SNAPSHOT TESTING

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SNAPSHOT TESTING

- Visual testing method
- Comparing screenshots
- Record mode - generate snapshots and check then
- Test mode - compare them to check for changes

WHY DO THIS?

- See how your views will look like
- Test wide range of different layers of code and states of the app
- TDD finally makes sense
- Easy to write tests

FBSnapshotTestCase

- Developed and used by Facebook
- Testing mainly in simulator
- Testing multiple devices and screen sizes
- Can show difference in case of failed test
- Customizable to specific workflow
- CI friendly

FBSnapshotTestCase

- Install via CocoaPods
- Set `FB_REFERENCE_IMAGE_DIR` environment variable
- Subclass `FBSnapshotTestCase` instead of `XCTestCase`
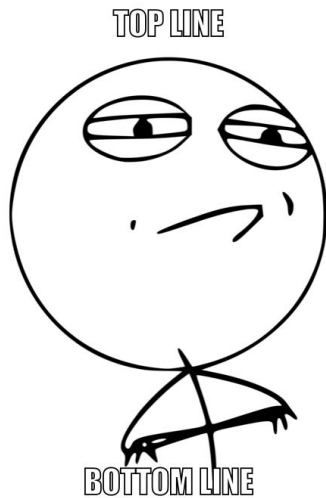- Use `FBSnapshotVerifyView` to check view

FBSnapshotTestCase

```swift
class SnapshotTestingTests: FBSnapshotTestCase {

    override func setUp() {
        super.setUp()
        isDeviceAgnostic = true
//          recordMode = true
    }

    func testMemeDetailViewController() {
        let vc = R.storyboard.main.memeDetail()!
        vc.meme = Meme.memes.first
        FBSnapshotVerifyView(vc.view)
    }
}
```
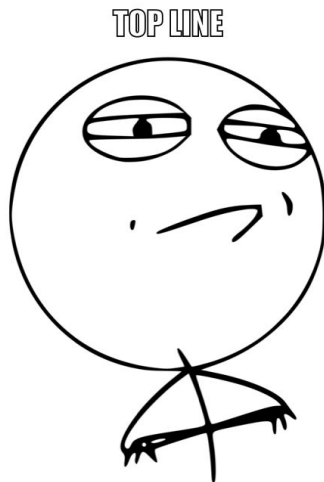
Visual diff

Top line Some funny text

Bottom line Some funny text

TOP LINE

BOTTOM LINE

Reference

Top line Some funny text

Bottom line Some funny text

TOP LINE

Current

BOTTOM LINE

Diff

DEMO

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Gotchas

- 32 & 64 bit devices render text in slightly different way
- `WKWebView` cannot be tested this way
- Toggle `usesDrawViewHierarchyInRect` flag to use UI Appearance, visual effect view and size classes

Resources

https://github.com/facebook/ios-snapshot-test-case

https://www.objc.io/issues/15-testing/snapshot-testing/

https://github.com/ashfurrow/Nimble-Snapshots

THANK YOU

jindra.dolezy@strv.com

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QUESTIONS

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