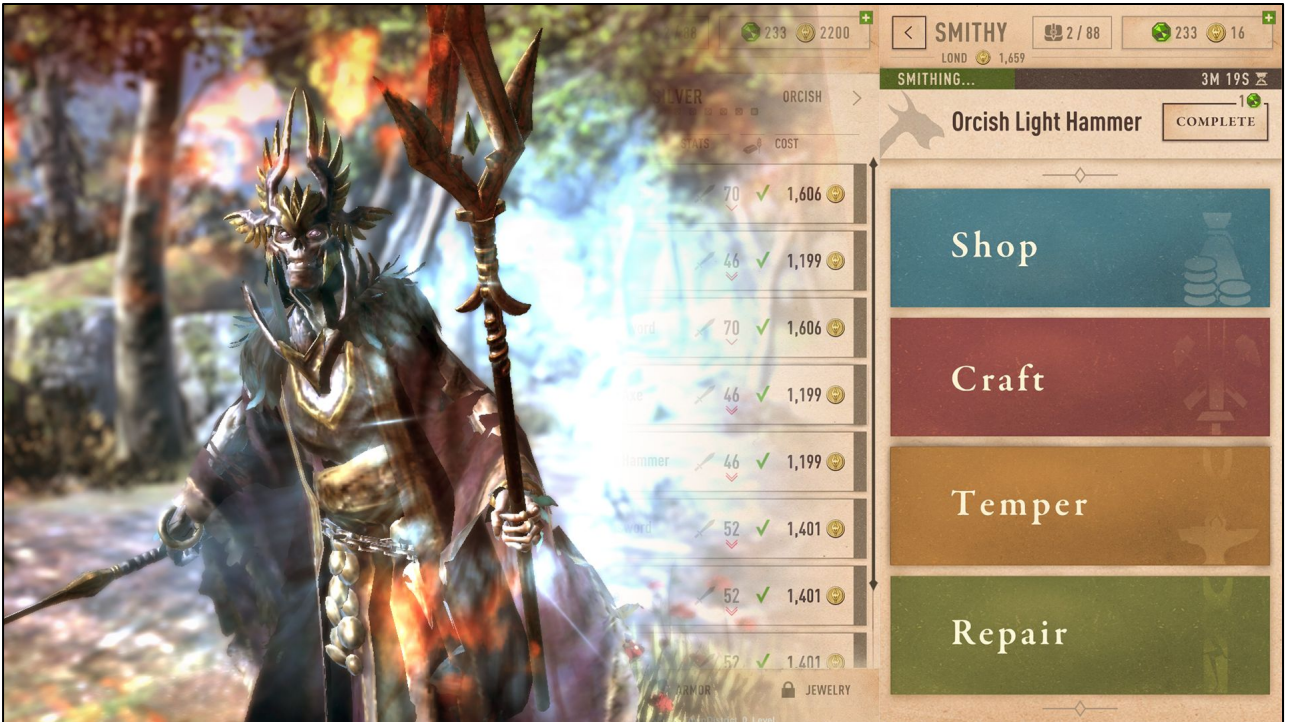
What's interesting, though, is that landscape adoption is not uniform: **menus** are still consistently viewed in portrait, **around 65%** of the time.

Globally, the trend we're observing is that many of our players will tend to go about their business in town in short, daytime sessions, **in portrait**: they'll get their gear repaired, temper a sword, brew a few potions…

and then they'll come back to the game later in the evening for longer sessions, **in landscape**, where they'll fight dragons and explore the abyss outside of town.

So in a way, dual screen orientation support has positioned The Elder Scrolls: Blades in the best of both worlds: it remains portable and accessible while making no concessions on the stunning RPG experience it provides.

The grand takeaway here is that, if well planned (both technically and production-wise), the return on investment of portrait-mode support on a 3D RPG experience on mobile is well worth the extra costs: the extra design constraints actually help improve the experience; and data shows our players appreciate it, and they use it when it suits them.

Thank you!

follow:
@mariejasmin_

feedback:
_bgs_mobile_playtest@zenimax.com

share:
#BladesInMeetings

Merci à Yves, Wendy, Rebecca, Long, Emma, Tiago, Véro, Craig et Todd;
Merci spécial à Guillaume Bonnet pour les illustrations <3

If you'd like to try it for yourselves, by all means, download the game and give it a run:
Blades is available to all, and it's free. Play it, and tell us what think!
Thank you!

MEDIA QUOTES:

It's an uncanny blend of deep console RPG mood with simple mobile gameplay easily pulled off while riding a subway.
https://www.geek.com/games/hands-on-the-elder-scrolls-blades-is-a-mythical-mobile-spin-off-1777376/

'Elder Scrolls: Blades' gets at least one thing right: The one-handed controls are *great*
https://mashable.com/article/elder-scrolls-blades-one-hand-controls-preview.amp

There are big sequels for Fallout, Doom, Quake and Elder Scrolls coming to PC, Xbox and PS4 in next few months -- and years -- but all I care about right now is Elder Scrolls Blades, the new free-to-play iOS and Android RPG. And I only care about it because of one single brilliant feature: The ability to play the game in portrait mode.

https://www.cnet.com/news/elder-scrolls-blades-most-anticipated-iphone-game/