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- 
- Notifications Off
 - Phone silenced and in DND mode
 - Check presenter notes
 - Start screen capture

Developing with WatchKit 1.0



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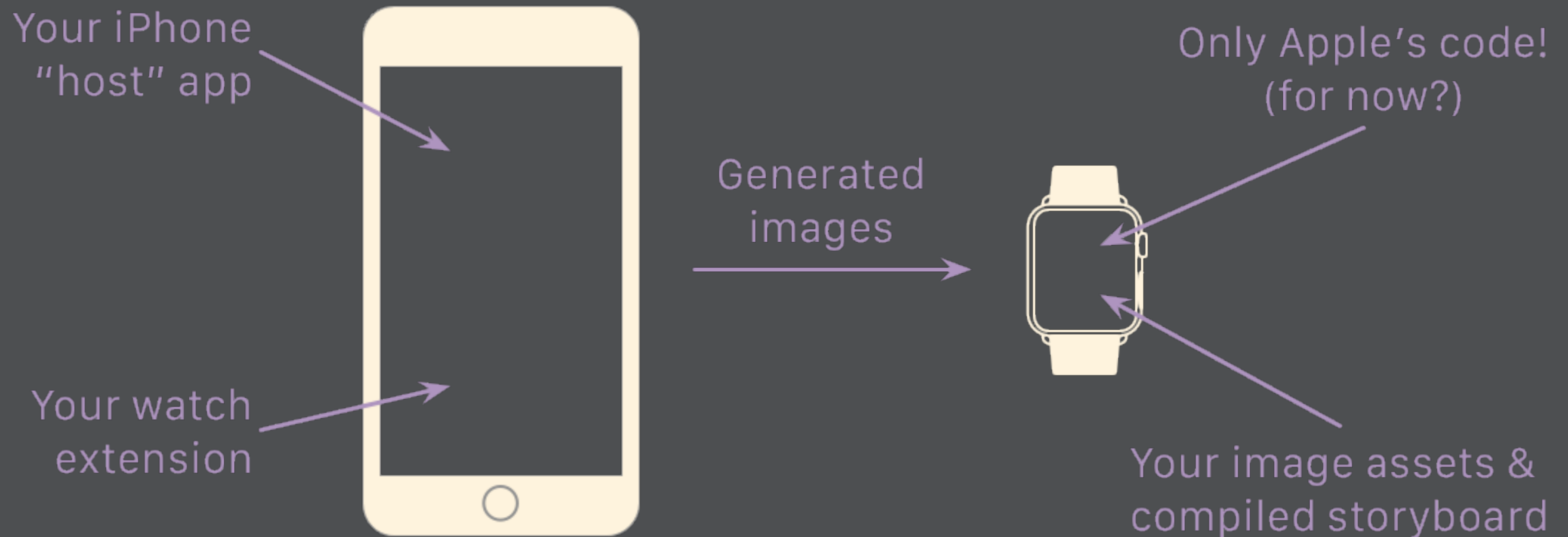
Outline

- Conceptual model
- Sample app
- Syncing data with  Watch
- Debugging  Watch apps
- Some challenges
- Other resources
- Wish list

Conceptual Model 1

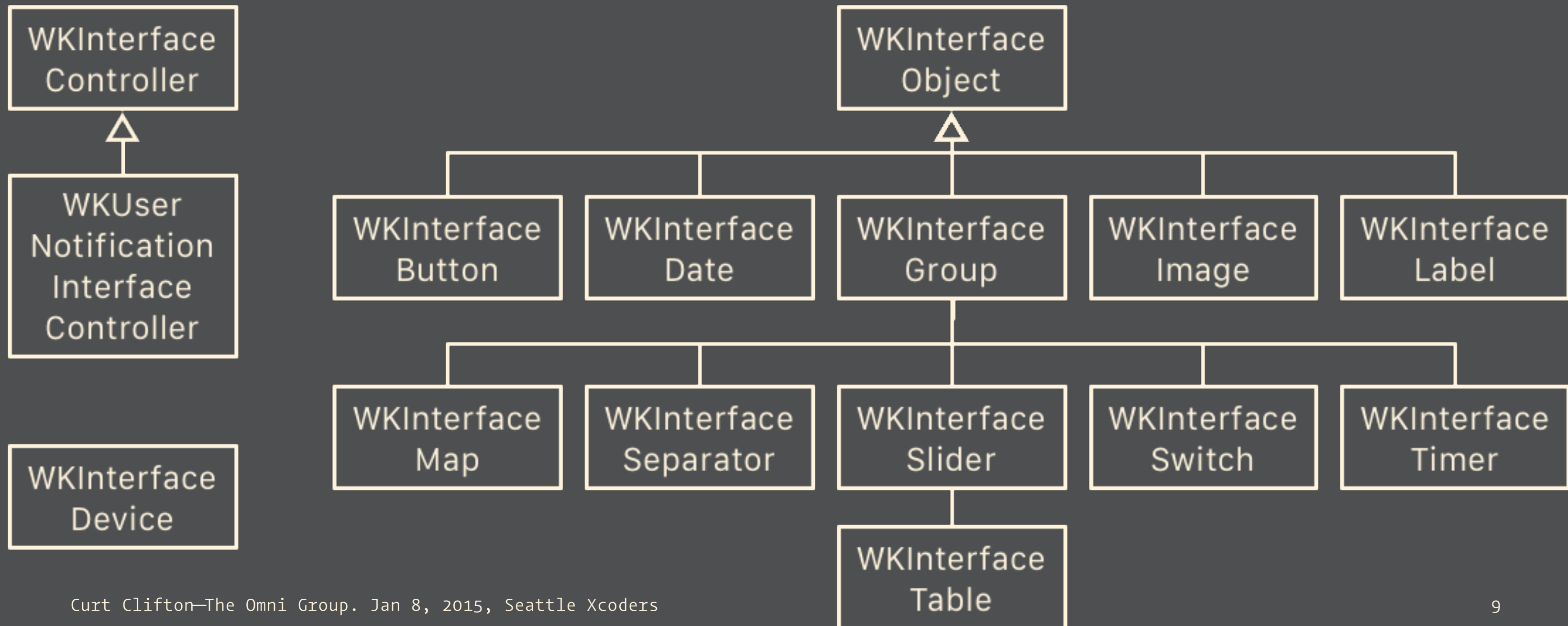
In WatchKit 1.0 your code *runs*
in an extension *on the iPhone*.

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**All the WatchKit classes fit on
one slide that you can read.**

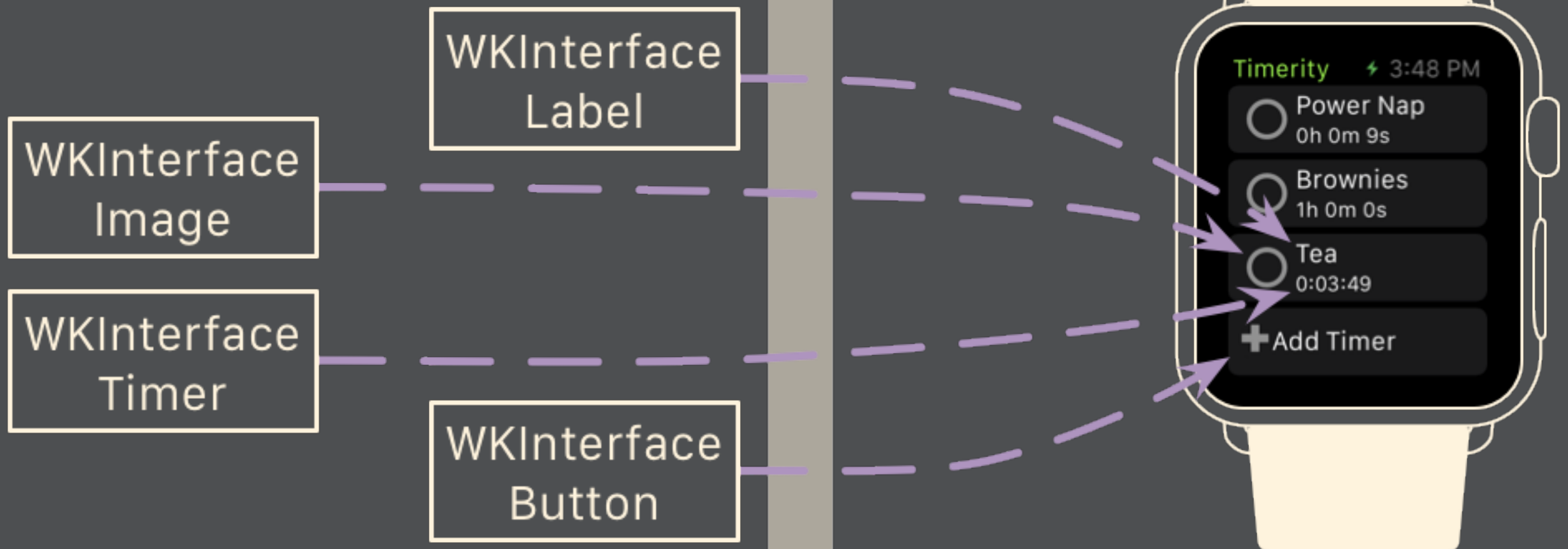
All the WatchKit classes fit on one slide that you can read.



All the WKInterfaceObjects are proxies for views on the watch.

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**Your watch extension
on iPhone**



All the WKInterfaceObjects are proxies for views on the watch.

Your watch extension
on iPhone

```
interfaceProperty
- setHidden:
- setAlpha:
- setWidth:
- setHeight:
- setAccessibility...:
- setText:
- setTextColor:
- setAttributedText:
```

WKInterfaceLabel

WKInterfaceButton



Conceptual Model

- In WatchKit 1.0 your code *runs* in an extension *on the iPhone*.
- All the WKInterfaceObjects are proxies for views on the watch.

Sample App

Syncing Data with Watch

Your watch extension is a separate process from your iPhone app; you just signed up for data syncing.

Watch apps die
easily; network
operations are
right out.¹

¹ Monty Python and the Holy Grail

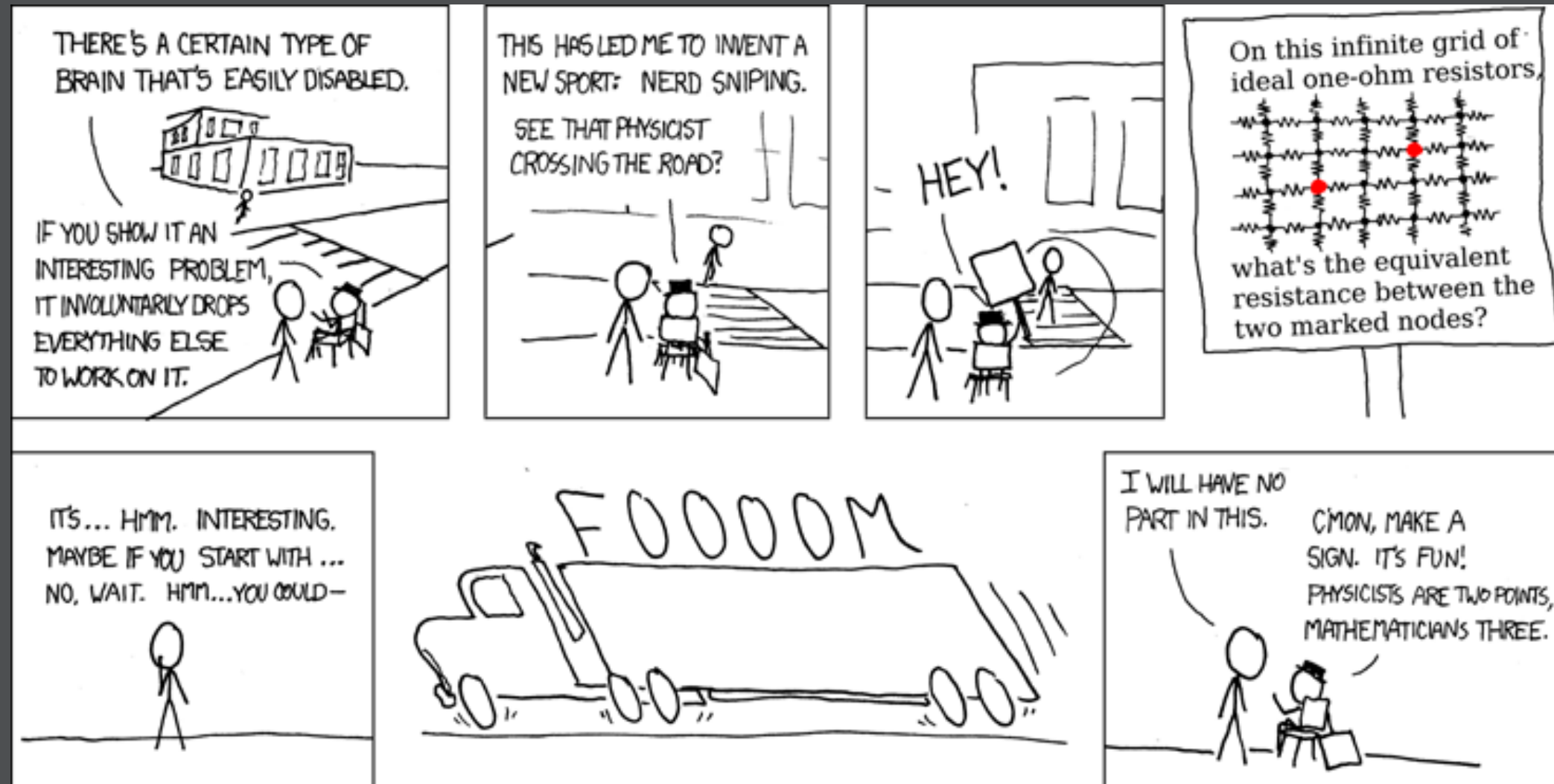


What's a developer to do?

- File coordination? Nope.
- App Group entitlement and user defaults
- Shared CoreData database
- Shared SQLite database
- Seed file & callbacks

Cartoon of the Day

Cartoon of the Day²

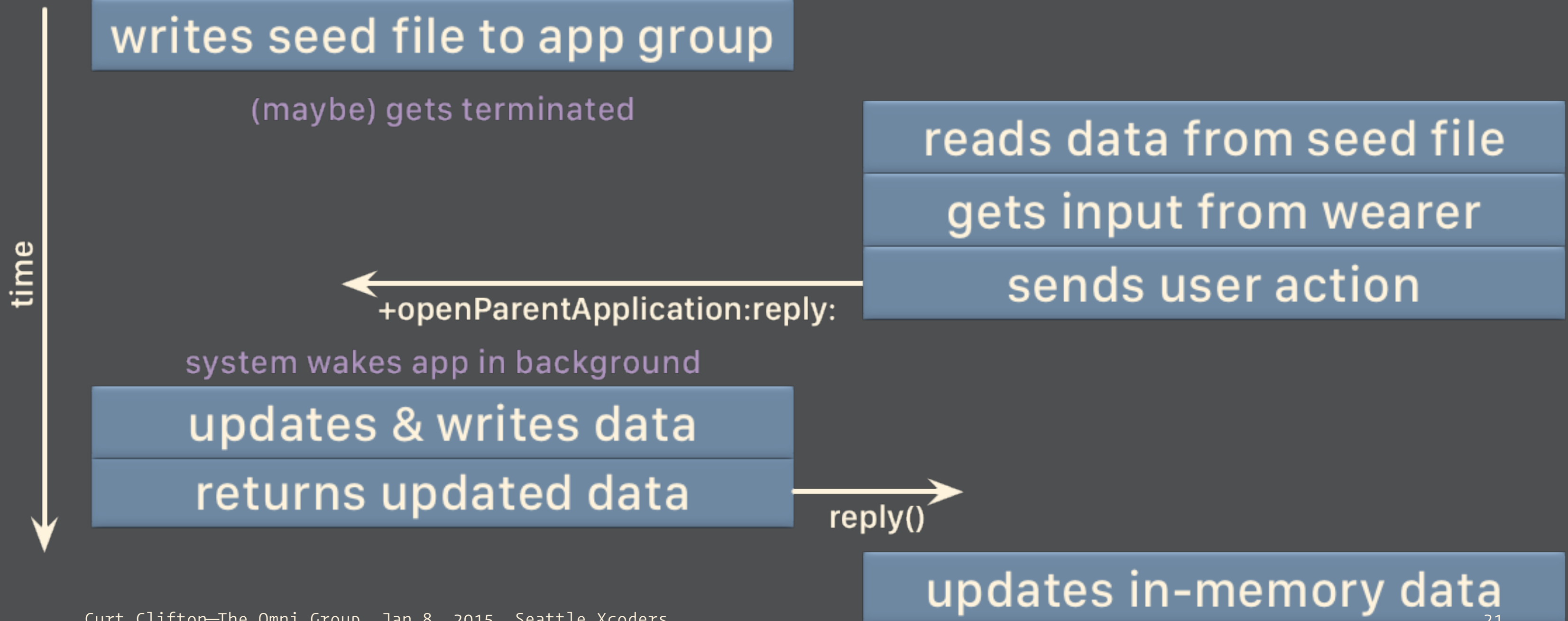


² <https://xkcd.com/356/>

Syncing Using Seed File & Callbacks

iPhone Host App

Watch Extension



Syncing Data with Watch

- Your watch extension is a separate process from your iPhone app; you just signed up for data syncing.
- Watch apps die easily; network operations are right out.¹

¹ [Monty Python and the Holy Grail](#)

Debugging Watch Apps

- Run iPhone app first
- Open Watch “external display”
- Launch the WatchKit app
- In the simulator, tap the iPhone app
- In Xcode, connect to the iPhone app
- Use Console to watch Simulator’s system log

Challenges

Challenges



- Sending UI commands to non-active controls
- Using shared frameworks
- Selecting watch menu items crashes the simulator eventually
- No auto layout?
- Notifications while watch app is running?

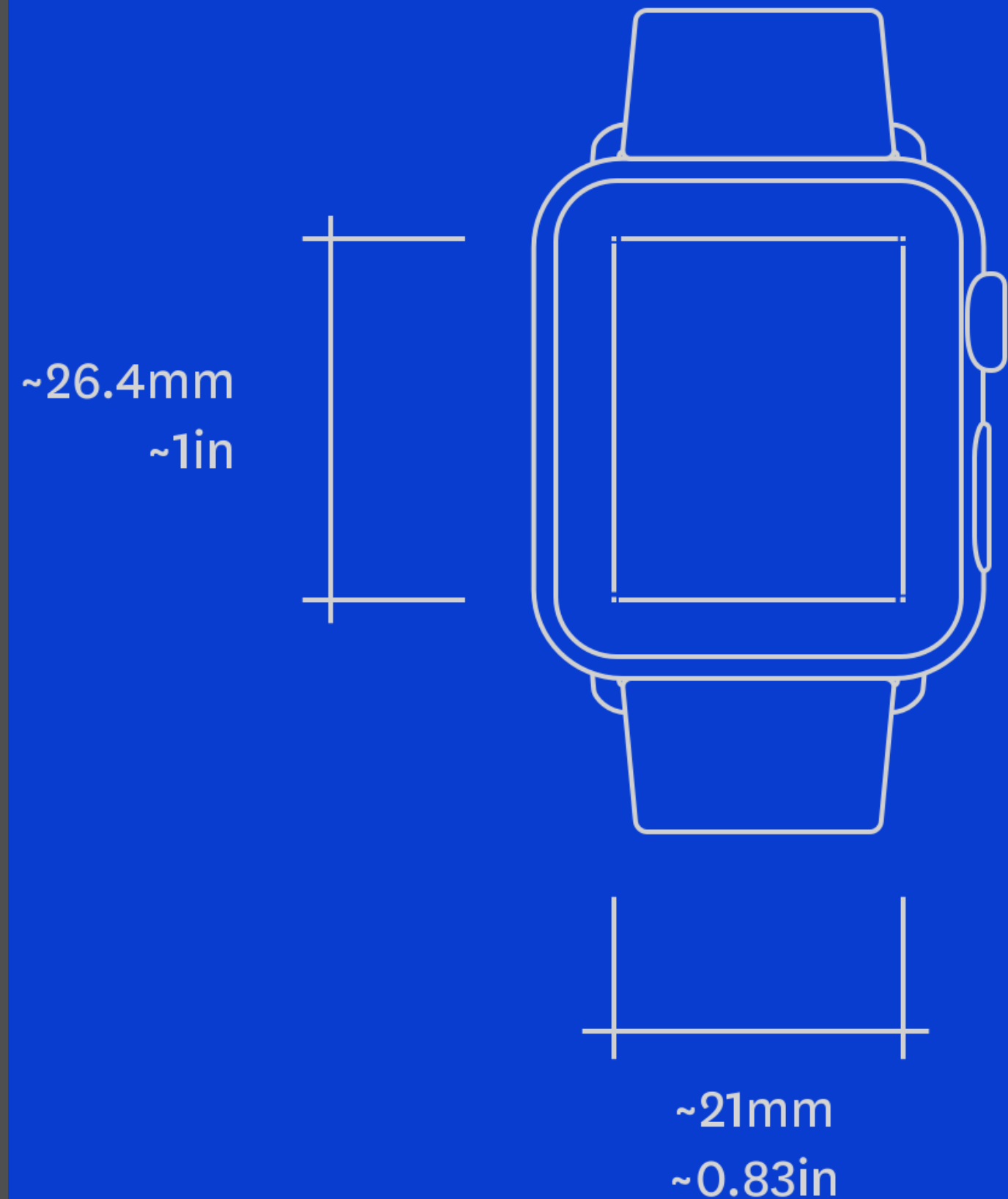
Useful Resources

From Apple

- Marketing site
- Dev and design resources

From Others

- “A Day with Watch”
Craig Hockenberry
- “As I Learn WatchKit”
David Smith
- To-scale Watch Mockup PDF
Thibaut Sailly



Bezel

- Free from Troy Gaul
- Combine with Xscope Mirror



Wish List

- Direct access to the Taptic Engine
- iPhone-free 3rd party code
- API for digital crown
- Animated state changes
- Interactive Glances

Thanks!!

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