HOMEBREW *

BY ILYA KRASNOV @ JUNE 15, 2017

*the missing package manager for macOS

STAKEHOLDERS

▶ **Users (mostly developers)**

▶ **Maintainers**

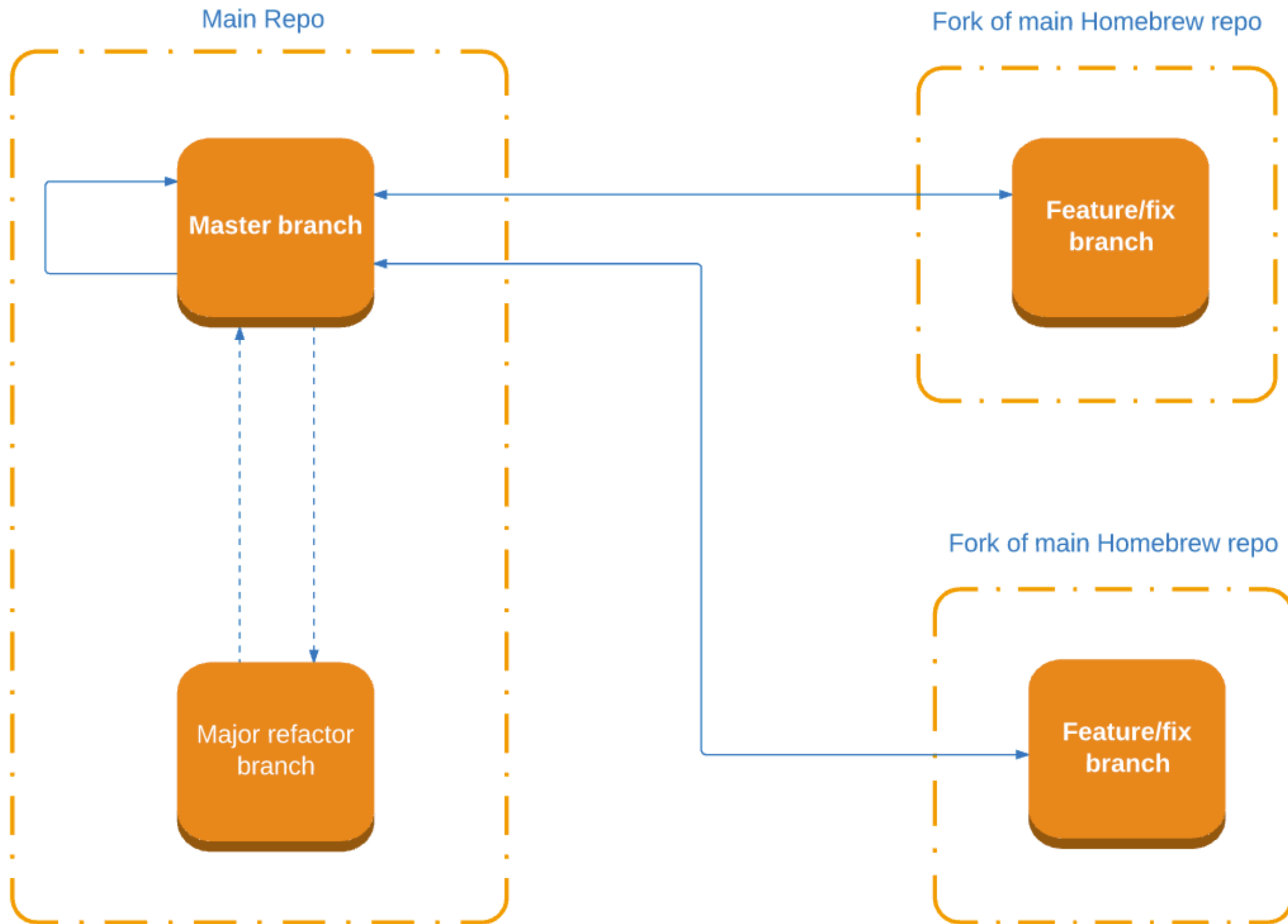▶ **Upstream package maintainers**

USE CASE

SET UP MY MAC

```
brews=(
  coreutils
  git
  htop
  node
  postgresql
  python
…
)

…
prompt "Install packages"
brew info ${brews[@]}
install 'brew install' ${brews[@]}
```

OPEN SOURCE

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CONTRIBUTING

Main Repo

Fork of main Homebrew repo

Master branch

Feature/fix branch

Major refactor branch

Fork of main Homebrew repo

Feature/fix branch

ARCHITECTURE - LET'S EXPLORE FIRST

- Keg
- Cellar
- Tap
- Formula

FORMULA

```ruby
class Node < Formula
  desc "Platform built on V8 to build network applications"
  homepage "https://nodejs.org/"
  url "https://nodejs.org/dist/v8.1.1/node-v8.1.1.tar.xz"
  sha256 "7b0d176dc4a1db37789e009825ba03d2e3f834227e5efd296167e7ef6b287847"
  head "https://github.com/nodejs/node.git"

…
  # We track major/minor from upstream Node releases.
  # We will accept *important* npm patch releases when necessary.
  resource "npm" do
    url "https://registry.npmjs.org/npm/-/npm-5.0.3.tgz"
    sha256 "de62206d779afcba878b3fb949488c01be99afc42e3c955932e754c2ab9aec73"
  end

  def install
    …
  end

  def post_install
    …
    end

    npm_root = node_modules/"npm"
    npmrc = npm_root/"npmrc"
    npmrc.atomic_write("prefix = #{HOMEBREW_PREFIX}\n")
  end

  def caveats
    if build.without? "npm"
      <<-EOS.undent
        Homebrew has NOT installed npm. If you later install it, you should supplement
        your NODE_PATH with the npm module folder:
          #{HOMEBREW_PREFIX}/lib/node_modules
      EOS
    end
  end

  test do
    path = testpath/"test.js"
    path.write "console.log('hello');"

    …    if build.with? "icu4c"
      output = shell_output("#{bin}/node -e 'console.log(new Intl.NumberFormat(\"de-DE\").format(1234.56))'").strip
      assert_equal "1.234,56", output
    end

    if build.with? "npm"
      # make sure npm can find node
      …
    end
  end
end
```

TESTING

Homebrew / brew   build passing

Current   Branches   Build History   Pull Requests

More options

✓ **Pull Request #2786** Added `/Library/Homebrew/bin` and `/Library   ⑂ #5884 passed

Commit 0234f6b

#2786: Added `/Library/Homebrew/bin` and
`/Library/Homebrew/.npmignore` to gitignore

Branch master

mansimarkaur authored and committed

Ran for 56 min 49 sec

Total time 28 min 21 sec

about 7 hours ago

```ruby
describe Tap do
…
  describe "#install" do
    it "raises an error when the Tap is already tapped" do
      setup_git_repo
      already_tapped_tap = described_class.new("Homebrew", "foo")
      expect(already_tapped_tap).to be_installed
      expect { already_tapped_tap.install }.to raise_error(TapAlreadyTappedError)
    end
  end
…
end
```

Max Howell
@mxcl

Google: 90% of our engineers use the software you wrote (Homebrew), but you can't invert a binary tree on a whiteboard so fuck off.

RETWEETS   LIKES

7,107   8,582