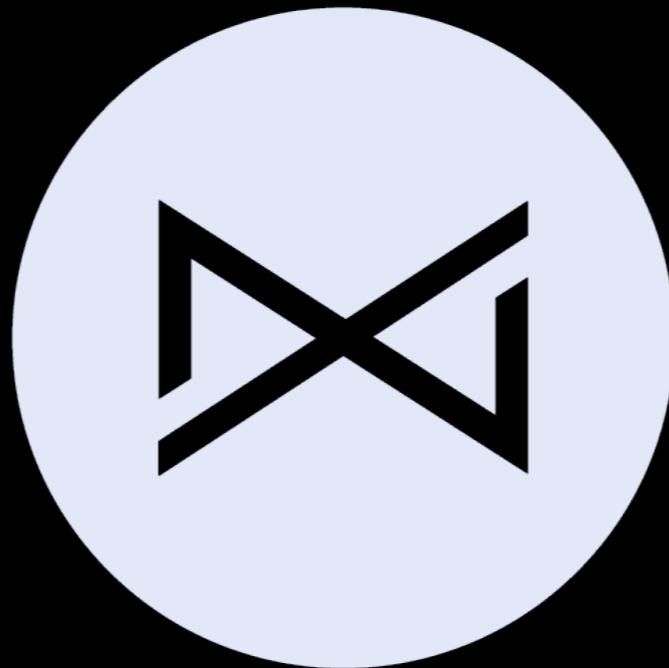
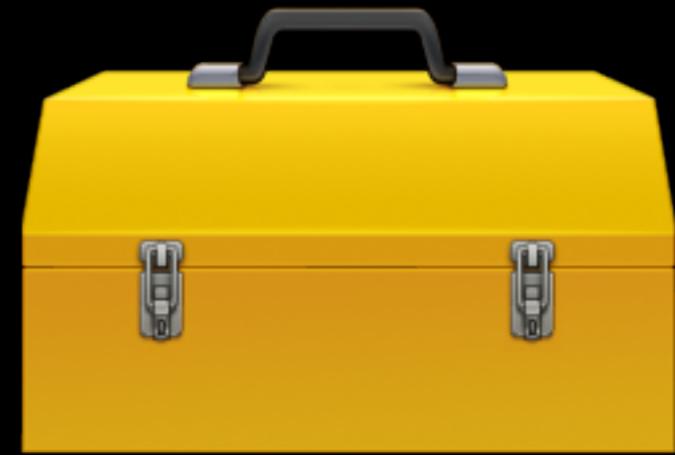


SaaS SDK as a Service





VS



Things to share:

- Who is the customer and how that affected our choices
- Compatibility
- The environment

Are you my customer?



Are you my customer?

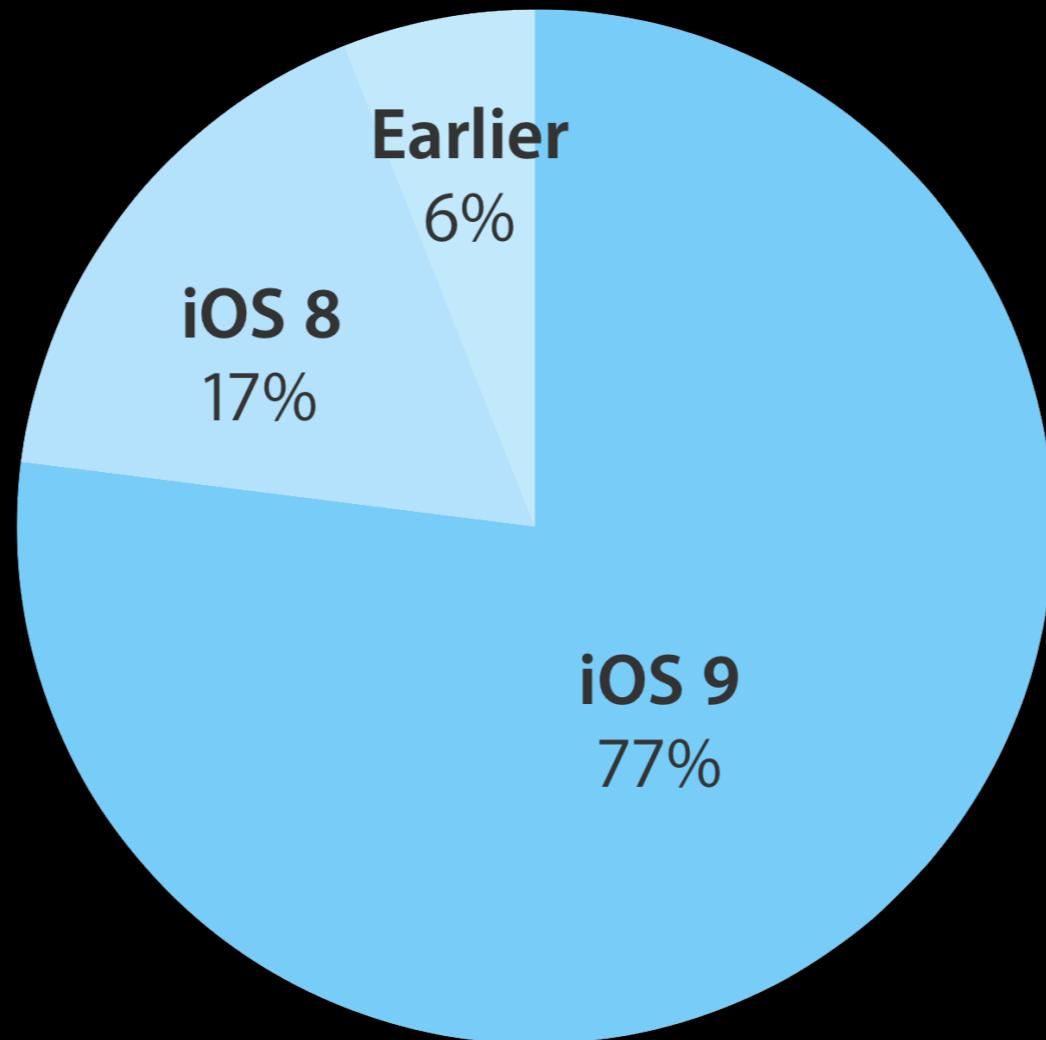


Which platforms and versions to support?

Which technologies to use?

iOS Version Statistics

...of user devices



iOS Version Statistics

...of apps in App Store

Min. iOS 9.0	
Min. iOS 8.0	                   
Min. iOS 7.0	                                  
Min. iOS 6.0 😊	   

Swift? Obj-C

	DemoBanking
	DemoBanking.app.dSYM
	DemoBanking.swiftmodule
	arm.swiftdoc
	arm.swiftmodule
	arm64.swiftdoc
	arm64.swiftmodule

	DemoBanking
	embedded.mobileprovision
	Frameworks
	libswiftContacts.dylib
	libswiftCore.dylib
	libswiftCoreGraphics.dylib
	libswiftCoreImage.dylib
	libswiftDarwin.dylib
	libswiftDispatch.dylib
	libswiftFoundation.dylib
	libswiftObjectiveC.dylib
	libswiftUIKit.dylib
	Info.plist

“It would be dangerous to rely upon binary frameworks that use Swift — especially from third parties.”

– *Swift.org*

[*https://developer.apple.com/swift/blog/?id=2*](https://developer.apple.com/swift/blog/?id=2)

	iOS 8.0 +	iOS 7.0 +
Objective-C		
Swift	 Open source only	 Open source only, copy code

Compatibility



New Version of App

↓ auto-updates

User Updates the App



New Version of SDK

↓ may never happen...

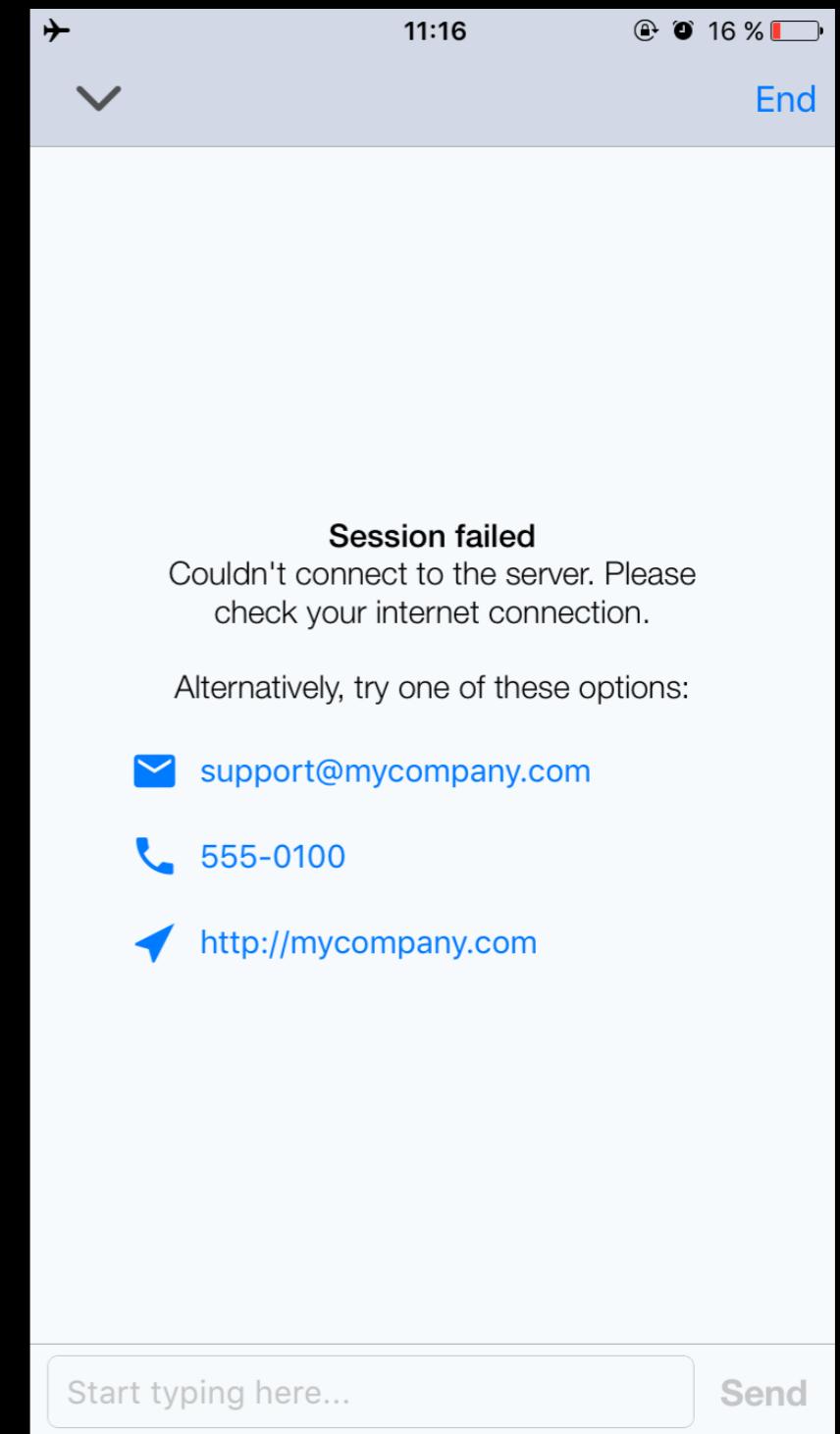
New Version of App

↓ auto-updates

User Updates the App

Forward Compatibility

- v1.0 might be out there forever
- What would happen when it stops working?
- There will be new features, or versions of features...



Backwards Compatibility

- Can't afford breaking changes on backend
- Public API - breaking changes only if needed

Mind your surroundings

- Device
- Arbitrary project and its configuration
- Arbitrary UI hierarchy

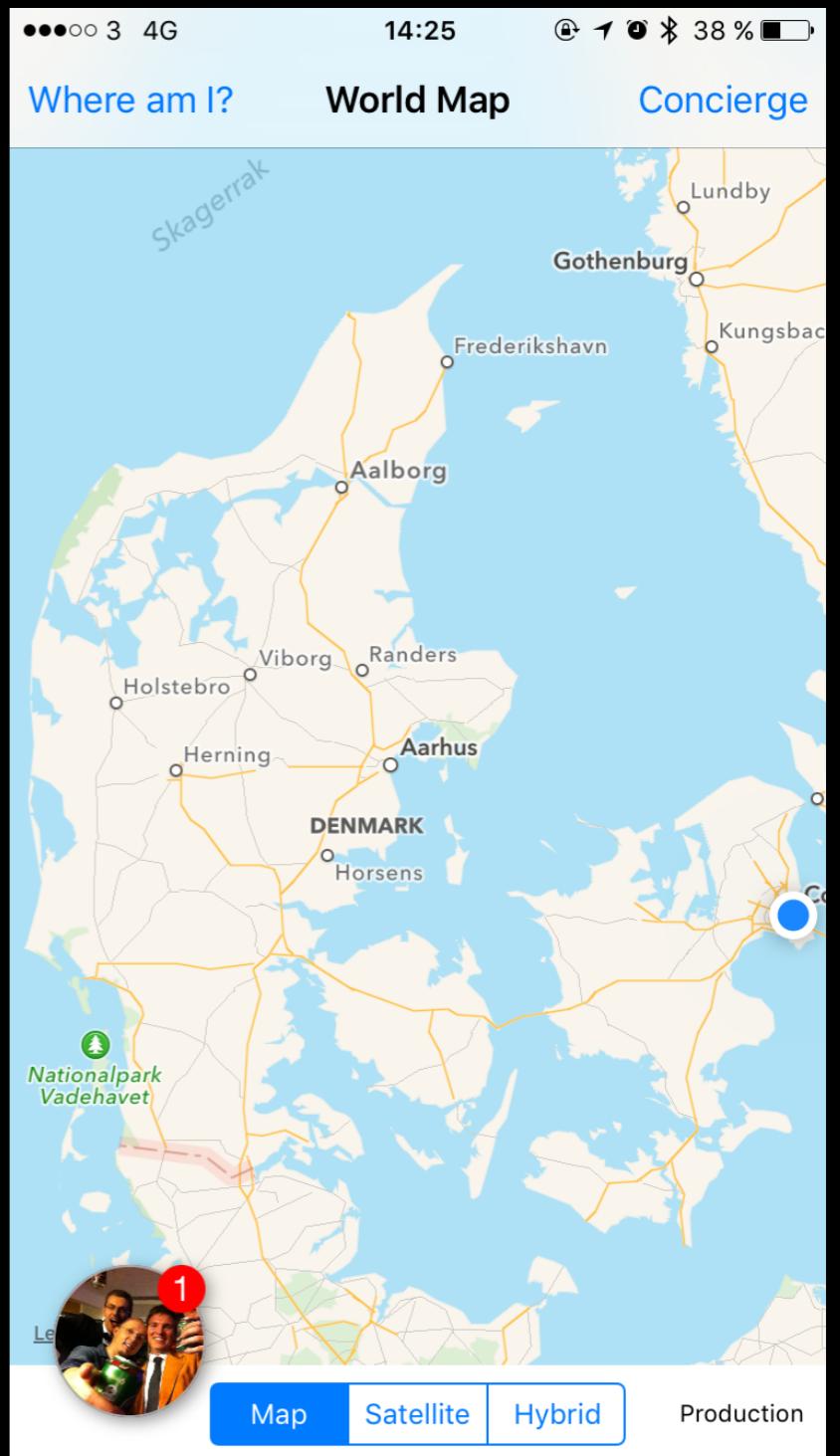
- No Swift - No Modules. Prefix classes, to avoid duplicate symbols
- `-ObjC` is evil (`-force_load` is good)
- `NSLog...`

Windows

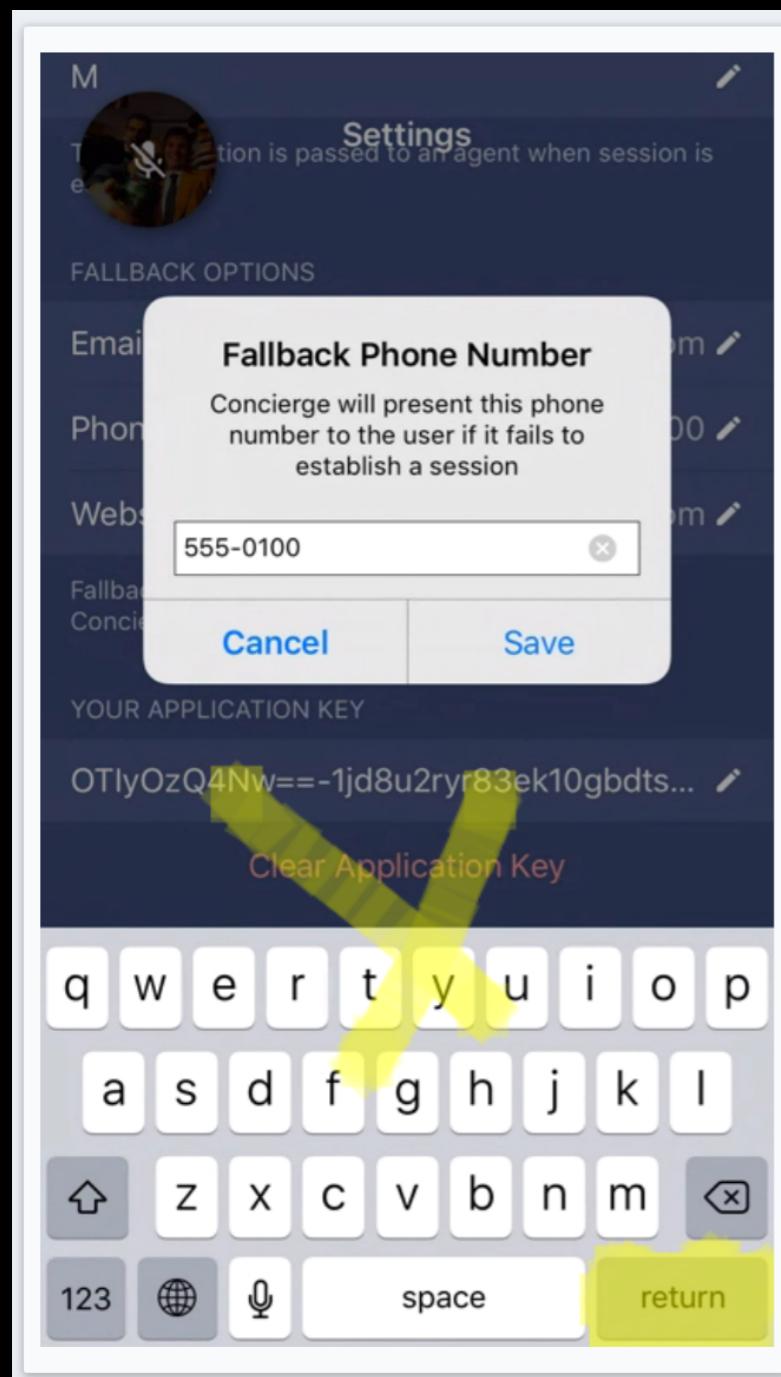
- A window on top of everything
- Window level is important.

```
UIWindowLevelNormal = 0;  
UIWindowLevelStatusBar = 1000.0;  
UIWindowLevelAlert = 2000.0;
```

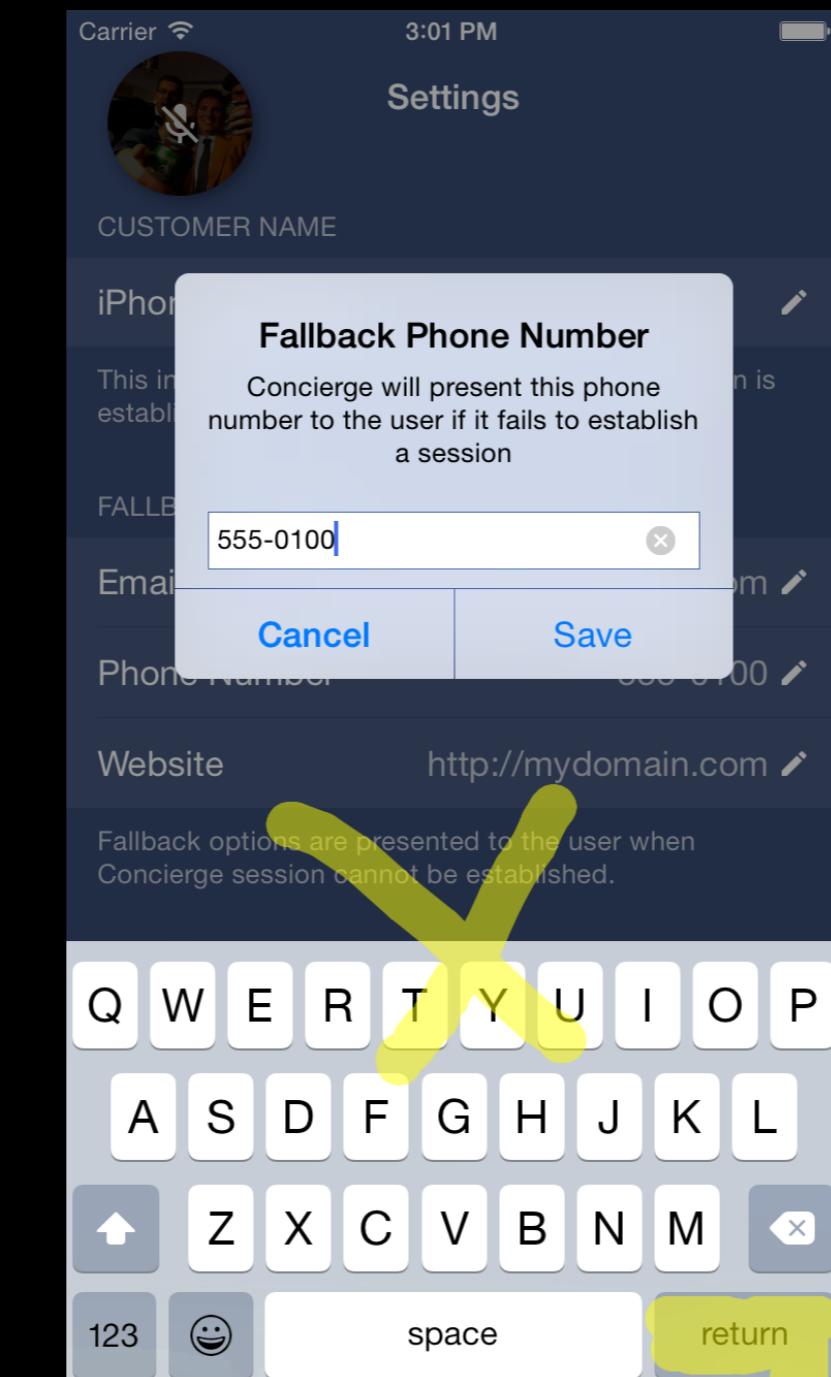
```
UIWindowLevel CSKConciergeWindowLevel = 500;  
UIWindowLevel CSKConciergeAnnotationsWindowLevel = 10000000;
```



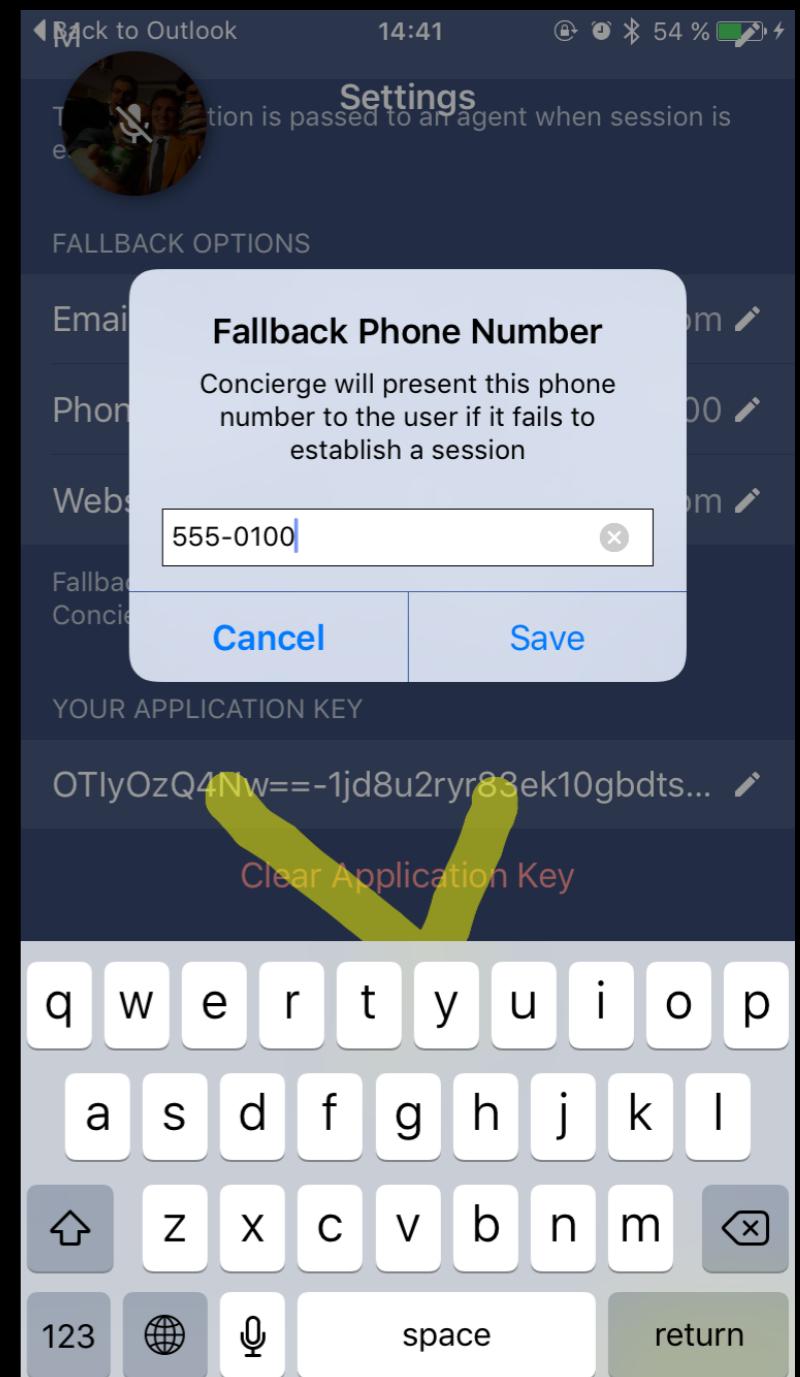
Keyboard



Web



iOS 8



iOS 9

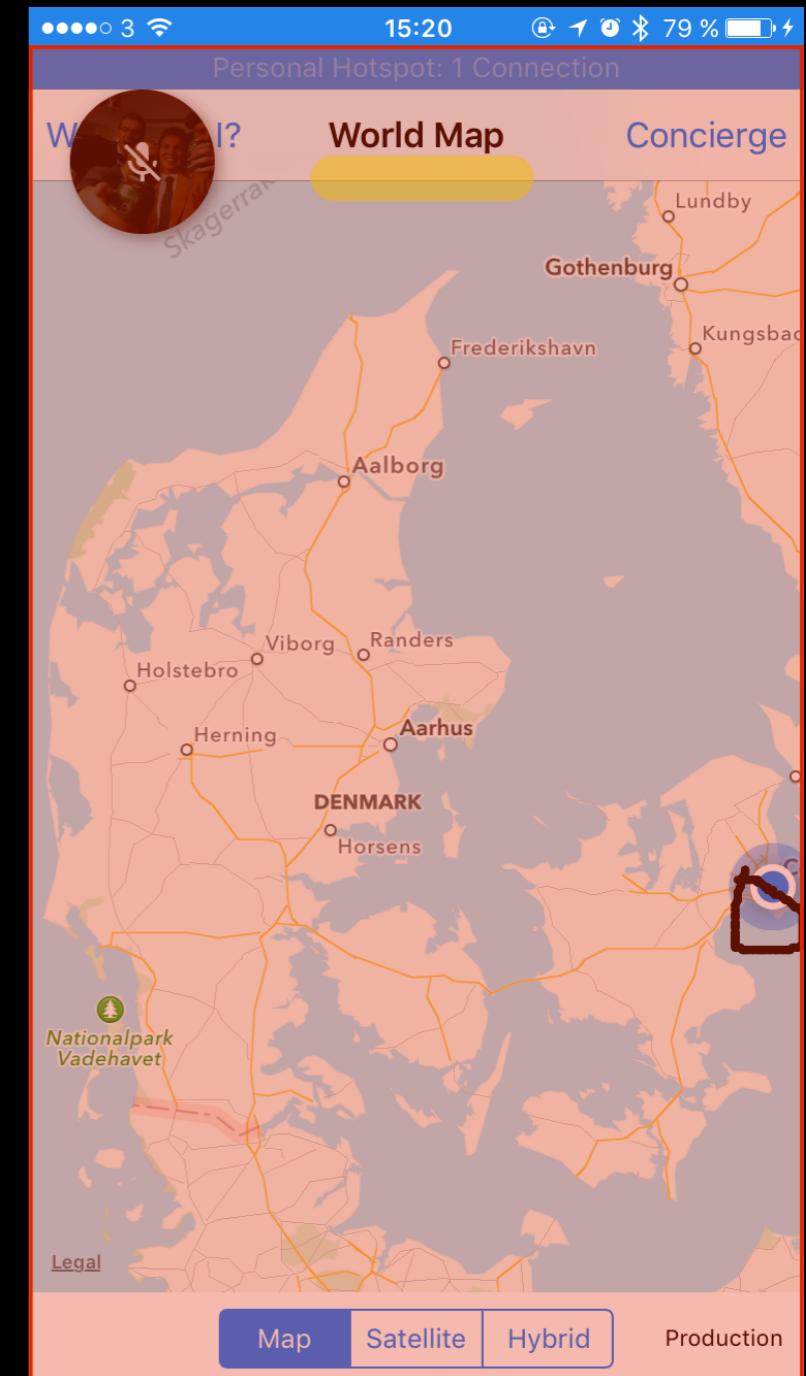
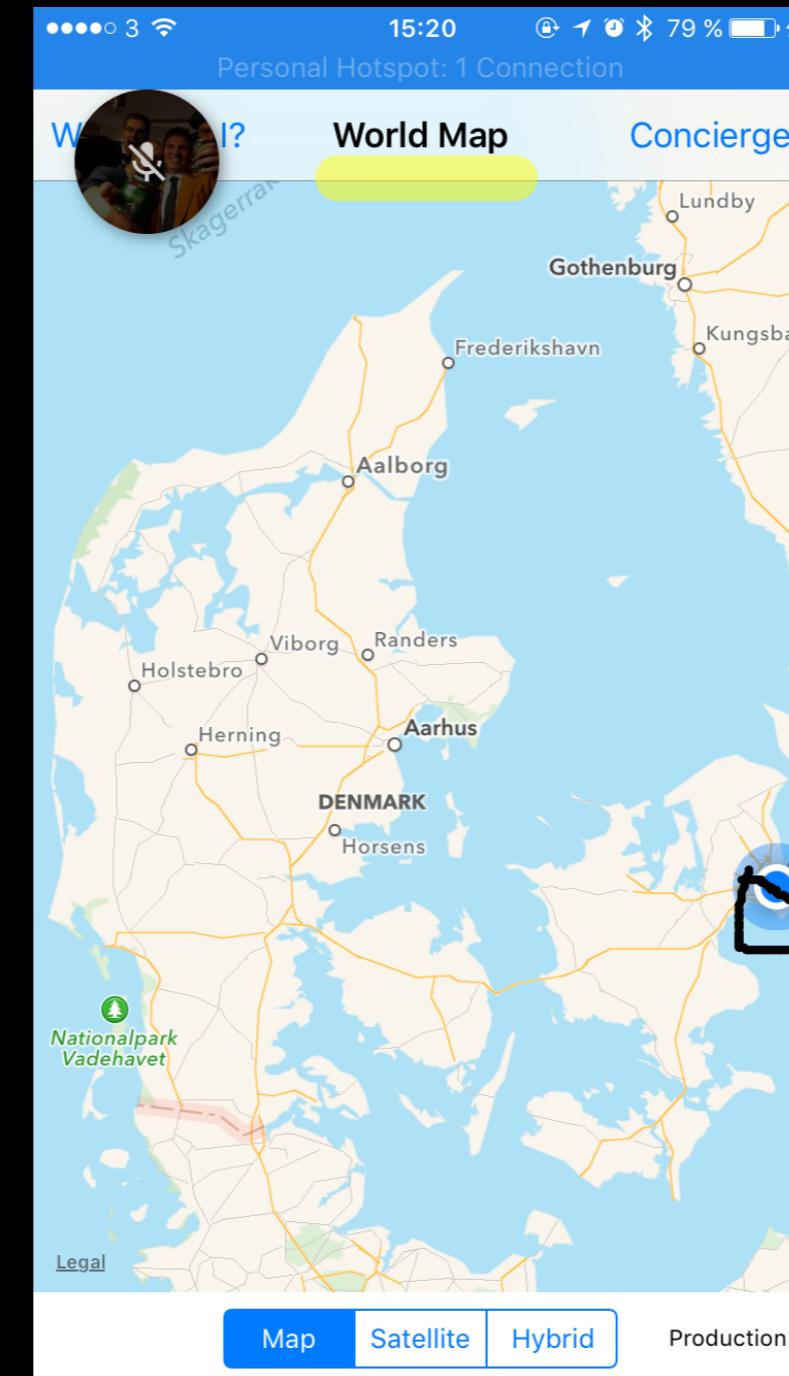
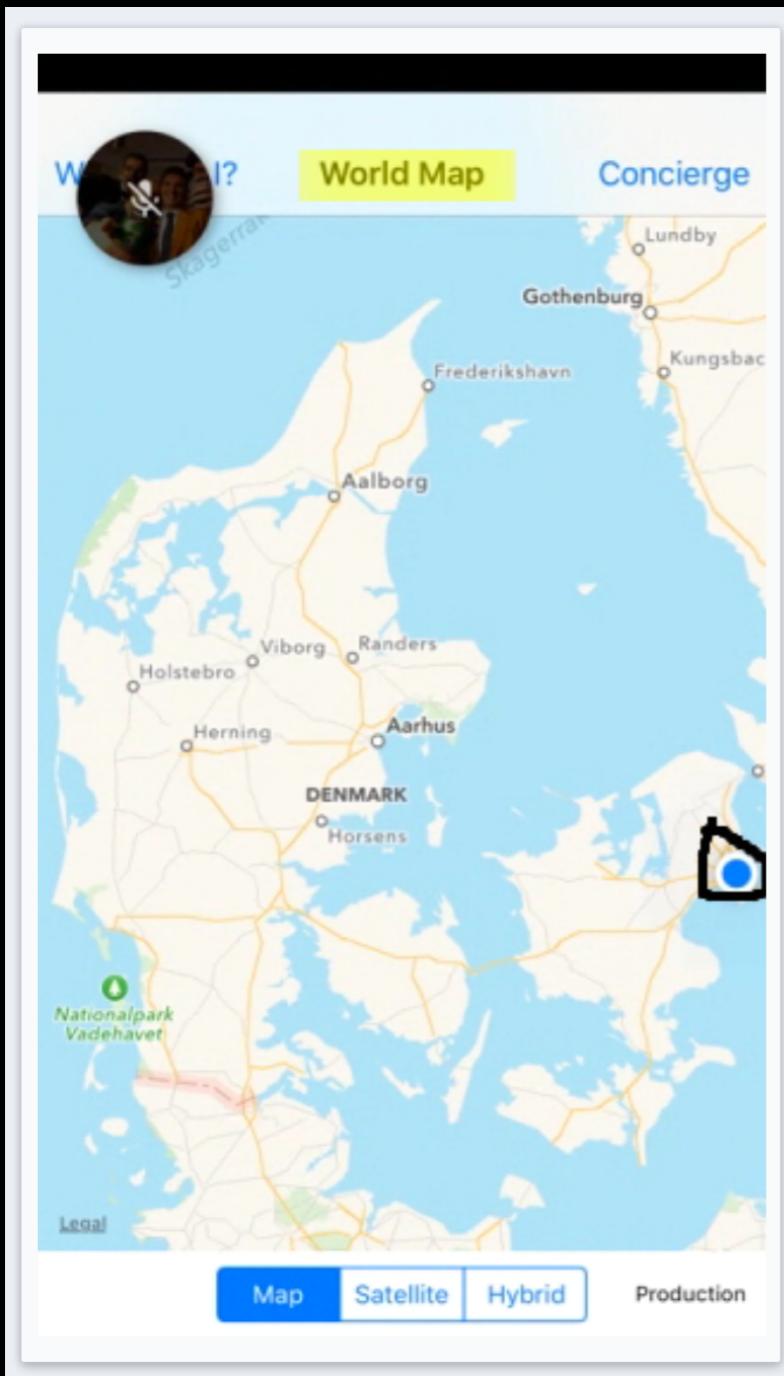
Status Bar

- Separate window takes over status bar.
- UIViewControllerBasedStatusBarAppearance does not make it easier.

```
+ (void)setPreferredMainStatusBarStyle:(UIStatusBarStyle)statusCode;  
+ (void)setShouldPreferStatusBarHidden:(BOOL)hidden;
```

Rotation

- No control over rotation
- If an orientation is not supported by the app, it will never go there.
- Have to support all



Localization

- What if app not localized?
- Bundle language

Localization native development region	▼	String	en
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Things we learned

- Remember your customer
- Look into future, but remember the past
- Always mind the surroundings

Thanks!

<https://live.gotoassist.com>

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@hybridcattt