CocoaPods

CocoaPods is the dependency manager for Swift and Objective-C Cocoa projects. It has almost ten thousand libraries and can help you scale your projects elegantly.

– *https://cocoapods.org*

O que faz?

- Resolve versões
- Baixa bibliotecas de terceiros
- Integra com seu projeto

https://cocoapods.org/about

Podfile

```ruby
source 'https://github.com/CocoaPods/Specs'

platform :ios, '8.0'

inhibit_all_warnings!
use_frameworks!

target "movile-up-ios", :exclusive => true do
  pod 'Alamofire'
  pod 'Argo'
  pod 'Result'
  pod 'TraktModels', :git => 'https://github.com/marcelofabri/TraktModels.git'
end
```

```
target :unit_tests, :exclusive => true do
  link_with 'UnitTests'

  pod 'Nimble'
  pod 'OHHTTPStubs'
end
```

```
pod install
pod update
pod update Alamofire
```

Alamofire

```
import Alamofire

Alamofire.request(.GET, "http://httpbin.org/get")
.responseJSON { (_, _, JSON, _) in
         println(JSON)
}
```

Closures

Closures are self-contained blocks of functionality that can be passed around and used in your code. Closures in Swift are similar to blocks in C and Objective-C and to lambdas in other programming languages.

– *https://developer.apple.com/library/ios/documentation/Swift/Conceptual/SwiftProgrammingLanguage/Closures.html*

```swift
let names = ["Chris", "Alex", "Ewa", "Barry", "Daniella"]

func backwards(s1: String, s2: String) -> Bool {
    return s1 > s2
}

// função
var reversed = sorted(names, backwards)

// closure
reversed = sorted(names, { (s1: String, s2: String) -> Bool in
    return s1 > s2
})
```

```
// inferência de tipos
reversed = sorted(names, { s1, s2 in return s1 > s2 } )

// return implicito
reversed = sorted(names, { s1, s2 in s1 > s2 } )

// shorthand argument names
reversed = sorted(names, { $0 > $1 } )

// operador
reversed = sorted(names, >)

// trailing closure
reversed = sorted(names) { $0 > $1 }
```

http://fuckingclosuresyntax.com

```swift
class TraktHTTPClient {

    private lazy var manager: Alamofire.Manager = {
        let configuration: NSURLSessionConfiguration = {
            var configuration = NSURLSessionConfiguration.defaultSessionConfiguration()

            var headers = Alamofire.Manager.defaultHTTPHeaders
            headers["Accept-Encoding"] = "gzip"
            headers["Content-Type"] = "application/json"
            // ...

            configuration.HTTPAdditionalHeaders = headers

            return configuration
            }()

        return Manager(configuration: configuration)
    }()
```

```
private enum Router: URLRequestConvertible {
    static let baseURLString = "https://api-v2launch.trakt.tv/"

    case Show(String)

    // MARK: URLRequestConvertible
    var URLRequest: NSURLRequest {
        let (path: String, parameters: [String: AnyObject]?, method: Alamofire.Method) = {
            switch self {
            case .Show(let id):
                return ("shows/\(id)", ["extended": "images,full"], .GET)
            }
            }()

        let URL = NSURL(string: Router.baseURLString)!
        let URLRequest = NSMutableURLRequest(URL: URL.URLByAppendingPathComponent(path))
        URLRequest.HTTPMethod = method.rawValue

        let encoding = Alamofire.ParameterEncoding.URL

        return encoding.encode(URLRequest, parameters: parameters).0
    }
}
```

```
func getShow(id: String, completion: ((Result<Show, NSError?>) -> Void)?) {
    // ???
}
```

```swift
let decoded = Show.decode(JSON.parse(json))

if let value = box.value {
    // ...
}
```

https://github.com/thoughtbot/Argo

```
func getShow(id: String, completion: ((Result<Show, NSError?>) -> Void)?) {
    manager.request(router).validate().responseJSON { (_, _, responseObject, error)  in
        if let json = responseObject as? NSDictionary {
            let box = Show.decode(JSON.parse(json))

            if let value = box.value {
                completion?(Result.success(value))
            } else {
                completion?(Result.failure(nil))
            }
        } else {
            completion?(Result.failure(error))
        }
    }
}
```

```
func getEpisode(showId: String, season: Int, episodeNumber: Int,
    completion: ((Result<Episode, NSError?>) -> Void)?) {
    // ???
}
```

```
func getEpisode(showId: String, season: Int, episodeNumber: Int,
    completion: ((Result<Episode, NSError?>) -> Void)?) {

    manager.request(router).validate().responseJSON { (_, _, responseObject, error)  in
        if let json = responseObject as? NSDictionary {
            let box = Episode.decode(JSON.parse(json))

            if let value = box.value {
                completion?(Result.success(value))
            } else {
                completion?(Result.failure(nil))
            }
        } else {
            completion?(Result.failure(error))
        }
    }
}
```

Como remover essa repetição de código?

Generics!

```swift
func swapTwoInts(inout a: Int, inout b: Int) {
    let temporaryA = a
    a = b
    b = temporaryA
}

var someInt = 3
var anotherInt = 107
swapTwoInts(&someInt, &anotherInt)
// "someInt is now 107, and anotherInt is now 3"
```

```swift
func swapTwoValues<T>(inout a: T, inout b: T) {
    let temporaryA = a
    a = b
    b = temporaryA
}

var someInt = 3
var anotherInt = 107
swapTwoValues(&someInt, &anotherInt)
// someInt is now 107, and anotherInt is now 3

var someString = "hello"
var anotherString = "world"
swapTwoValues(&someString, &anotherString)
// someString is now "world", and anotherString is now "hello"
```

```
func getJSONElement<T: Decodable where T.DecodedType == T>(router: Router,
        completion: ((Result<T, NSError?>) -> Void)?) {

    manager.request(router).validate().responseJSON { (_, _, responseObject, error)  in
        if let json = responseObject as? NSDictionary {
            let box = T.decode(JSON.parse(json))

            if let value = box.value {
                completion?(Result.success(value))
            } else {
                completion?(Result.failure(nil))
            }
        } else {
            completion?(Result.failure(error))
        }
    }
}
```

```
func getShow(id: String, completion: ((Result<Show, NSError?>) -> Void)?) {
    getJSONElement(Router.Show(id), completion: completion)
}



func getEpisode(showId: String, season: Int, episodeNumber: Int,
    completion: ((Result<Episode, NSError?>) -> Void)?) {

    let router = Router.Episode(showId: showId, season: season,
                                number: episodeNumber)
    getJSONElement(router, completion: completion)
}
```

```swift
func getPopularShows(completion: ((Result<Array<Show>, NSError?>) -> Void)?) {
    // ??
}

func getSeasons(showId: String,
    completion: ((Result<Array<Season>, NSError?>) -> Void)?) {
    // ??
}

func getEpisodes(showId: String, season: Int,
    completion: ((Result<Array<Episode>, NSError?>) -> Void)?) {
    // ??
}
```

map

```
var result = []
for x in elements {
    result.append(f(x))
}
```

```
result = elements.map(f)
```

filter

```
var result = []
for x in elements {
    if shouldBeIncluded(x) {
        result.append(x)
    }
}
```

```
result = elements.filter(shouldBeIncluded)
```

reduce

```
var result = initialValue
for x in elements {
    result = operation(result, x)
}
```

```
result = elements.reduce(initialValue, operation)
```

```
if let jsonArray = responseObject as? Array<NSDictionary> {
    let values = jsonArray.map { T.decode(JSON.parse($0)).value }.filter { $0 != nil }.map { $0! }
    completion?(Result.success(values))
} else {
    completion?(Result.failure(error))
}
```

`jsonArray.map` retorna [T?]

`filter { $0 != nil }` remove os `nils`

`.map { $0! }` retorna [T]

https://www.weheartswift.com/higher-order-functions-map-filter-reduce-and-more/

```swift
class ShowsViewController {

    private let httpClient = TraktHTTPClient()
    private var shows: [Show]?

    func loadShows() {
        httpClient.getPopularShows { [weak self] result in
            if let shows = result.value {
                println("conseguiu")
                self?.shows = shows
                self?.collectionView.reloadData()
            } else {
                println("oops \(result.error)")
            }
        }
    }
}
```

Carregamento de imagem

```
pod 'HanekeSwift'
```

https://github.com/Haneke/HanekeSwift

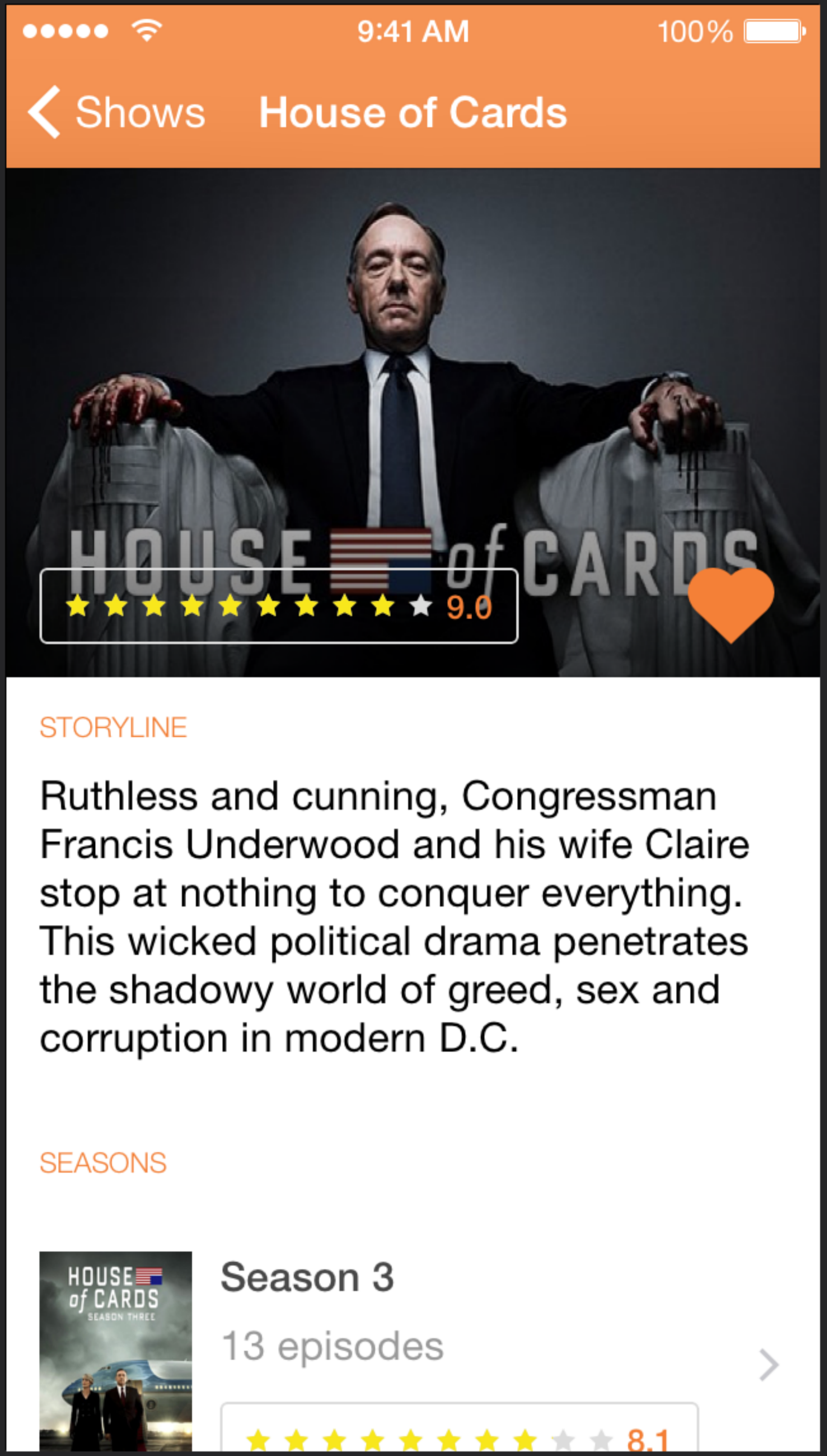
```
class ShowCollectionViewCell: UICollectionViewCell {

    @IBOutlet weak var posterImageView: UIImageView!
    @IBOutlet weak var nameLabel: UILabel!

    func loadShow(show: Show) {
        let placeholder = UIImage(named: "poster")
        if let url = show.poster?.fullImageURL {
            posterImageView.hnk_setImageFromURL(url, placeholder: placeholder)
        } else {
            posterImageView.image = placeholder
        }

        nameLabel.text = show.title
    }
    override func prepareForReuse() {
        super.prepareForReuse()

        posterImageView.hnk_cancelSetImage()
        posterImageView.image = nil
    }
}
```

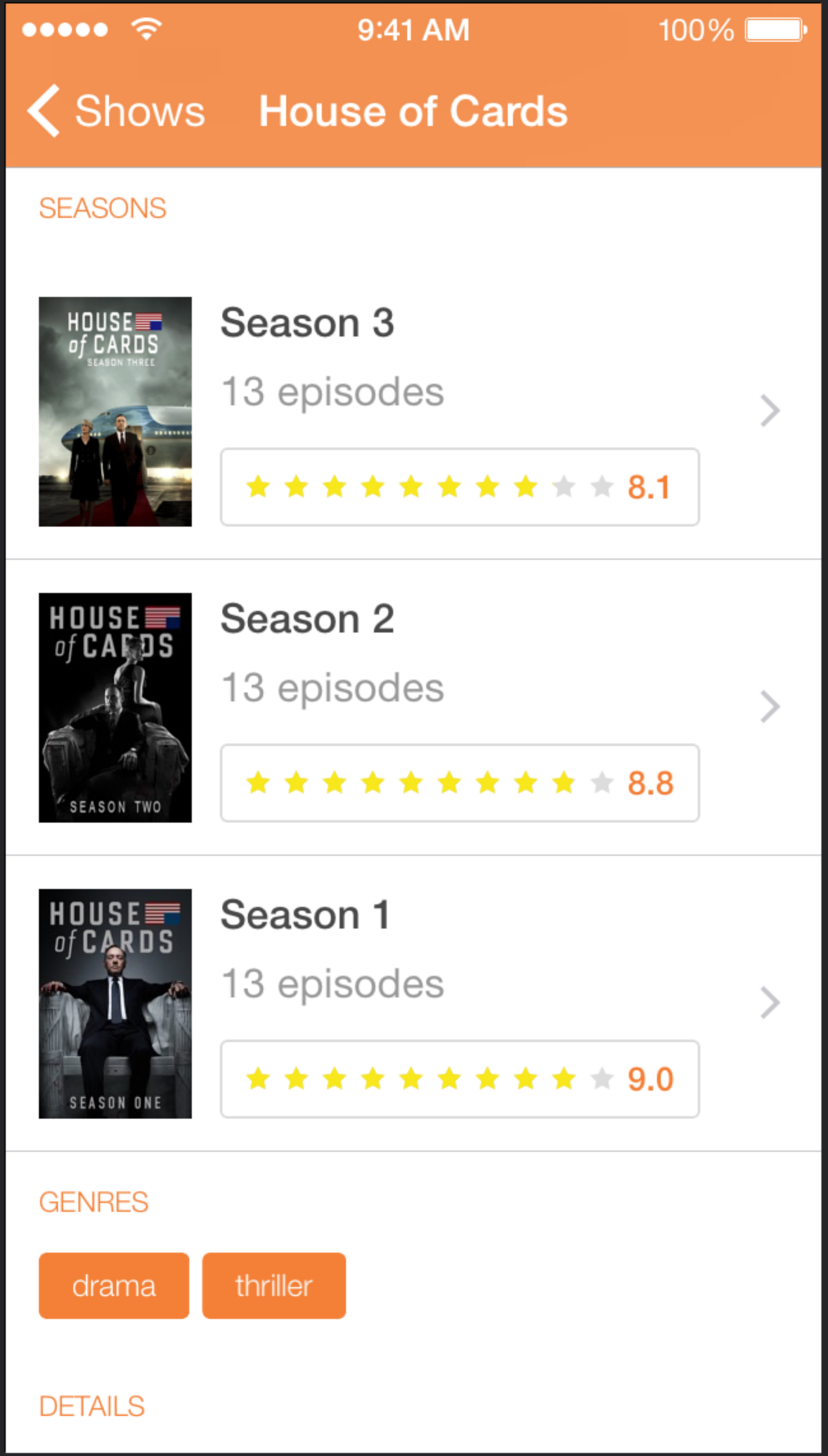


STORYLINE

Ruthless and cunning, Congressman Francis Underwood and his wife Claire stop at nothing to conquer everything. This wicked political drama penetrates the shadowy world of greed, sex and corruption in modern D.C.

SEASONS

Season 3
13 episodes
8.1



SEASONS

Season 3
13 episodes
8.1

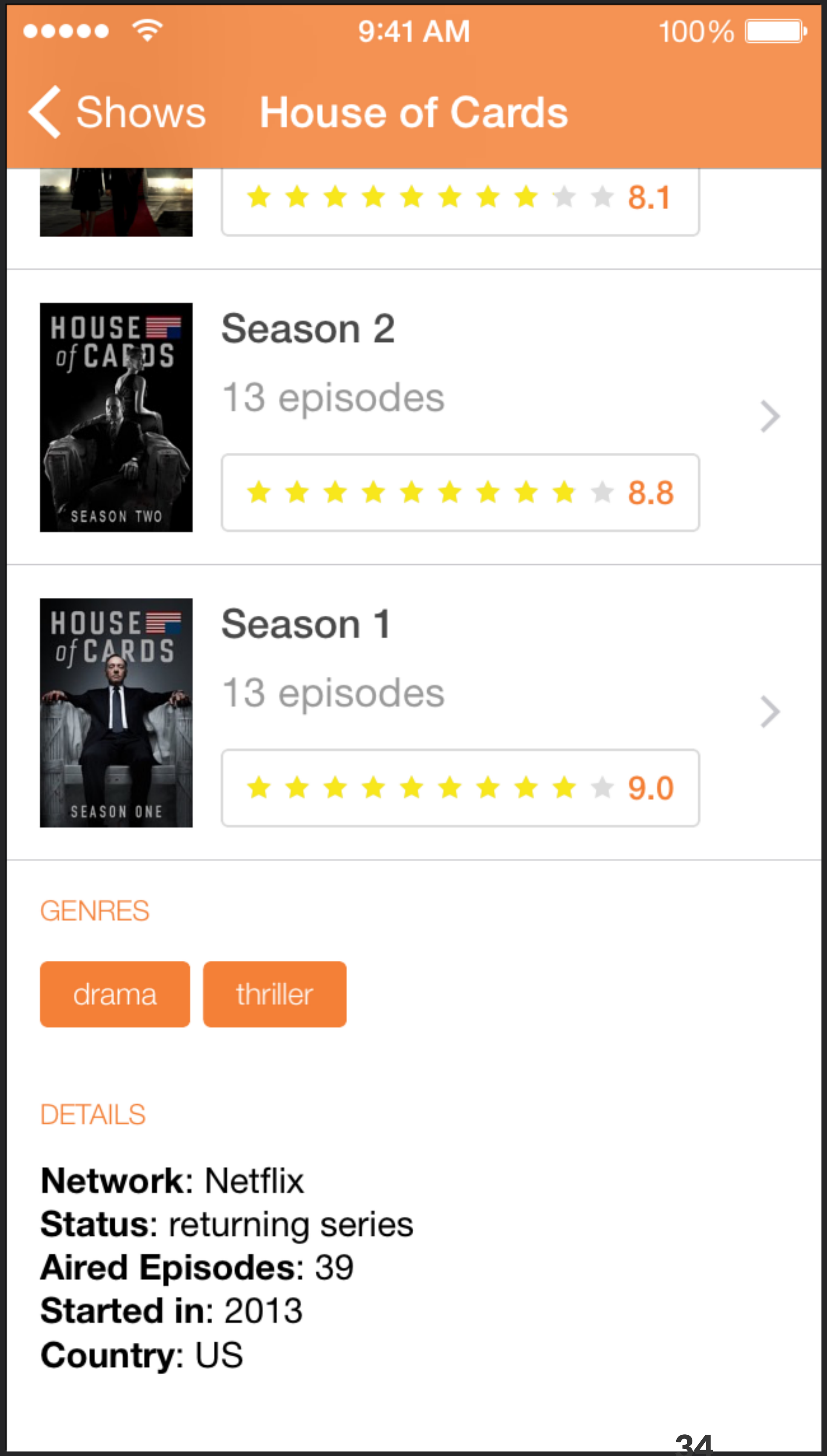
Season 2
13 episodes
8.8

Season 1
13 episodes
9.0

GENRES

drama thriller

DETAILS



Season 2
13 episodes
8.8

Season 1
13 episodes
9.0

GENRES

drama thriller

DETAILS

Network: Netflix
Status: returning series
Aired Episodes: 39
Started in: 2013
Country: US

```
pod 'TagListView'
pod 'FloatRatingView', :git => 'https://github.com/strekfus/FloatRatingView.git'
pod 'BorderedView'
pod 'OverlayView', :git => 'https://github.com/marcelofabri/OverlayView.git'
```