Advanced RxSwift – Day 3

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RxSwift Basics

- Day 1 – Observable, Operator (Filter, Transform, Combine)

- Day 2 – Subject (flatMap, flatMapFirst, flatMapLatest)

- Day 3 – Two VCs communications with Subject, RxCocoa (Button)

- Day 4 – Sequential, Merged Observable Calls

- Day 5 – RxCocoa, UI Binding (Button, TextField, Label, TableView)

Advanced RxSwift

- Day 1 – Protocol-Oriented Programming, Protocol Extension, Associatetype
- Day 2 – Network Call, Generic Enum
- **Day 3 – Binding Track Activity (show / hide 'Loading')**

- Day 4 – Adding a Reactive Extension to Custom UI Element,
-         2 Way Binding, Advanced TableView – RxDataSources
- Day 5 – Schedulers (observeOn, subscribeOn),
          Unit Test (RxTest, RxBlocking)

ActivityIndicator

https://github.com/ReactiveX/RxSwift/blob/master/RxExample/RxExample/Services/ActivityIndicator.swift

```
public class ActivityIndicator : SharedSequenceConvertibleType {

…

}
```

ActivityIndicator in ViewModel

```swift
class SimpleViewModel {
    // Is signing process in progress
    let signingIn: Observable<Bool>
    let signingInIndicator = ActivityIndicator()

    init() {
        self.signingIn = signingInIndicator.asObservable()
    }

    func simpleObservable() -> Observable<String> {
        return Observable<String>.create { observer in
            DispatchQueue.main.asyncAfter(deadline: .now() + 5) {
                observer.onNext("strawberry")
                observer.onCompleted()
            }
            return Disposables.create()
        }
    }
}
```

```swift
class ViewController: UIViewController {
    @IBOutlet weak var TrackActivityOulet: UIActivityIndicatorView!
    @IBOutlet weak var backgroundView: UIImageView!
    @IBOutlet weak var trackActivityButton: UIButton!
    var disposeBag = DisposeBag()

    override func viewDidLoad() {
        super.viewDidLoad()

        let viewModel = SimpleViewModel()

        viewModel.signingIn
            .bind(to: TrackActivityOulet.rx.isAnimating)
            .disposed(by: disposeBag)

        viewModel.signingIn
            .map { !$0 }
            .bind(to: backgroundView.rx.isHidden)
            .disposed(by: disposeBag)
```
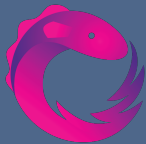
ActivityIndicator : UI Binding 2

```
viewModel.signingIn
    .bind(to: trackActivityButton.rx.isHidden)
    .disposed(by: disposeBag)

trackActivityButton.rx.tap.asDriver()
    .drive(onNext: { _ in
        viewModel.simpleObservable()
            .observeOn(MainScheduler.instance)
            .trackActivity(viewModel.signingInIndicator)
            .subscribe(onNext: { _ in
            })
            .disposed(by: self.disposeBag)
    }).disposed(by: disposeBag)
}
```

Lab

Add ActivityIndicator in Borders App in day 2