



Esri International Developer Summit

Palm Springs, CA

The Design Process

Staying Ahead of Developers with Caffeine Addictions

Introduction

- Brent Pierce, Product Engineer
- Steven Nelson, UX Architect

Brent



Steven



Currently working on: ArcGIS Explorer



Disclaimer: This talk will be mobile-focused





Creative Lab

UX / UI

Dev Center

Dev Center

UX / UI

Developer

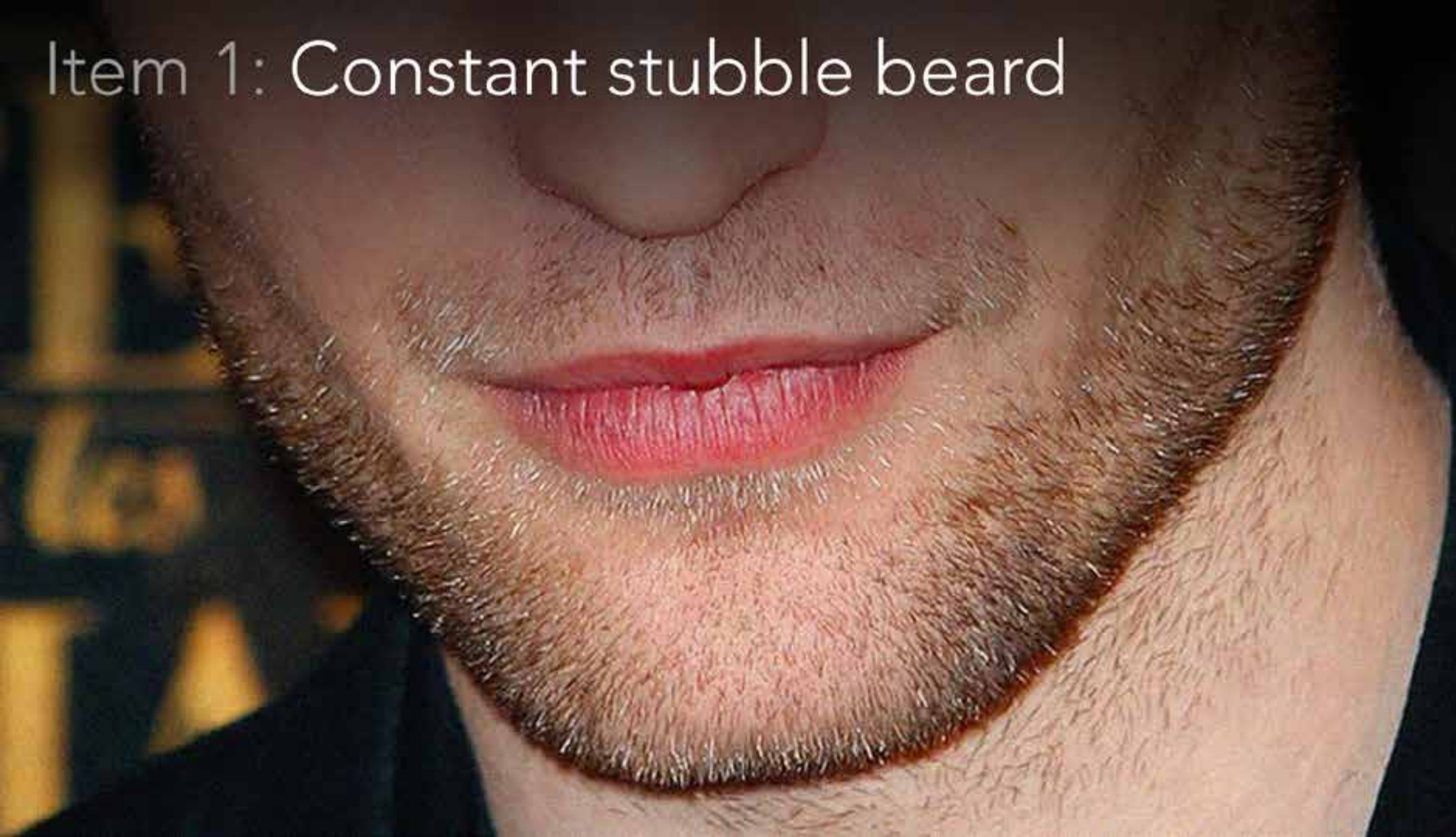
Product Engineer

Product Management

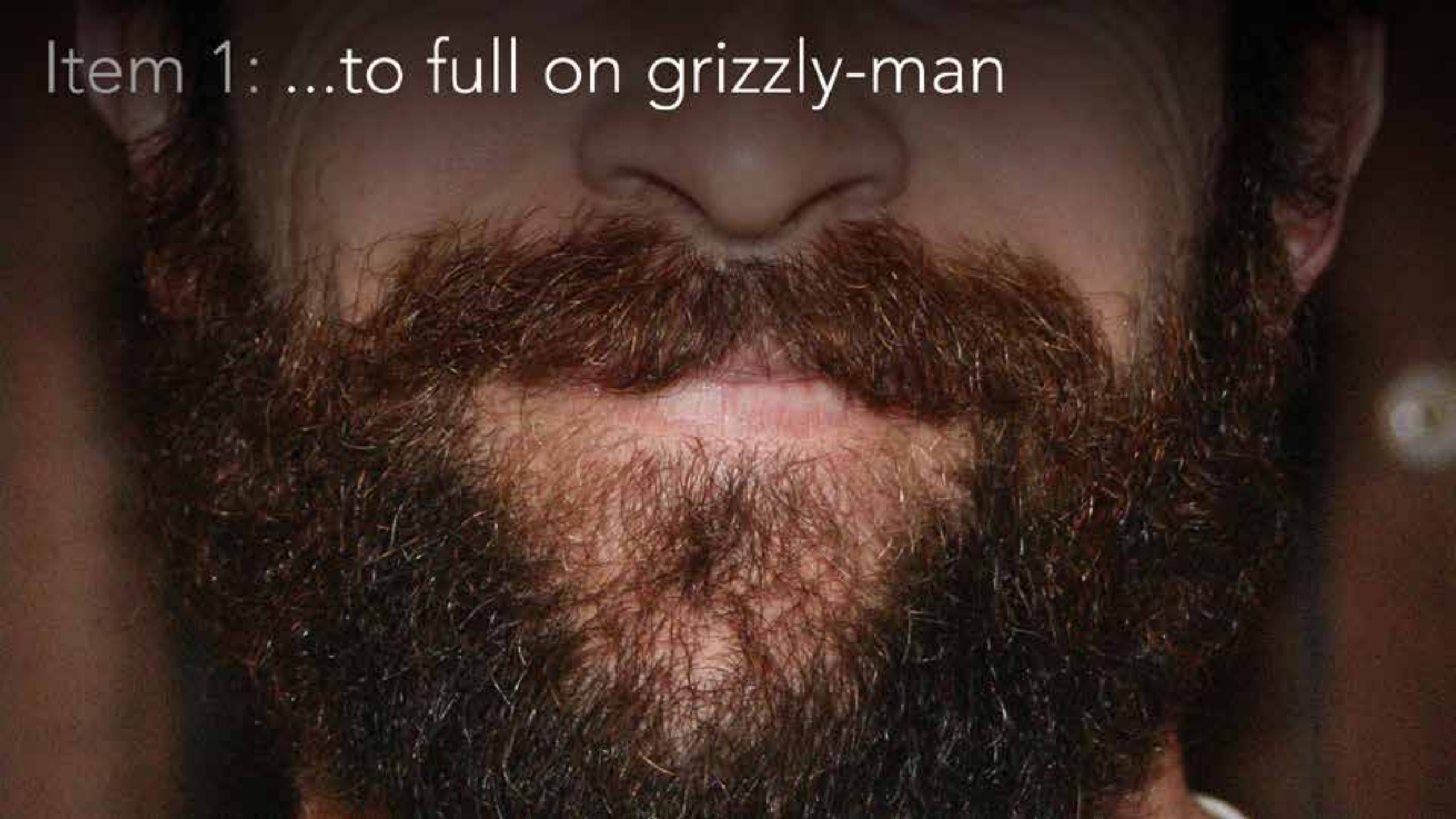


The Problem - Intro to the Developer in his Natural Habitat

Item 1: Constant stubble beard



Item 1: ...to full on grizzly-man



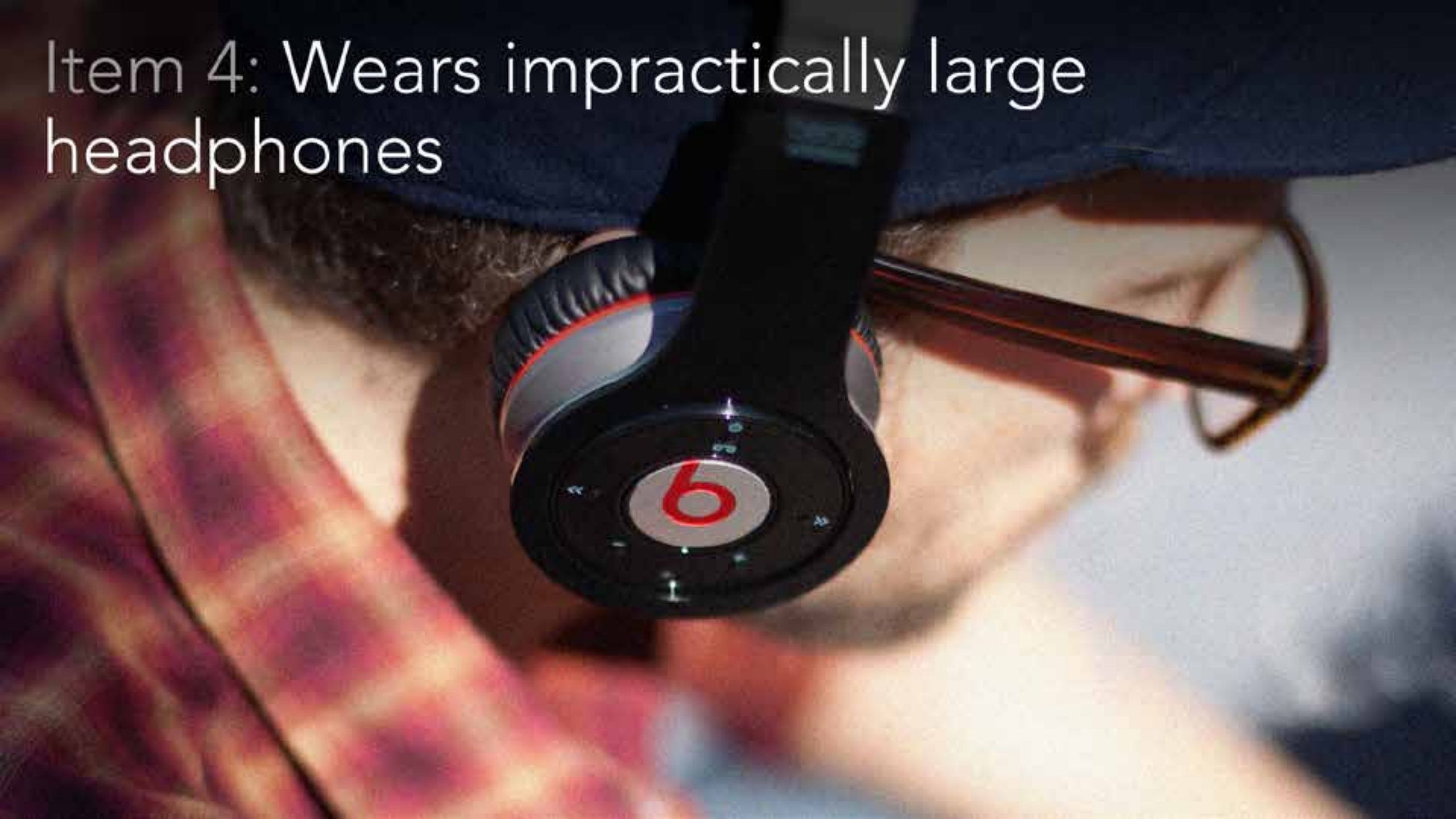
Item 2: wears t-shirts with obscure sayings that mix trends with snobby code references

There's no place
like 127.0.0.1

Item 3: Brings own keyboard to work



Item 4: Wears impractically large headphones



Item 5: blood-caffeine level:
a constant 0.50



General Problem Encountered when working with these creatures

- These characteristics contribute to great developers who: MOVE FAST
- Designs usually take a lot longer than it takes to code
- Designs need a little more review than code typically does
- You don't really know if a design works until it's been implemented

Practical Solution #1: **Front-Load Your Designs**

- Do your designing at least a sprint ahead of the implementation
- Anticipate design needs in your backlog

Extreme Cases:

- Design holiday: heads-down design week while devs are working on something that does not require design (refactoring, testing sdk's)

Release 2 (Q2 2014) 15 cards

Time Support - Interaction Design

Directions - Interaction Design

Printing Map - Interaction Design

Feature Service Backed Sketching - Visual Design

Export to PDF - Interaction Design

Recommending Maps and Notifications

Data Exploration - Interaction Design

Add a card...

Release 1 (Q1 2014) 22 cards

Contacts - Visual Design

Emailing/Texting link to the map - Visual Design

Dropping Pin - Visual Design

Sign In / Out - Visual Design

Filters and Predefined queries - Visual Design

Legend Tool - Visual Design

Feature Popups - Visual Design

Coach Marks - Visual Design

Favorites - Visual Design

Empty Dataset Consistency

Add a card...

Current Sprint 4 cards

Custom Roles for Organizations

Loss of Connectivity - Interaction Design

Curated set of maps for the Try It experience

Add a card...

In Progress 2 cards

Portal Settings - Interaction Design

Add a card...

Done 95 cards

Map Details - Visual Design

Start Screen - Visual Design

Find Maps - Visual Design

Filters and Predefined queries - Interaction Design

Dropping Pin on Map - Interaction Design

Presentation Playback - Interaction Design

Feature Popups - Interaction Design

Add a card...

Practical Solution #2: **Separate interaction and visual aspects of a design**

- Create low fidelity interaction designs that can go straight to dev
- Follow with a higher fidelity visual design

Practical Solution #3: Couple a designer to a design

- Designer owns the design until it gets implemented
- Always available for questions
- Has final say on if the implementation meets the “spirit” of the design
- Designs will need to be reworked during implementation, the designer takes the lead on reworking the design and updating the appropriate design artifacts
- Also key to cross-platform support
- You don't know if a design works until it is implemented.

Practical Solution #4: Reviews

- Design studio
- Interaction designs reviewed by visual designers and visual designs reviewed by interaction designers
- (keep everyone on the same page)

Practical Solutions #5: Good Communication Tools

- Notifications
- Prioritization
- Record of conversation
- Everyone is pulling and building the code.



Keys to a good interaction design

- Sweat the details
- Tell a story with the design
- Don't fall into the high fidelity trap (it don't have to be pretty)
- Concentrate on interactions

- Key details that often get overlooked
 - State: when should it be saved/maintained
 - What if the app is killed by the platform?
 - Connectivity
 - What is persisted and where are app settings stored?
 - With the app or the platform



let's user get back to current map.

Current map is behind browse experience (most recent map opened, or default map for first time users)

date last updated

map image, and entire background of tile are tappable and will open the map

opens a details view of map

owner of map, tapping on it will query other maps authored by the user



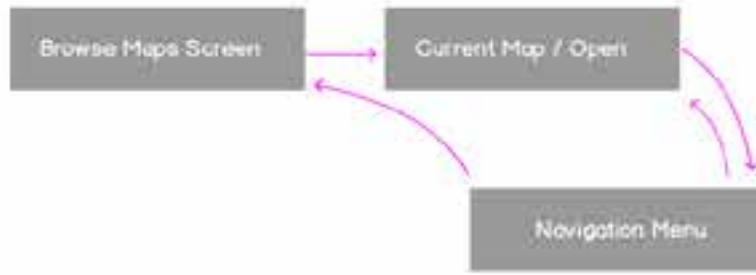
universal tools (share, search map, gps, bookmarks)

Browse Maps Screen

Current Map / Open

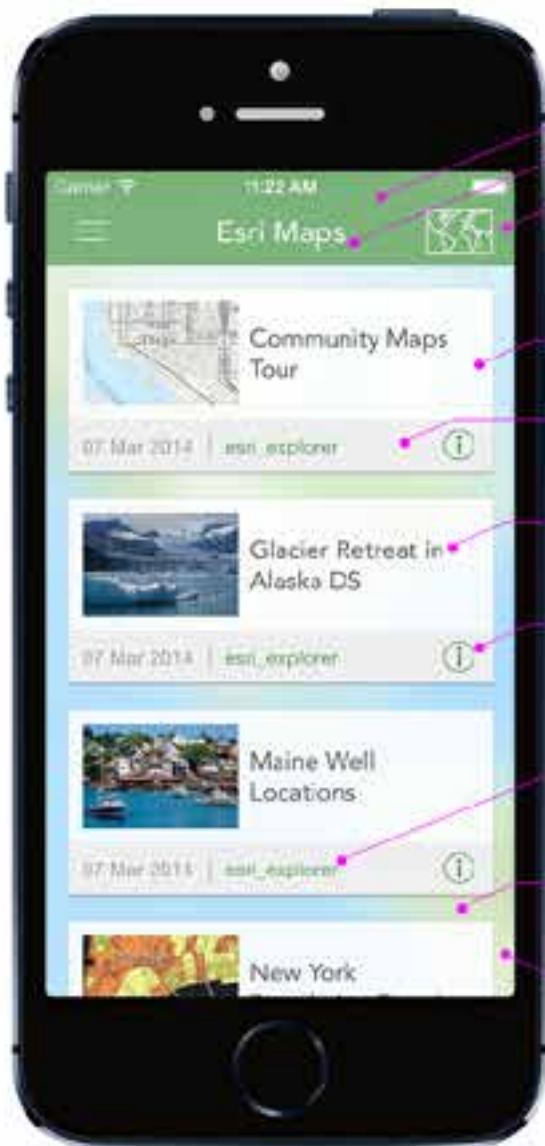
Navigation Menu

tools paired with map (measure, sketch, presentation, etc.)



Keys to a good visual design

- Design with a visual system in mind
- Be consistent
- Make sure visual aspects of the brand are communicated
- Be attentive and vocal in the interaction design review process
- Make sure your design doesn't disrupt the vision of the interaction design
- Know how to communicate your designs to developers
- Don't be distracting, be delightful



B=104 G=170 B=103, OPACITY: 95%

AVENIR MEDIUM 20PT

BROWSE EXPERIENCE BACKGROUND

90% OPACITY, WHITE,
BORDER:R=204 G=204 B=204

BG: R=239 G=239 B=240

AVENIR ROMAN 17PT

ICON TINT COLOR:
R=91 G=148 B=90

LINK COLOR
R=91 G=148 B=90

15PT VERTICAL SPACE

15PT MARGIN

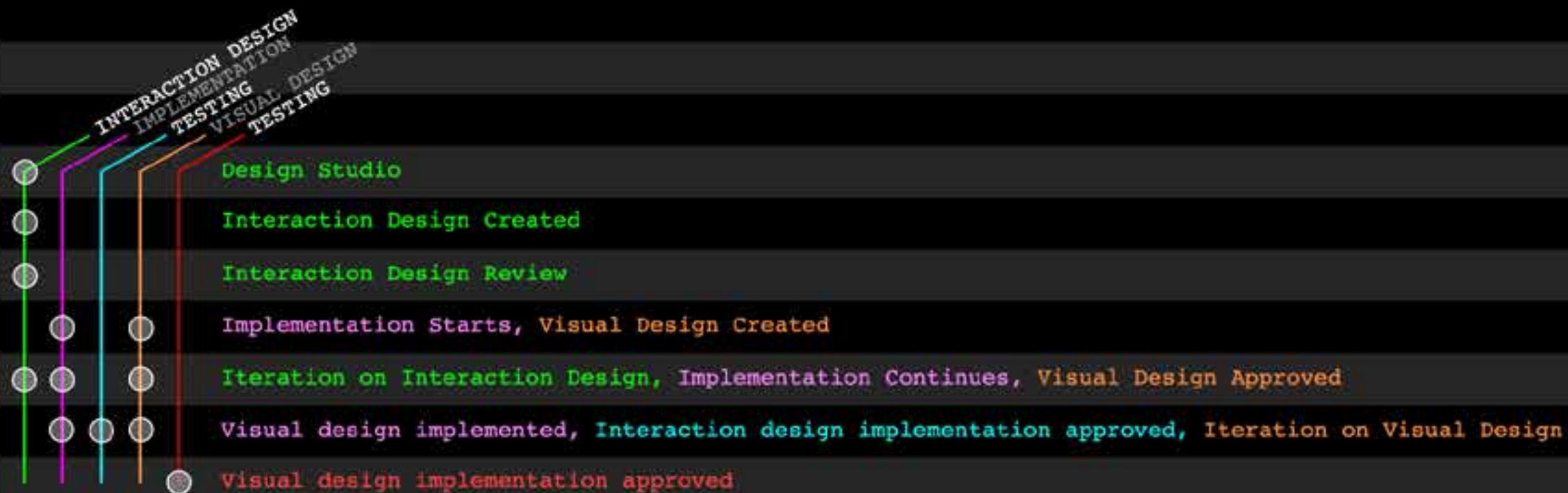


18PT MARGIN

USE TOOL BAR SIZE

MAP AREA, BLUR WHEN BROWSING

TOOL BAR BG COLOR: R=248 G=248 B=248



Conclusion

- Separation of Interaction and Visual elements is key
- Good communication is critical to make this work
- Every needs to buy into a design - no throwing over the wall



Understanding our world.