

IB Designables: Failed to render and update auto layout status

I have a custom view (xib) that has a UIButton inside of it, I made it IBDesignable doing the following:

UserView.swift

```
import UIKit

@IBDesignable
class UserView: UIView {

    @IBOutlet var view: UIView!
    @IBOutlet weak var userButton: UIButton!

    override init(frame: CGRect) {
        super.init(frame: frame)
        load()
    }

    required init?(coder aDecoder: NSCoder) {
        super.init(coder: aDecoder)
        load()
    }

    fileprivate func load() {
        Bundle.main.loadNibNamed("UserView", owner: self, options: nil)
        addSubview(view)
        self.frame = bounds
    }
}
```

UserView.xib

- Added the UIButton and set constraints
- Set the File's Owner: UserView

Storyboard

I added a UIView to a Bar Button Item and assigned UserView class but nothing is rendering, and I got the following build error:

error: IB Designables: Failed to render and update auto layout status for FoodViewController (bR3-Kz-wX7): The agent threw an exception.

My currently environment: **Xcode 9**, Swift 4

ios swift xcode xcode9 ibdesignable

asked Oct 13 '17 at 6:22



Jonathan Solorzano

2,080 5 24 78

Try to disable 'Use Trait Variations' (Identity and Type panel) for any xib file that you might have for custom views that are used in your storyboard. from stackoverflow.com/questions/39732312/... – iPatel Oct 13 '17 at 6:25

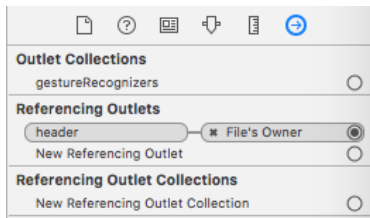
4 Answers

This question is related to this answer. Check both.

Failed to render instance of ClassName: The agent threw an exception loading nib in bundle

Bottom Line

Make sure that your xib file does not have any orphaned outlets. Check each view/element of the nib for an outlet and remove and re-add.



For me, they were orphaned outlets. It seems the nibs and IB are very finicky and the debugger doesn't give many details... if you can't get this to work, you might start with a fresh nib/xib file.

Walkthrough of my working code

This issue took me several days to resolve. For the benefit of others I am giving a verbose answer and showing all of my relevant code and connections.

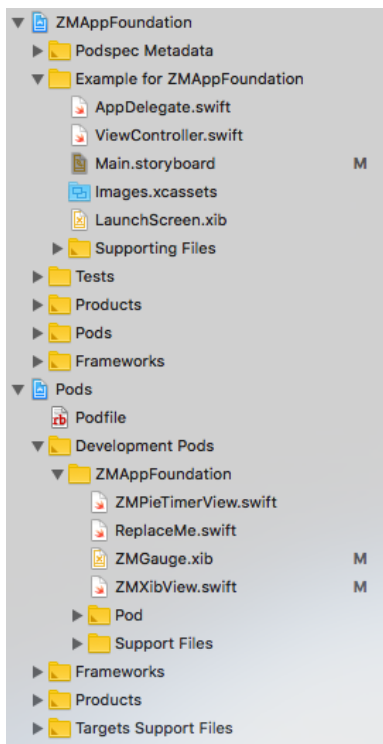
A working commit where I implemented the fix action (above) is here:

<https://github.com/jfosterdavis/ZMAAppFoundation/commit/6855f0d5b9cd1bc320395e57e2b271653ef7acd1>

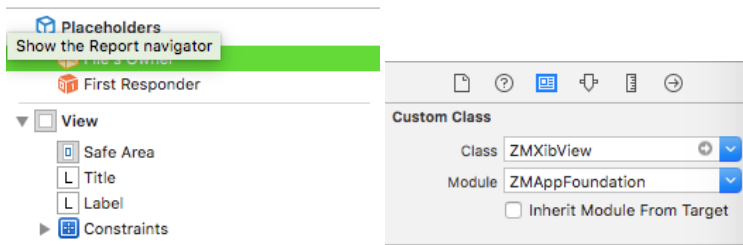
Xcode version 9.2

My file structure

Here is my file structure (note: I am creating a pod with cocoapods named `ZMAAppFoundation` . Also, `ZMPieTimerView.swift` is not relevant to the solution.):



I want my nib to be viewable (IBDesignable) in the `Main.storyboard` file. Here is the File's Owner and Custom Class of my xib, `ZMGauge.xib` :



Code, implementations

Here is my ZMXibView class:

// Adapted from <https://medium.com/zenchef-tech-and-product/how-to-visualize-reusable-xibs-in-storyboards-using-ibdesignable-c0488c7f525d>

```
import UIKit

@IBDesignable
open class ZMXibView: UIView {

    var contentView:UIView?
    @IBInspectable var nibName:String?

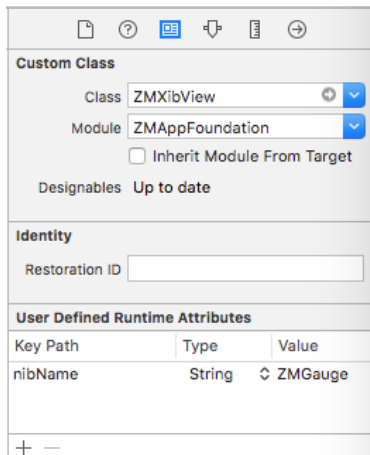
    override open func awakeFromNib() {
        super.awakeFromNib()
        xibSetup()
    }

    func xibSetup() {
        guard let view = loadViewFromNib() else { return }
        view.frame = bounds
        view.autoresizingMask =
            [.flexibleWidth, .flexibleHeight]
        addSubview(view)
        contentView = view
    }

    func loadViewFromNib() -> UIView? {
        guard let nibName = nibName else { return nil }
        let bundle = Bundle(for: type(of: self))
        let nib = UINib(nibName: nibName, bundle: bundle)
        return nib.instantiate(
            withOwner: self,
            options: nil).first as? UIView
    }

    override open func prepareForInterfaceBuilder() {
        super.prepareForInterfaceBuilder()
        xibSetup()
        contentView?.prepareForInterfaceBuilder()
    }
}
```

In storyboard, my xib is designated in the Custom Class. I am using cocoapods to develop a pod. I have explicitly selected the Module. (Note that in my XibView class, I have to define the `nibName` property.):



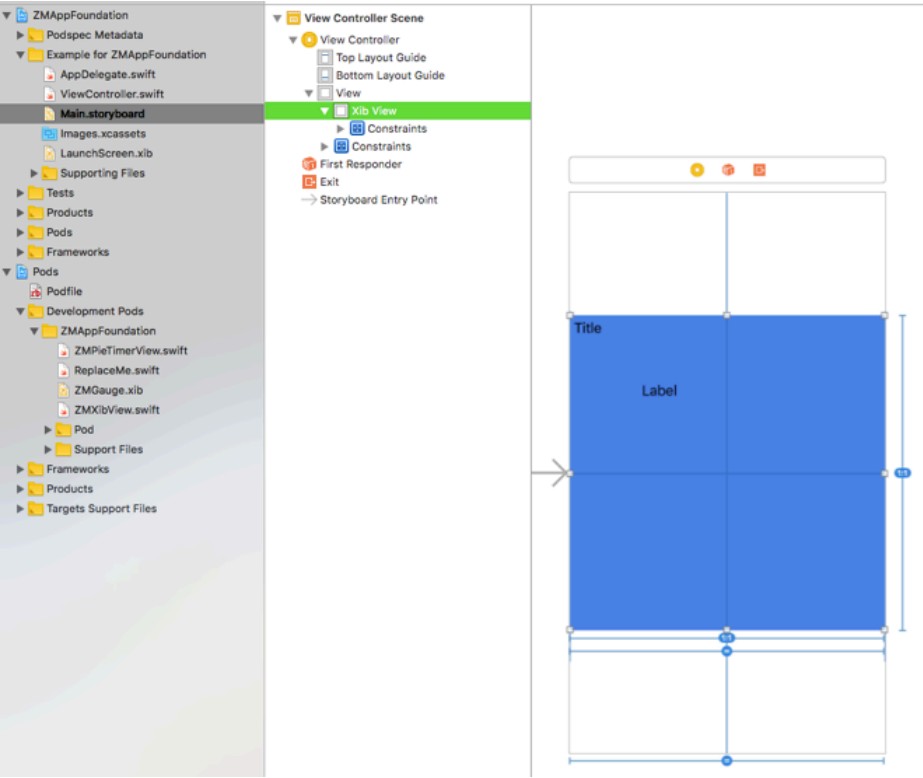
Don't Forget!

Then you may need to clean, close Xcode, rebuild, or simply wait a while for the IB to render it

again. It is still a mystery to me exactly when Xcode will decide to try to render the IBDesignables, and I don't know of a way to force.

Success

Based on my code and the actions I took, my nib is now IBDesignable viewable in my Main.storyboard.



In case you missed it

In case you missed it, my solution is at the very top of this post. I got mine to clear the error cited by the OP by removing some orphaned IBOutlets.

answered 11 mins ago

 **Jacob Davis**
162 1 9

I disabled the 'User trait Variations' and my problem was solved.

answered Jan 15 at 5:09

 **Sam**
346 3 15

For me, the fix came down to getting Interface Builder to redraw the object. I had this in two places and both were fixed by no changes to code but the symptoms of the agent error and the views being blank in storyboard was eventually fixed.

One was fixed by dragging a UIView to a different order under the View and rebuilding. A second in a TableView with Prototype cell was fixed by selecting the TableView, changing the count of Prototype cells to two, wait a sec, then change it back to one. The TableView, which had been a white blank, then drew all the elements correctly and the agent error was gone.

It feels like it's a bug with IB and from other searches, many solutions exist for the similar error.

Hope this helps someone.

answered Oct 15 '17 at 1:24



FiveOhHO

148 4 10

Unfortunately, you can't use IBOutlets within a IBDesignable. Better answer for you here:

[Live Render IBOutlet Connected Subviews Via IBInspectable Properties](#)

Perhaps you wanted to have your UIView extend UIButton, rather than UIView?

answered Oct 13 '17 at 8:32



Mars

553 2 11

Add Another Answer