Seed Your Own CocoaPod

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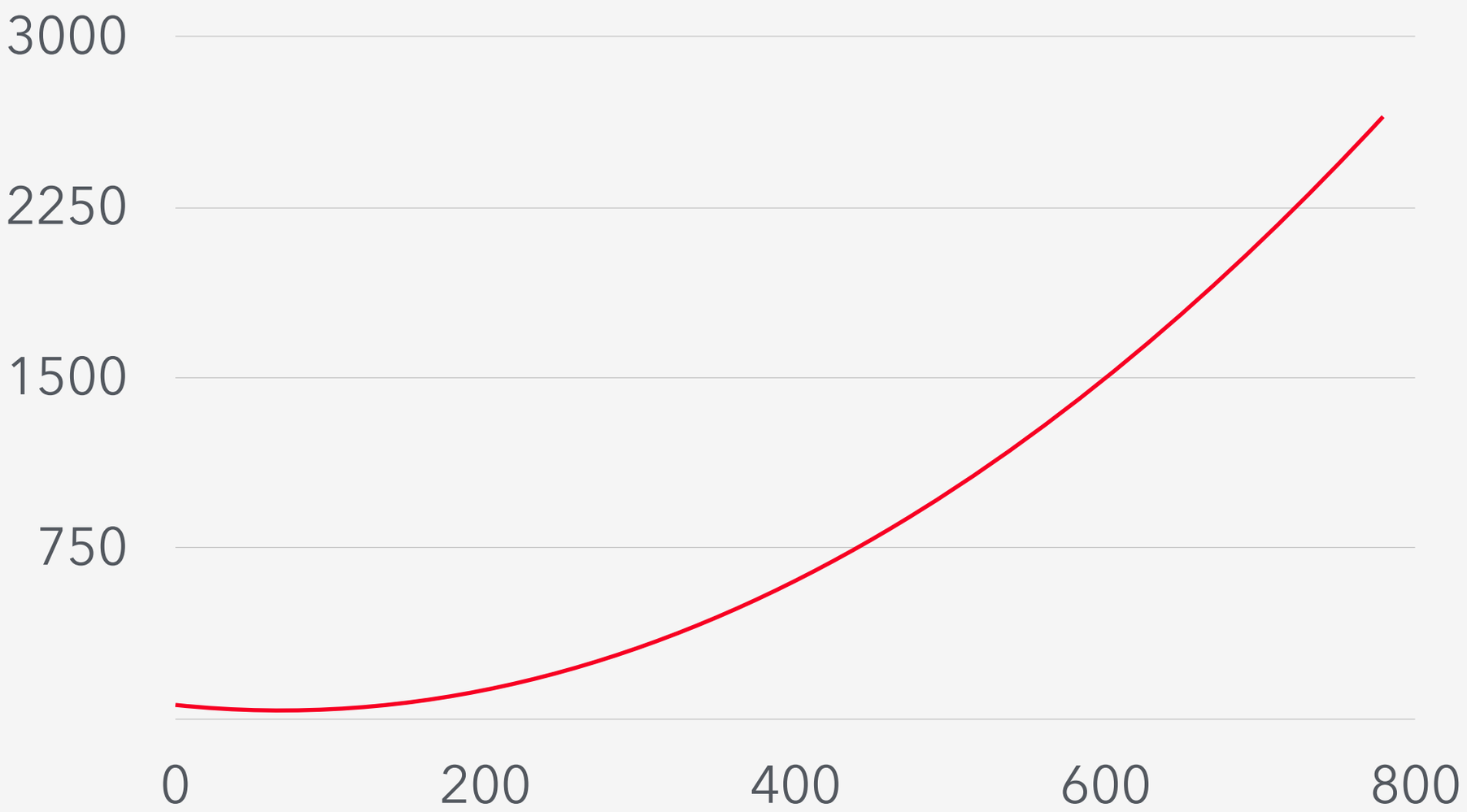
COCOAPODS

CocoaPods manages library dependencies for your Xcode projects.

Ultimately the goal is to improve discoverability of, and engagement in, third party open-source libraries by creating a more centralized ecosystem.

Pod additions per day



Pod additions per day

2669 Pods

Almost 8 Pods per day in the last month

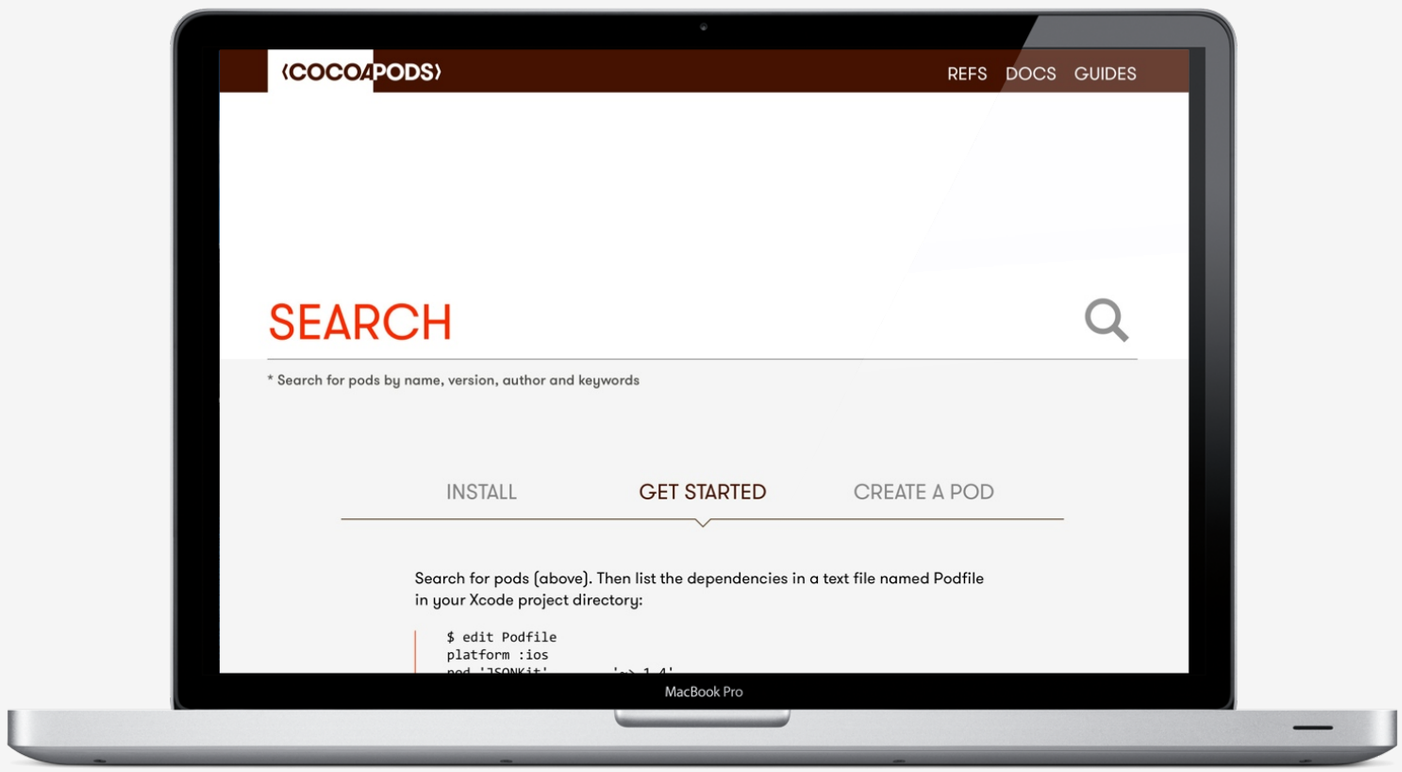
2,2	Years
270.000	Gem Downloads
4.000	Pull Requests
7.300	Podspecs
1.706	Contributors
16.000	Commits

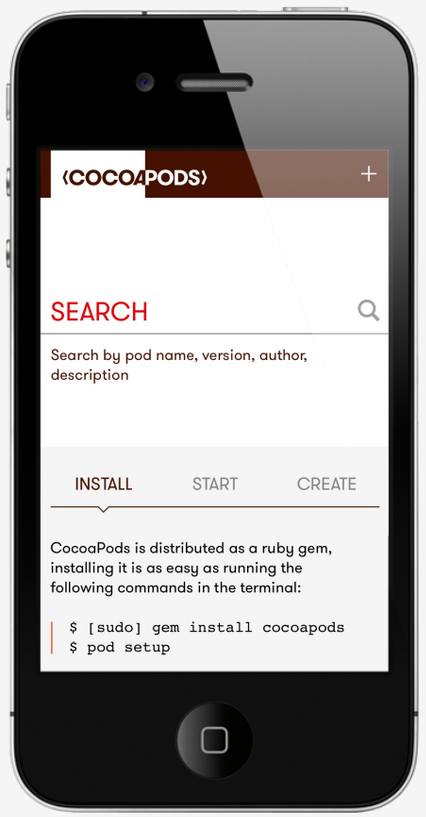
16.000 Commits

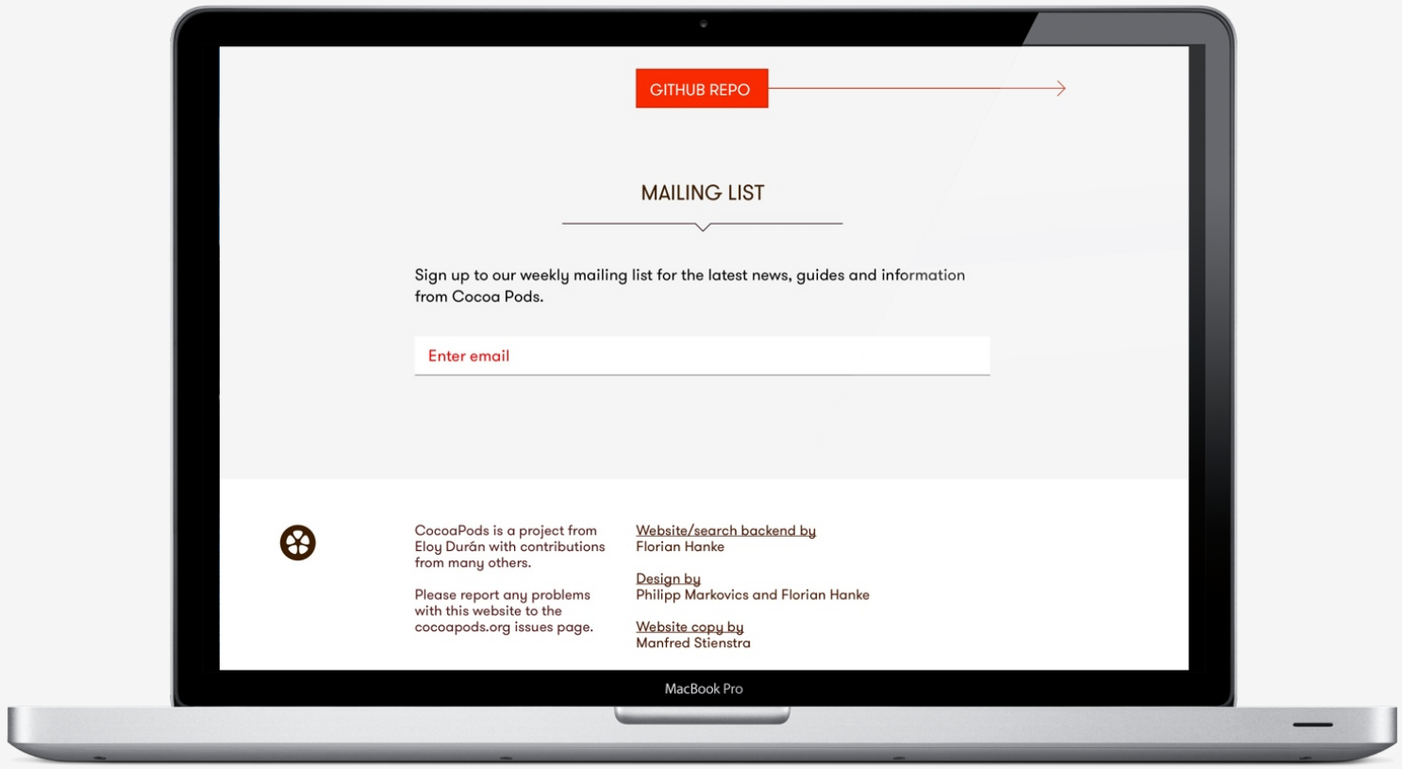
Assuming 3 minutes per commit this is equivalent to 2.000 hours

More than 5 years!

More than 10
projects


COCOAPODS
REFS DOCS GUIDES
SEARCH
* Search for pods by name, version, author and keywords
INSTALL
GET STARTED
CREATE A POD
Search for pods (above). Then list the dependencies in a text file named Podfile in your Xcode project directory:
$ edit Podfile
platform :ios
MacBook Pro


COCOAPODS
SEARCH
Search by pod name, version, author, description
INSTALL
START
CREATE
CocoaPods is distributed as a ruby gem, installing it is as easy as running the following commands in the terminal:
$ [sudo] gem install cocoapods
$ pod setup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Enter email
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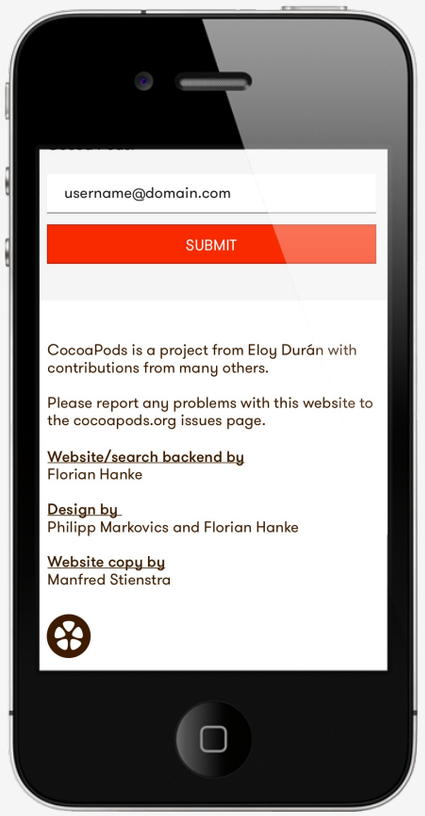
username@domain.com
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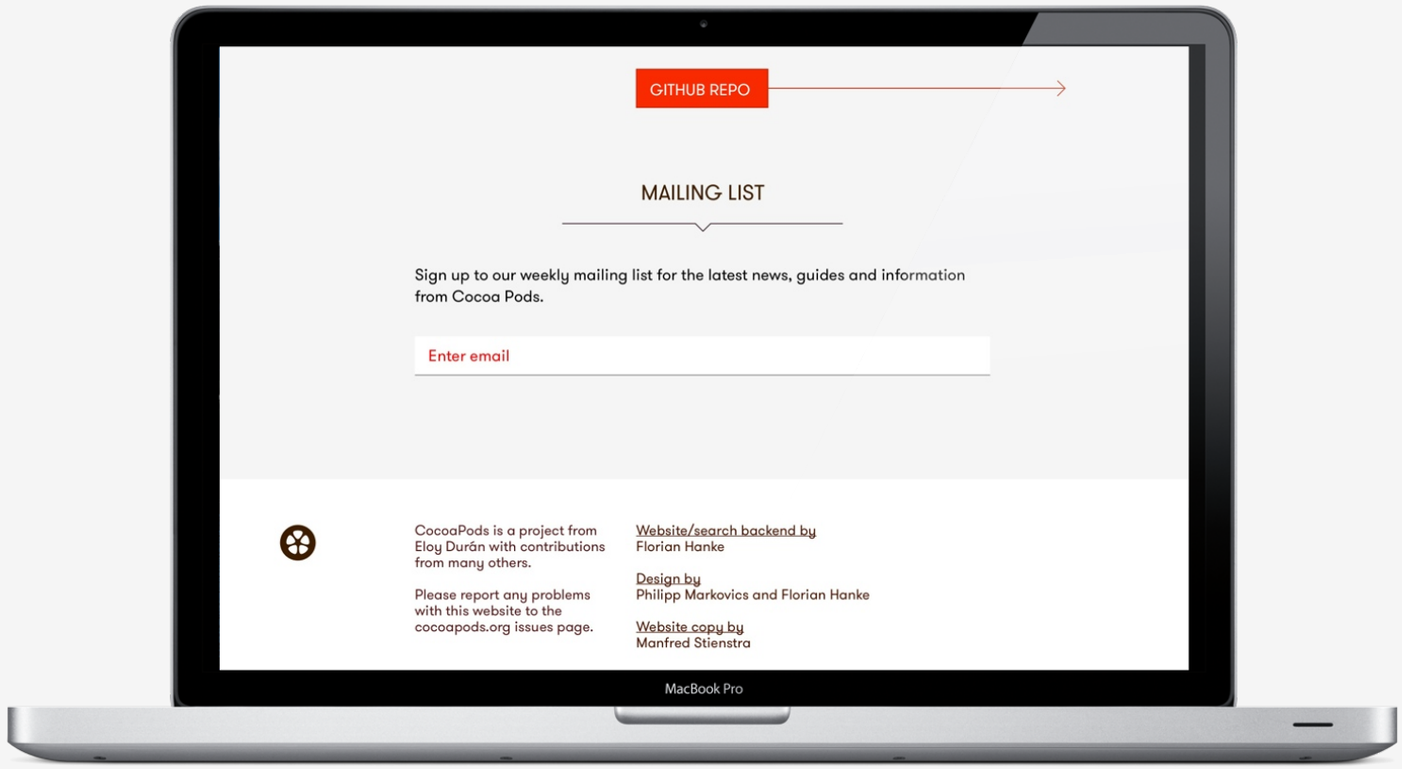
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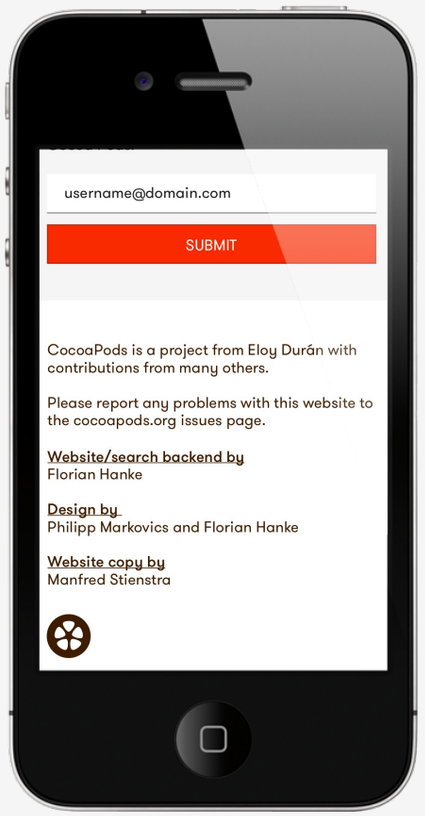
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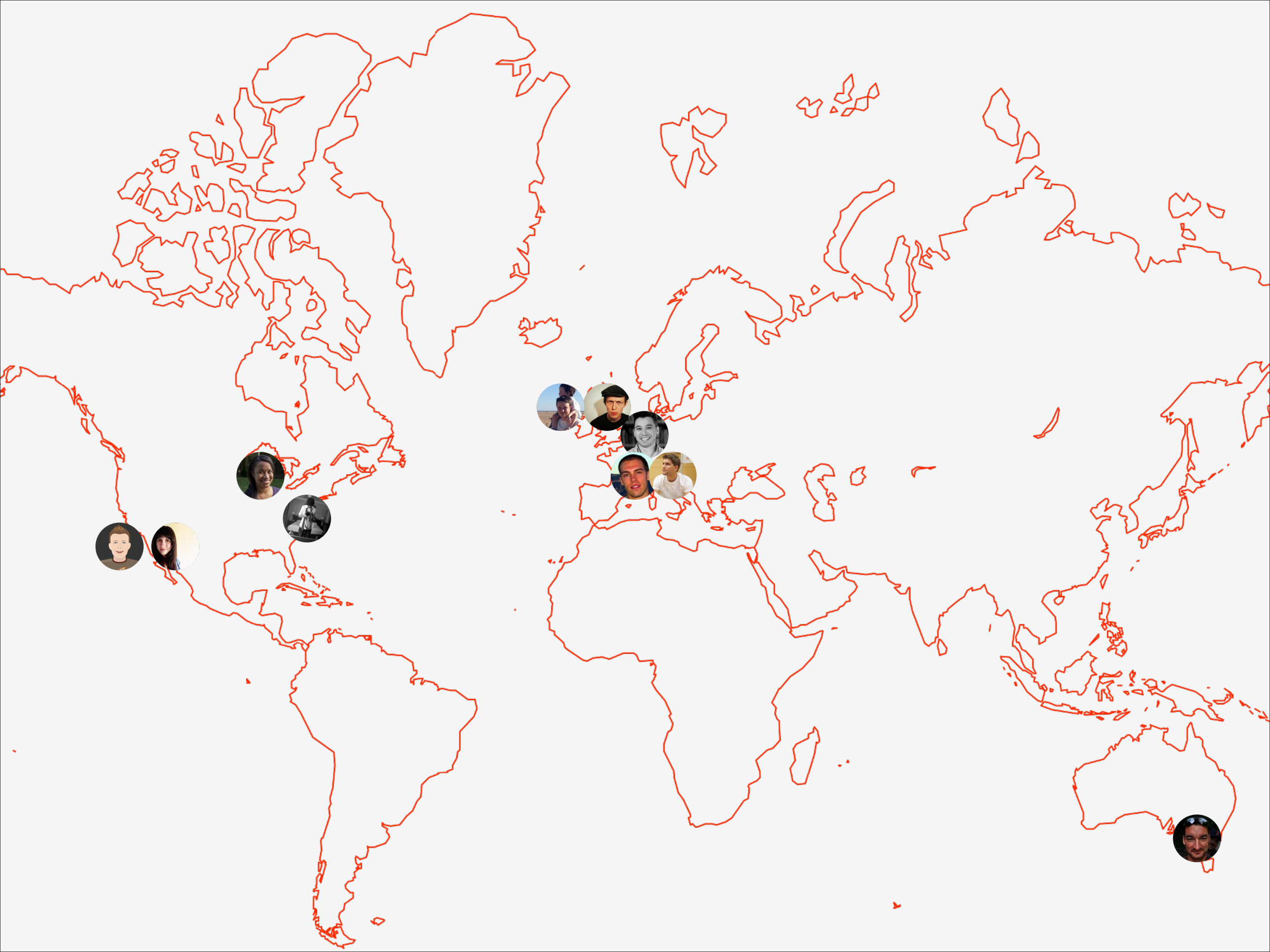




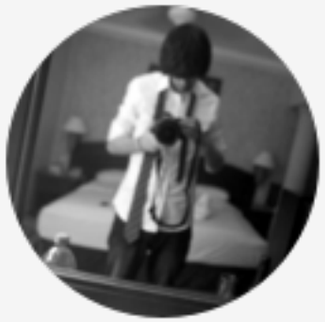

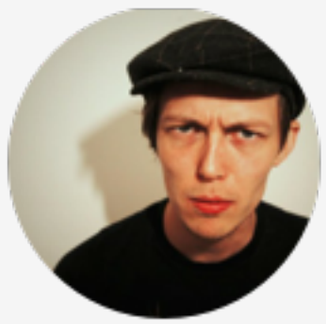
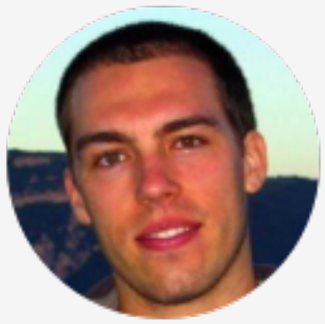


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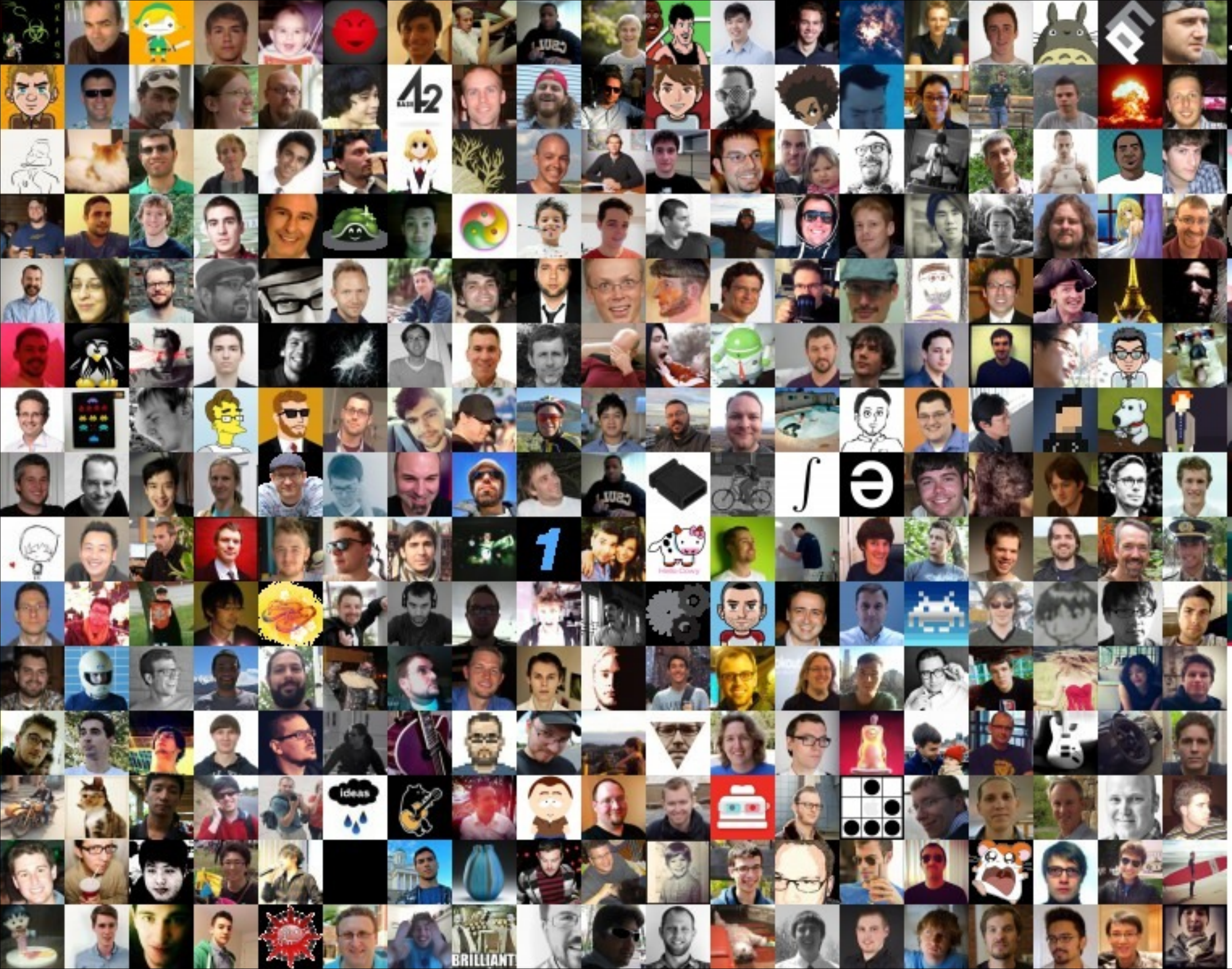
contributors


N&H
OLB
NOV
TAPWINGS
tNETacle
YES WE CODE


42
1
ideas
BRILLIANT


COCOAPODS

Getting started with CocoaPods

Installing CocoaPods

```
$ [sudo] gem install cocoapods
$ pod --version
```

Use `sudo` during the installation only if strictly needed.

Never use `sudo` while launching the `pod` executable!

NEW

Simplified installation which doesn’t require the Xcode command line tools anymore.

Integrating a target

```
$ cd project_dir
$ pod init
# Close the project
# Add least one dependency to your Podfile
$ pod install
# Check that CocoaPods doesn’t print any warning
# Open the workspace
# Check that your integrated target builds
```

The Podfile

```
target 'Marshmallow' do
  pod 'AFNetworking', '~> 2.0'
  pod 'ObjectiveSugar', '~> 0.5'
end
```

Use the optimistic `~>` operator.

Treat your Pods as external frameworks and namespace the imports.

E.g. `#import <AFNetworking/AFNetworking.h>`

Migration to CocoaPods

- Can be performed incrementally.
- You can install each new dependency and then check that the system works until you have enough confidence.
- Should be pretty straightforward if a Pod is available for your libraries.

The Path option

```
$ git clone https://github.com/AFNetworking/AFNetworking.git
$ edit Podfile
# pod 'AFNetworking', :path => '~/code/AFNetworking'
$ pod install
```

Never edit a Pod which doesn’t uses the path option.

Contribute back to libraries!

Seeding your own Pod

Creating a new Pod

```
$ pod lib create MyAwesomePod
$ cd MyAwesomePod
# Create the project
# Copy or create your classes
# Configure MyAwesomePod.podspec
# Integrate it with CocoaPods
$ edit Podfile
# pod 'MyAwesomePod', :path => '~/code/MyAwesomePod'
$ pod install
```

A specification

```
Pod::Spec.new do |s|
  s.name             = 'Reachability'
  s.version          = '3.1.0'
  s.license          = :type => 'BSD'
  s.homepage         = 'https://github.com/tonymillion/Reachability'
  s.authors          = 'Tony Million' => 'tonymillion@gmail.com'
  s.summary          = 'ARC and GCD Compatible Reachability Class for iOS and OS X.'
  s.source           =  {
                          :git => 'https://github.com/tonymillion/Reachability.git',
                          :tag => 'v3.1.0'
                        }
  s.source_files     = 'Reachability.h,m'
  s.framework        = 'SystemConfiguration'
  s.requires_arc     = true
end
```

Linting

```
$ pod spec lint MyAwesomePod/MyAwesomePod.podspec
```

```
$ cd MyAwesomePod
$ pod lib lint
```

Use`$ pod lib lint`.

Use Semantic Versioning 2.0.0 for your libraries.

Document your Pod

Pushing to the master repo

```
$ pod push master MyAwesomePod/MyAwesomePod.podspec
```

Release an open source Pod without a proper license.

Reasons to use CocoaPods

even for private libraries

View of the application as the glue layer

Encapsulations of unit tests

Better encapsulation of code

Reusability

Dependencies

Paves out the way for open source publication

(which in some cases makes sense)

Convenience

Leaner development with the creation of Demo targets

Clear identification of which version of a library/source code is used

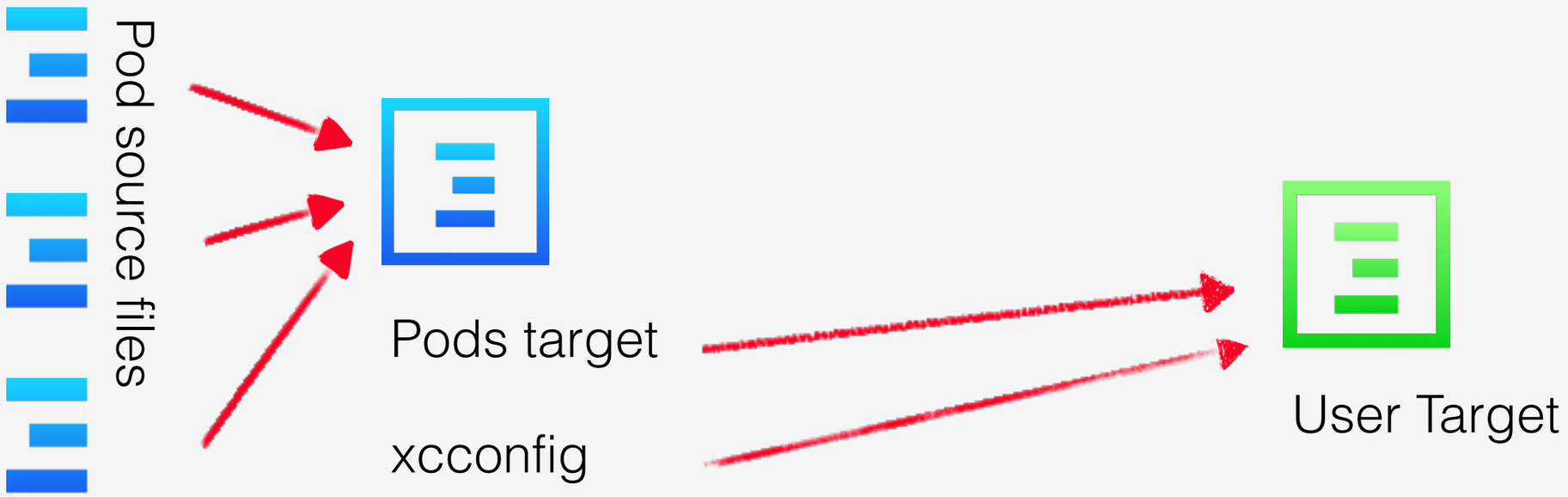
Private repos

```
$ pod repo add MYPrivateRepo SOURCE_URL
$ pod push MYPrivateRepo MyAwesomePod/MyAwesomePod.podspec
```

@fabiopelosin

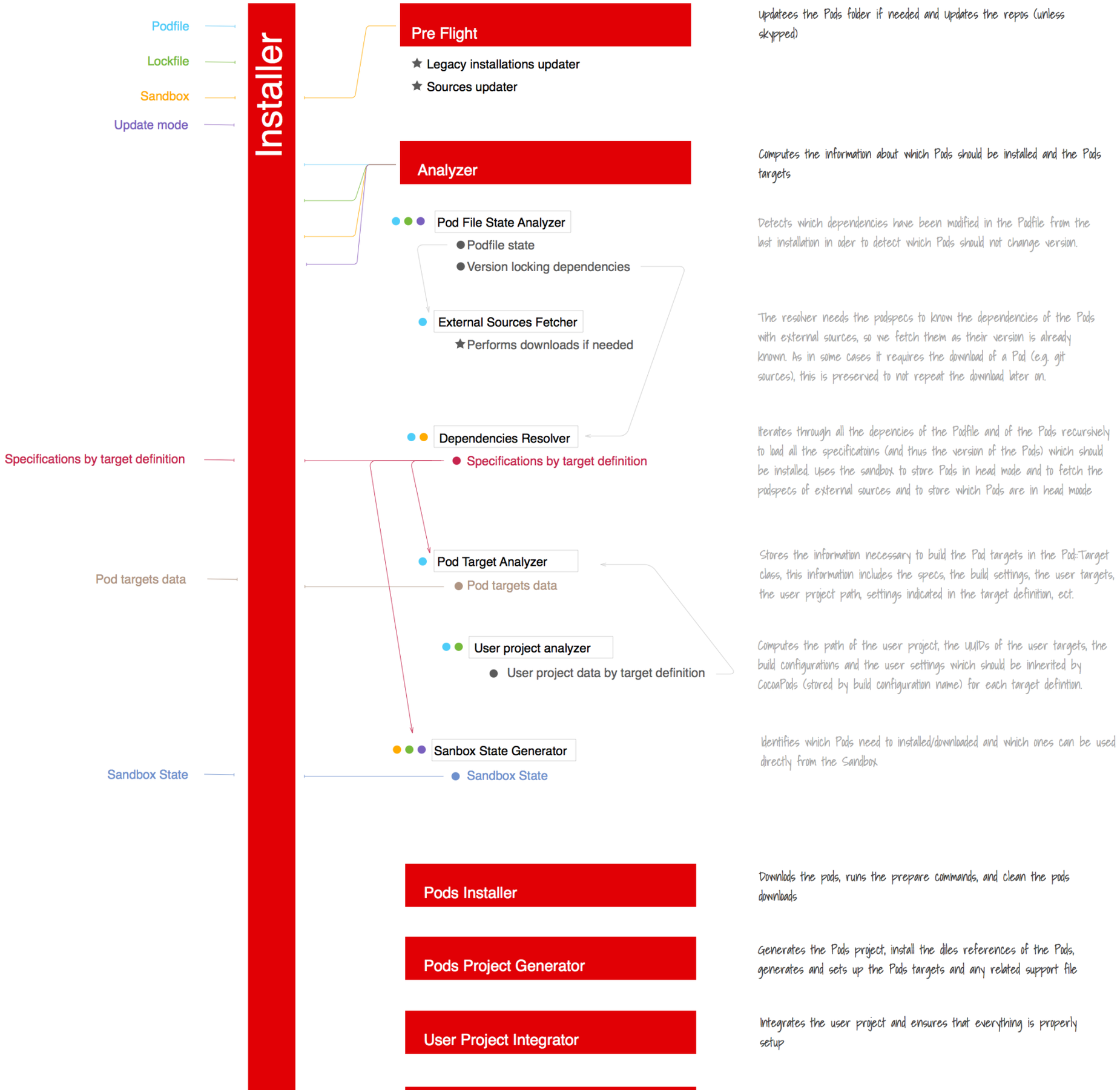
irrationalfab

How CocoaPods works


Pod source files
Pods target
xcconfig
User Target

CocoaPods main tasks

- Creates the workspace.
- Creates the Pods project.
- Adds the relative Pod target to your library link in the binaries build phase.
- Configures your library with the xcconfigs.
- Does some other minor house keeping.



updatees the Pods folder if needed and updates the repos (unless skypped)

Computes the information about which Pods should be installed and the Pods targets

Detects which dependencies have been modified in the Podfile from the last installation in oder to detect which Pods should not change version.

The resolver needs the podspecs to know the dependencies of the Pods with external sources, so we fetch them as their version is already known. As in some cases it requires the download of a Pod (e.g. git sources), this is preserved to not repeat the download later on.

Iterates through all the depencies of the Podfile and of the Pods recursively to load all the specificatoins (and thus the version of the Pods) which should be installed. Uses the sandbox to store Pods in head mode and to fetch the podspecs of external sources and to store which Pods are in head moode

Stores the information necessary to build the Pod targets in the Pod::Target class, this information includes the specs, the build settings, the user targets, the user project path, settings indicated in the target definition, ect.

Computes the path of the user project, the UUIDs of the user targets, the build configurations and the user settings which should be inherited by CocoaPods (stored by build configuration name) for each target defintion.

Identifies which Pods need to installed/downloaded and which ones can be used directly from the Sandbox

Downloads the pods, runs the prepare commands, and clean the pods downloads

Generates the Pods project, install the diles references of the Pods, generates and sets up the Pods targets and any related support file

Integrates the user project and ensures that everything is properly setup

Generates the CocoaPods workspace