

FeatureFlags

*feature flags, a/b & mvt testing
framework for ios*

Feature Flags

- Configured via JSON
- Supports feature flags, A/B testing and MVT testing
- Automatically rollout a feature to 100%
- Visualise the state of flags and tests

Configuration

- JSON file may be locally bundled or remote
- Features can be included as part of existing configuration file or defined in an entirely new file

```
{  
  "features": []  
}
```

Flags & Tests

- Feature flag
- A/B test
- Feature A/B test
- MVT test

Flags & Tests

```
{
  "features": [{
    "name": "Example Feature Flag",
    "enabled": false
  }, {
    "name": "Example A/B Test",
    "enabled": true, // whether or not the test is enabled
    "test-variations": ["Group A", "Group B"],
    "labels": ["label1-for-analytics", "label2-for-analytics"]
  }, {
    "name": "Example Feature On/Off A/B Test",
    "enabled": true,
    "test-biases": [80, 20],
    "test-variations": ["enabled", "disabled"],
    "labels": ["label1-for-analytics", "label2-for-analytics"]
  }, {
    "name": "Example MVT Test",
    "enabled": true, // whether or not the test is enabled
    "test-biases": [70, 20, 10],
    "test-variations": ["Group A", "Group B", "Group C"],
    "labels": ["label1-for-analytics", "label2-for-analytics", "label3-for-
analytics"]
  }]
}
```

Rolling Out

To roll out an A/B test to all users:

```
{
  "features": [{
    "name": "Example A/B Test",
    "enabled": true,
    "test-biases": [50, 50],
    "test-variations": ["Group A", "Group B"],
    "labels": ["label1-for-analytics", "label2-for-analytics"]
  }]
}
```

becomes:

```
{
  "features": [{
    "name": "Example A/B Test",
    "enabled": true
  }]
}
```

API

- Feature flag
 - `Feature.isEnabled(.exampleFeatureFlag)` used to check whether a feature flag is enabled.

- A/B test

```
if let test = ABTest(rawValue: .exampleABTest) {  
    print("Is in group A? -> \(test.isGroupA())")  
    print("Is in group B? -> \(test.isGroupB())")  
}
```

- A/B feature test (all of the following work)

```
if let feature = Feature.named(.exampleFeatureOnOffTest) {  
    print("Feature name -> \(feature.name)")  
    print("Is enabled? -> \(feature.isTestVariation(.enabled))")  
    print("Is disabled -> \(feature.isTestVariation(.disabled))")  
    print("Test variation -> \(feature.testVariation())")  
}
```

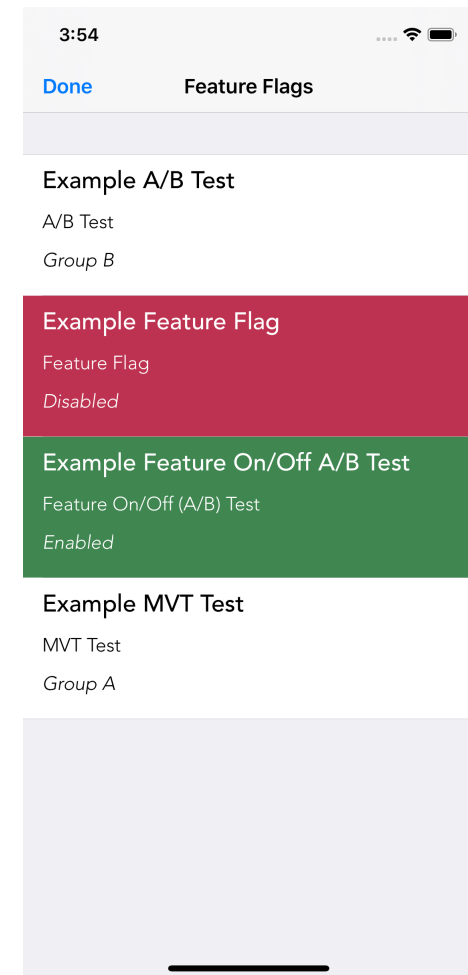
Extensibility

For MVT tests (or A/B tests which require further granularity):

```
extension Feature.Name {  
    static let exampleFeatureFlag = Feature.Name(rawValue: "Example Feature Flag")  
    static let exampleABTest = Feature.Name(rawValue: "Example A/B Test")  
    static let exampleFeatureTest = Feature.Name(rawValue: "Example Feature On/  
Off")  
    static let exampleMVTTest = Feature.Name(rawValue: "Example MVT Test")  
}  
  
extension Test.Variation {  
    static let groupA = Test.Variation(rawValue: "Group A")  
    static let groupB = Test.Variation(rawValue: "Group B")  
    static let groupC = Test.Variation(rawValue: "Group C")  
}  
  
if let feature = Feature.named(.exampleMVTTest) {  
    print("Feature name -> \(feature.name)")  
    print("Is group A? -> \(feature.isTestVariation(.groupA))")  
    print("Is group B? -> \(feature.isTestVariation(.groupB))")  
    print("Is group C? -> \(feature.isTestVariation(.groupC))")  
    print("Test variation -> \(feature.testVariation())")  
}
```

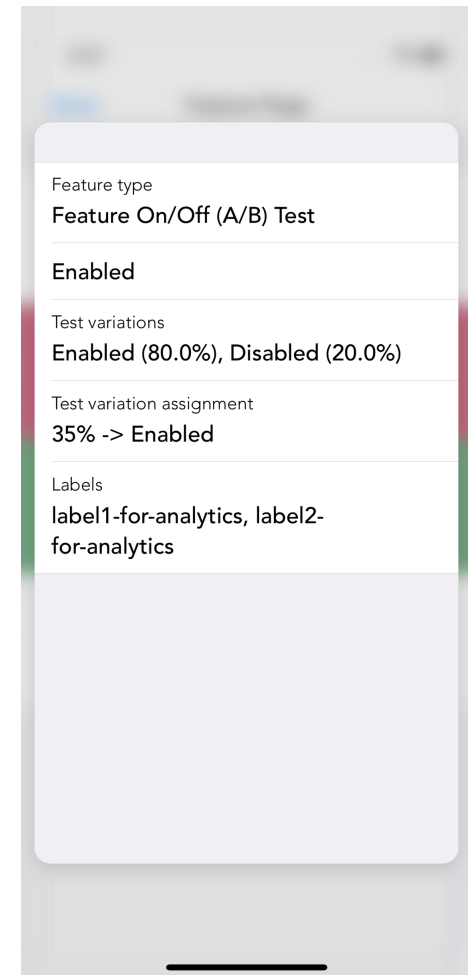

Visualisation

- Tap to switch enable / disable flags
- Tap to toggle A/B or MVT groups
- Swipe to delete cached flags / tests



Visualisation

- 3D Touch to peek more information
- Including analytics labels



API

- `FeatureFlags.configurationURL` used to set URL to remote or bundled configuration JSON .
- `FeatureFlags.localFallbackConfigurationURL` used to set a locally-bundled fallback URL where using a remote configuration.
- `FeatureFlags.refresh()` which accepts an optional completion handler triggers a configuration fetch.
- `FeatureFlags.refreshWithData(_:completion:)` useful where configuration file has already been fetched.

FeatureFlags

<https://github.com/rwbutler/FeatureFlags>

- Cocoapods

```
pod "FeatureFlags"
```

- Carthage

```
github "rwbutler/FeatureFlags"
```