# Cypress - End to End Javascript framework

Main competitors (Selenium-based):
  Nightwatch, Protractor, Phantomjs, Casper, Webdriver.io

**Pros:**
  1) reliability of tests results (unlike flaky Selenium-based ones)
  2) speed
  3) no initial configuration (if no proxy)
  4) all tests are in JS
  5) screenshot for every step or for failed step only
  6) clear and familiar syntax (jQuery, chai, sinon)
  7) very good docs
  8) works with any framework including server rendered pages
  9) smooth cooperation with Percy (visual regression tool)
  10) platform for test grouping and paralellization (github)

**Cons:**

  1) Chrome only (FF version under development)

  2) Newer than most Selenium-based frameworks (started in 2014)

  3) Smaller but still decent size community
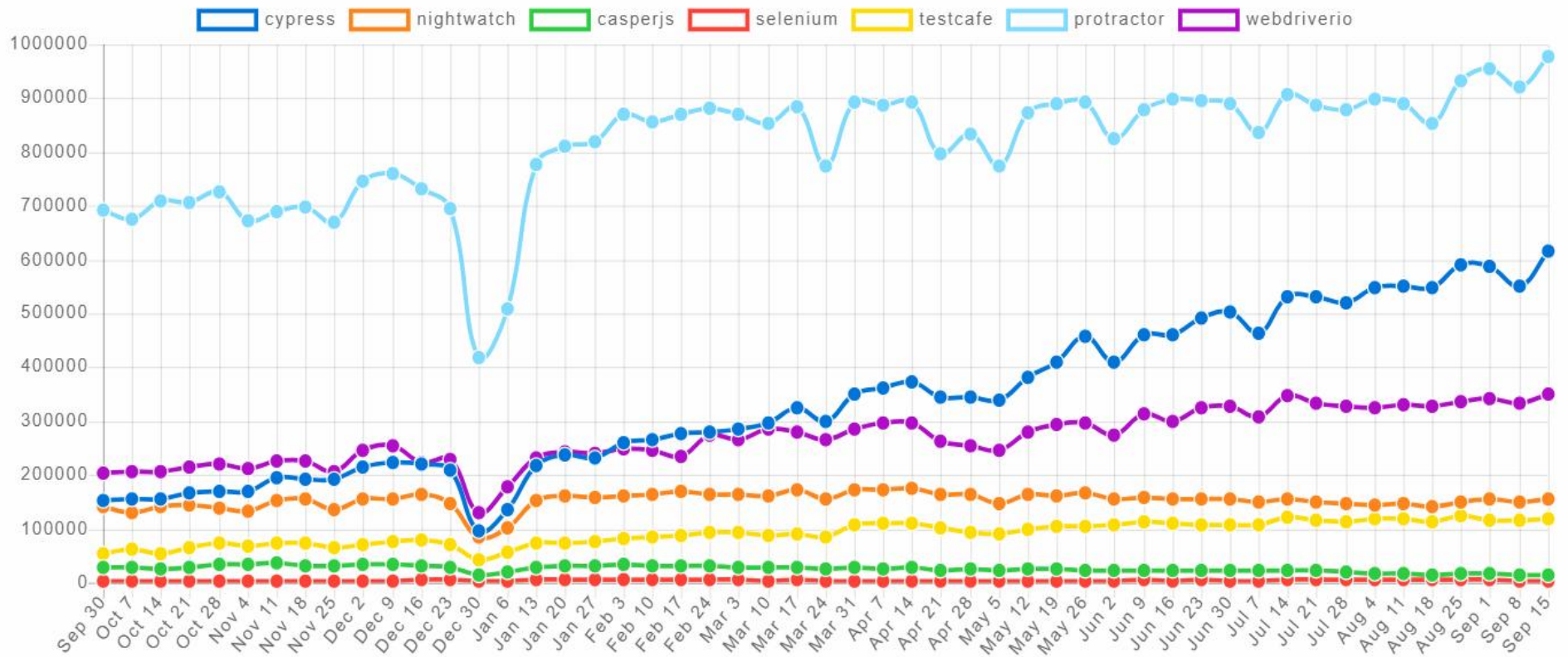
**Github stars and last release dates:**

cypress:       14,651 (ver 1.0 @ July '18, current 3.1.4 @ Jul '19)

nightwatch:   9,667 (last release Sep '19)

webDriverIO:  5,209 (last release Sep '19)

protractor:    8,340 (last release Mar '19)

casperjs:      7,307 (discontinued, last release Nov '17)

phantomjs:  27,023 (discontinued, last release Jan '16)

# 12 months npm downloads

# Github stars and other stats

## Stats

| | stars ✹ | forks 🎞 | issues ⚠ | updated 🛠 | created 🐣 | size 👖 |
|---|---|---|---|---|---|---|
| cypress | 14689 | 794 | 1086 | Sep 20, 2019 | Mar 4, 2015 | minzipped size 352.6 KB |
| nightwatch | 9680 | 950 | 106 | Sep 20, 2019 | Mar 17, 2012 | minzipped size 362.6 KB |
| casperjs | 7308 | 1064 | 0 | Dec 16, 2018 | Sep 5, 2011 | minzipped size 149 B |
| selenium | 4 | 16 | 1 | Mar 14, 2018 | Jul 15, 2011 | bundlephobia 500 |
| testcafe | 7408 | 455 | 430 | Sep 20, 2019 | Apr 20, 2015 | minzipped size 1008.8 KB |
| protractor | 8344 | 2282 | 544 | Aug 9, 2019 | Jan 16, 2013 | bundlephobia 500 |
| webdriverio | 5214 | 1497 | 99 | Sep 20, 2019 | Aug 30, 2011 | minzipped size 314.0 KB |

## Cypress.io platform

a) much faster test execution thanks to parallelization
   and test grouping

c) github integration

d) $99 monthly for 5 users

e) free tier for 3 users for non-commercial projects

## Corporate users

NASA, Autodesk, Netflix, DHL, Shopify, GitHub, Slack,
SendGrid, SaltStack and GoDaddy

## Links

Cypress vs. Selenium, is this the end of an era ?  06.06.2018
   https://automationrhapsody.com/cypress-vs-selenium-end-era

Cypress.io - the selenium killer
   https://blog.logrocket.com/cypress-io-the-selenium-killer