

QA Testiranje Web Stranica



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Pojmovi

QA - Quality Assurance

CICD pipeline - Continuous Integration / Continuous Development

Assertion

Testiranje web stranica

- Tipovi QA testiranja
 - Monkey test
 - Unit test
 - Visual regression testing
 - E2E (end-to-end) test
 - Acceptance test (UAT)
 - Integration testing
- Još tipova testiranja
 - Usability test
 - Performance test
 - Sanity test
 - Stress test
 - Security test
 - Smoke test
 - ...

Ručni vs Automatizirani Testovi

- Ručni testovi su:
 - Sporiji
 - Lagano se testiraju kompleksni zahtjevi
 - Ne zahtjevaju maintenance
- Automatizirani testovi su:
 - Brži
 - Točniji su
 - Dugo treba da se napišu
 - Zahtjevaju inženjere
 - Zahtjevaju maintenance

Automatizirani QA Testovi

- Pokreću se iz CI/CD pipelinea

```
1 name: GitHub Actions Demo
2 on: [push]
3 jobs:
4   Explore-GitHub-Actions:
5     runs-on: ubuntu-latest
6     steps:
7       - run: echo "🚀 The job was automatically triggered by a ${github.event_name} event."
8       - run: echo "💻 This job is now running on a ${runner.os} server hosted by GitHub!"
9       - run: echo "🔍 The name of your branch is ${github.ref} and your repository is ${github.repository}."
10      - name: Check out repository code
11        uses: actions/checkout@v3
12      - run: echo "💡 The ${github.repository} repository has been cloned to the runner."
13      - run: echo "🖨️ The workflow is now ready to test your code on the runner."
14      - name: List files in the repository
15        run: |
16          ls ${github.workspace}
17      - run: echo "🍏 This job's status is ${job.status}."
```



GitHub Actions



GitLab



Jenkins

Github Actions

The screenshot shows the GitHub Actions page for the repository 'zvone187 / outlineDOMElements'. The interface includes a top navigation bar with links to Pull requests, Issues, Marketplace, and Explore. Below this is a secondary navigation bar with links to Code, Issues, Pull requests, Actions (highlighted with a red arrow labeled '1'), Projects, Wiki, Security, Insights, and Settings. The main content area is titled 'All workflows' and shows 'Showing runs from all workflows'. A search bar labeled 'Filter workflow runs' is present. Below the search bar, a table header indicates '0 workflow runs' with columns for Event, Status, Branch, and Actor. The table body is empty, displaying a message 'There are no workflow runs yet.' with a workflow diagram icon. A red arrow labeled '2' points to the 'All workflows' button in the left sidebar. The footer contains the GitHub logo, copyright information, and various links including Terms, Privacy, Security, Status, Docs, Contact GitHub, Pricing, API, Training, Blog, and About.

zvone187 / outlineDOMElements Private

Unwatch 1 Fork 0 Star 0

<> Code Issues Pull requests **Actions** Projects Wiki Security Insights Settings

Workflows [New workflow](#)

All workflows

Filter workflow runs

0 workflow runs Event Status Branch Actor

There are no workflow runs yet.

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Github Actions

zvone187 / outlineDOMElementsPrivate

Unwatch1Fork0Star0

<> CodeIssuesPull requests**Actions**ProjectsWikiSecurityInsightsSettings

Get started with GitHub Actions

Build, test, and deploy your code. Make code reviews, branch management, and issue triaging work the way you want. Select a workflow to get started.

Skip this and [set up a workflow yourself](#) →

Search workflows

Suggested for this repository

Simple workflow

By GitHub

Start with a file with the minimum necessary structure.

Configure

DeploymentView all

Responsiveye

Responsiveye - test entire site at once

Configure

Testing●

Deploy to Amazon ECS

By Amazon Web Services

Deploy a container to an Amazon ECS service powered by AWS Fargate or Amazon EC2.

Configure

Deployment●

Build and Deploy to GKE

By Google Cloud

Build a docker container, publish it to Google Container Registry, and deploy to GKE.

Configure

Deployment●

Terraform

By HashiCorp

Set up Terraform CLI in your GitHub Actions workflow.

Configure

Deployment●

Deploy to Alibaba Cloud ACK

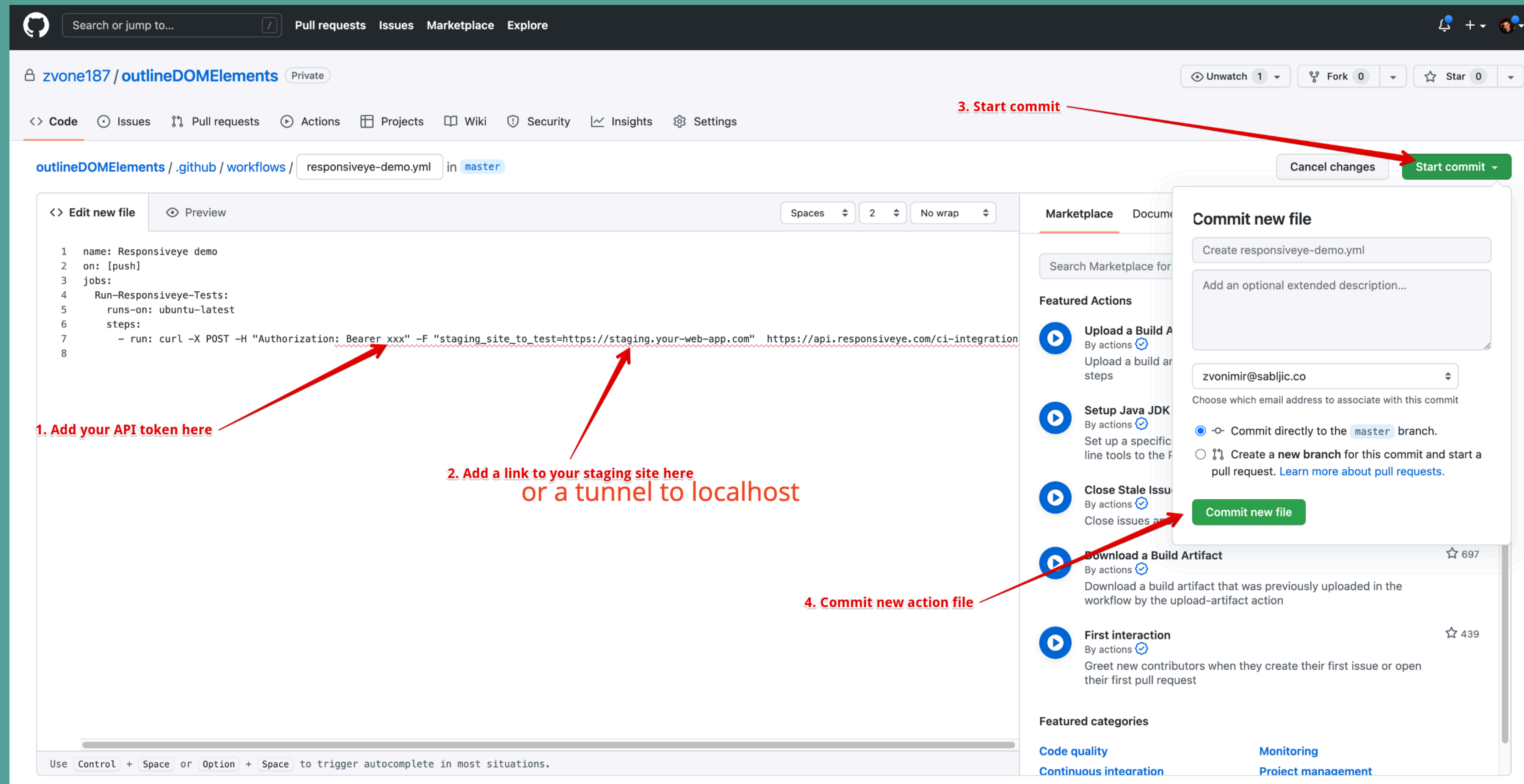
Deploy to IBM Cloud Kubernetes Service

Tencent Kubernetes Engine

OpenShift

By Red Hat

Github Actions



Tipovi QA testiranja

Za web stranice

Unit Test

- Testiranje zasebnih dijelova koda
- Piše se u programskom jeziku sa frameworkom



Integration Test

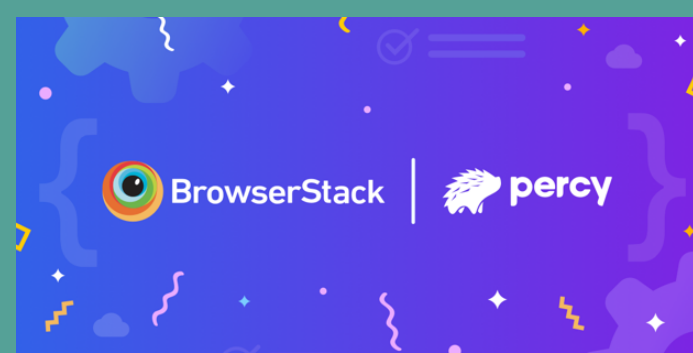
- Testiranje veza između zasebnih dijelova koda
- Testiranje API endpointova

Acceptance Test (UAT)

- Testiranje zahtjeva korisnika
- Bazirano na biznis logici
- Piše se mali broj putanja koje korisnik najčešće radi

Visual Regression Test

- Vizualno uspoređivanje stanja na stranici



Monkey Test

- Nasumično testiranje elemenata na ekranu
- Obuhvaća i nemoguće scenarije ali i obuhvaća one kojih se nije moguće sjetiti

E2E Test

- Testiranje SVIH dijelova stranice (frontend, backend, baza, itd.)
- Najzahtjevnija i najtočnija vrsta testiranja

Automatizacija E2E testova

1. Ručno pisanje testova



2. No code / Low code rješenja

- Snimanje testova
- Izrada dijagrama



Responsiveye Alpha

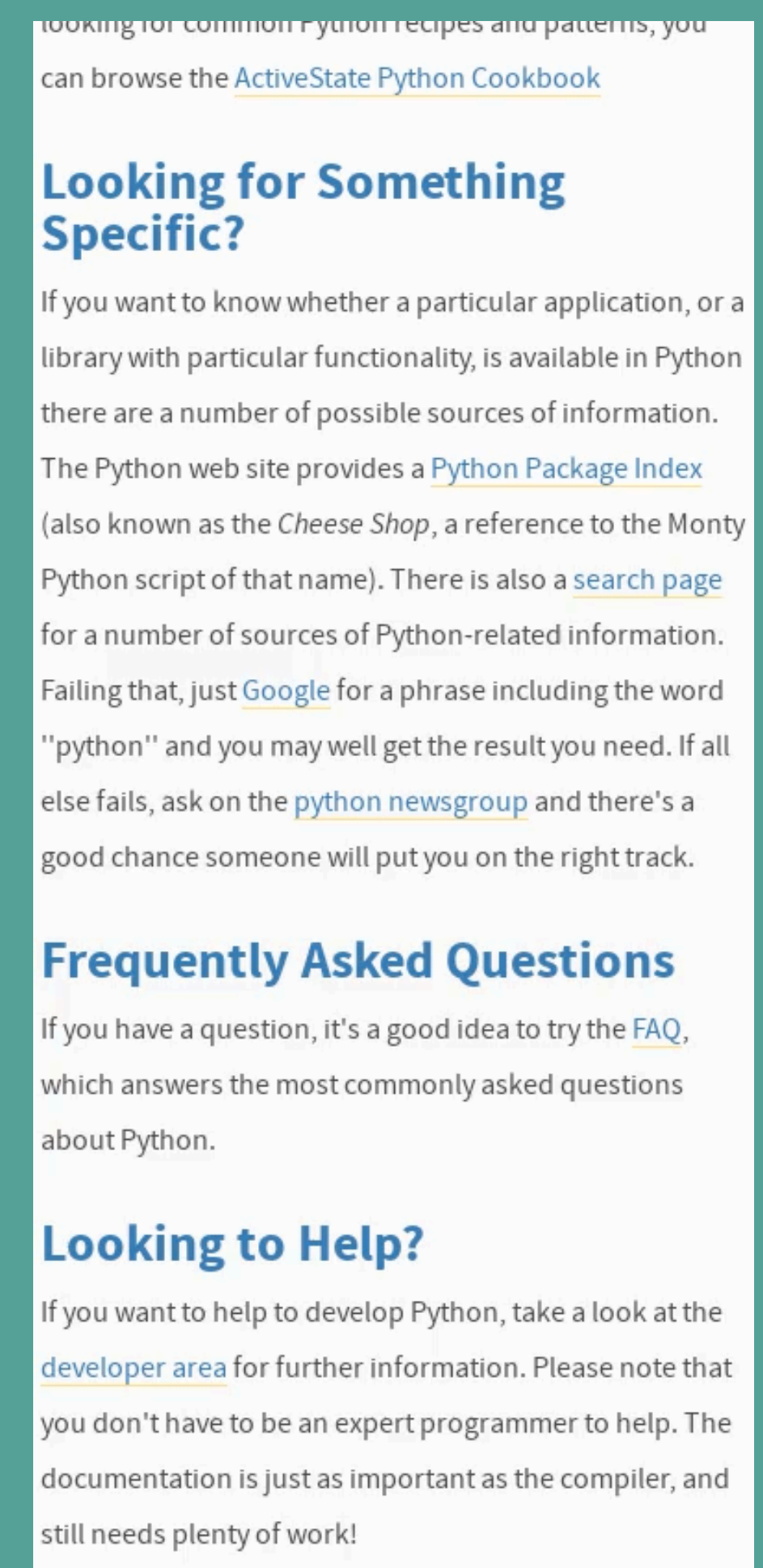
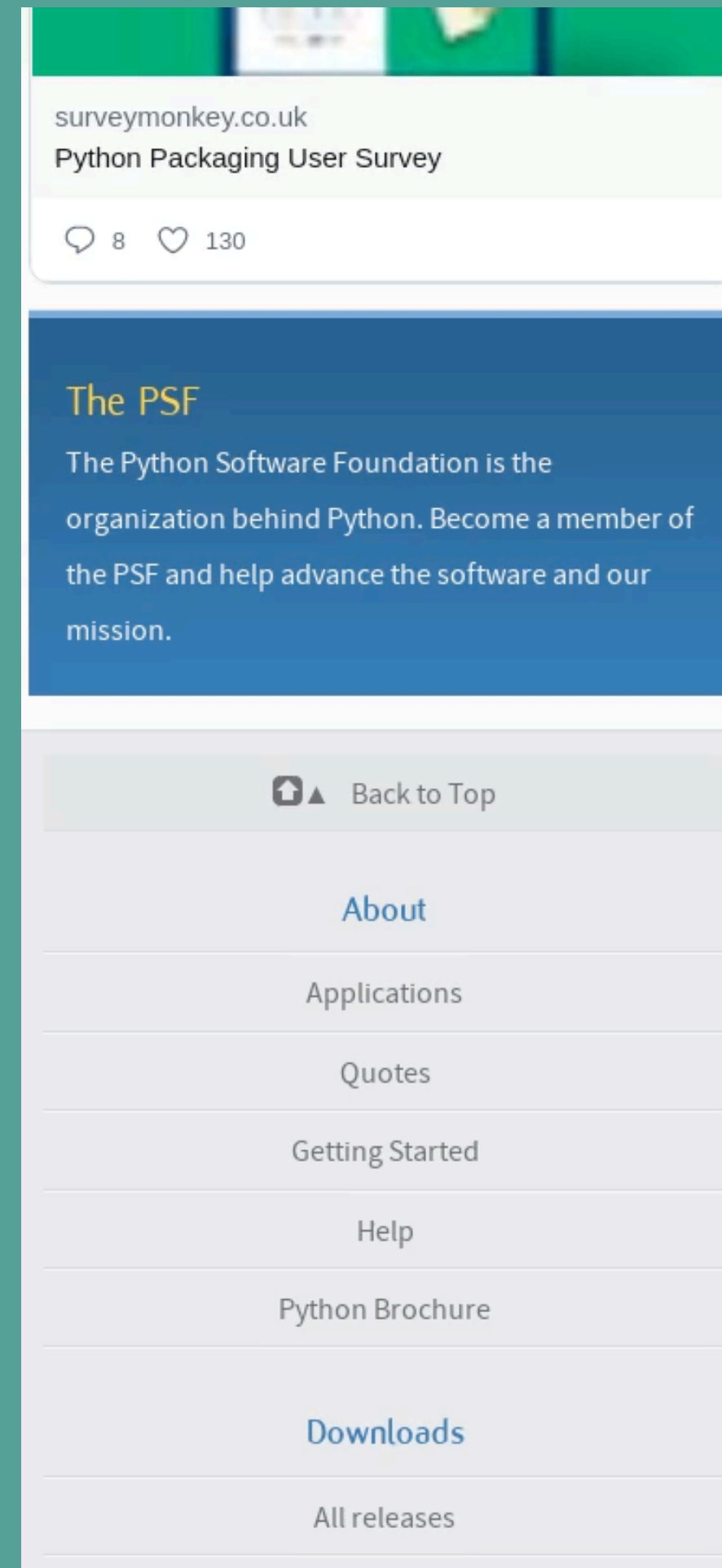
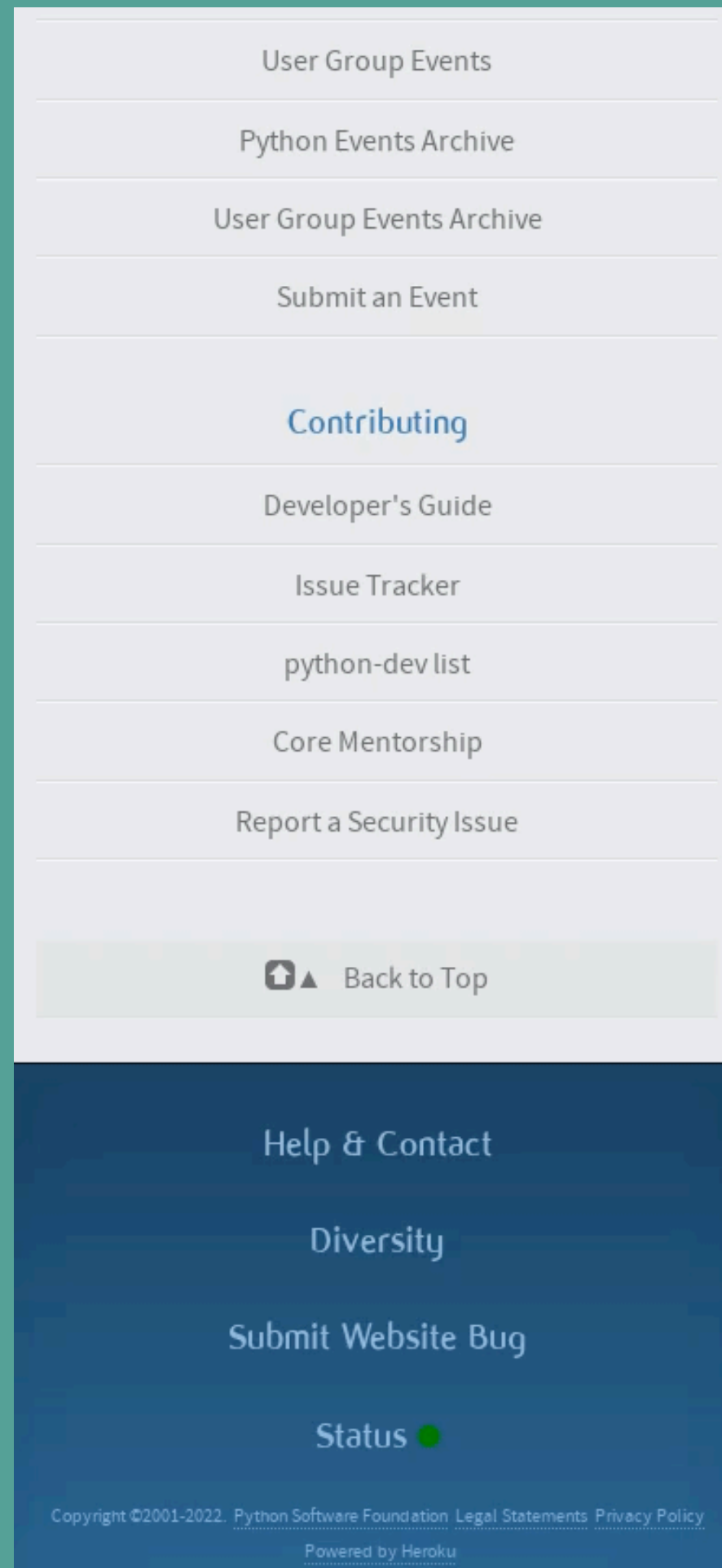
Funkcionalno testiranje

Prva platforma koja generira automatske E2E testove sama od sebe

- Postavljanje traje 3 minute
- Automatski se generiraju tisuće testova
- Testovi se pokreći na našim serverima u paraleli
- Rezultati su dostupni unutar nekoliko minuta

Responsiveye Alpha

Funkcionalno testiranje

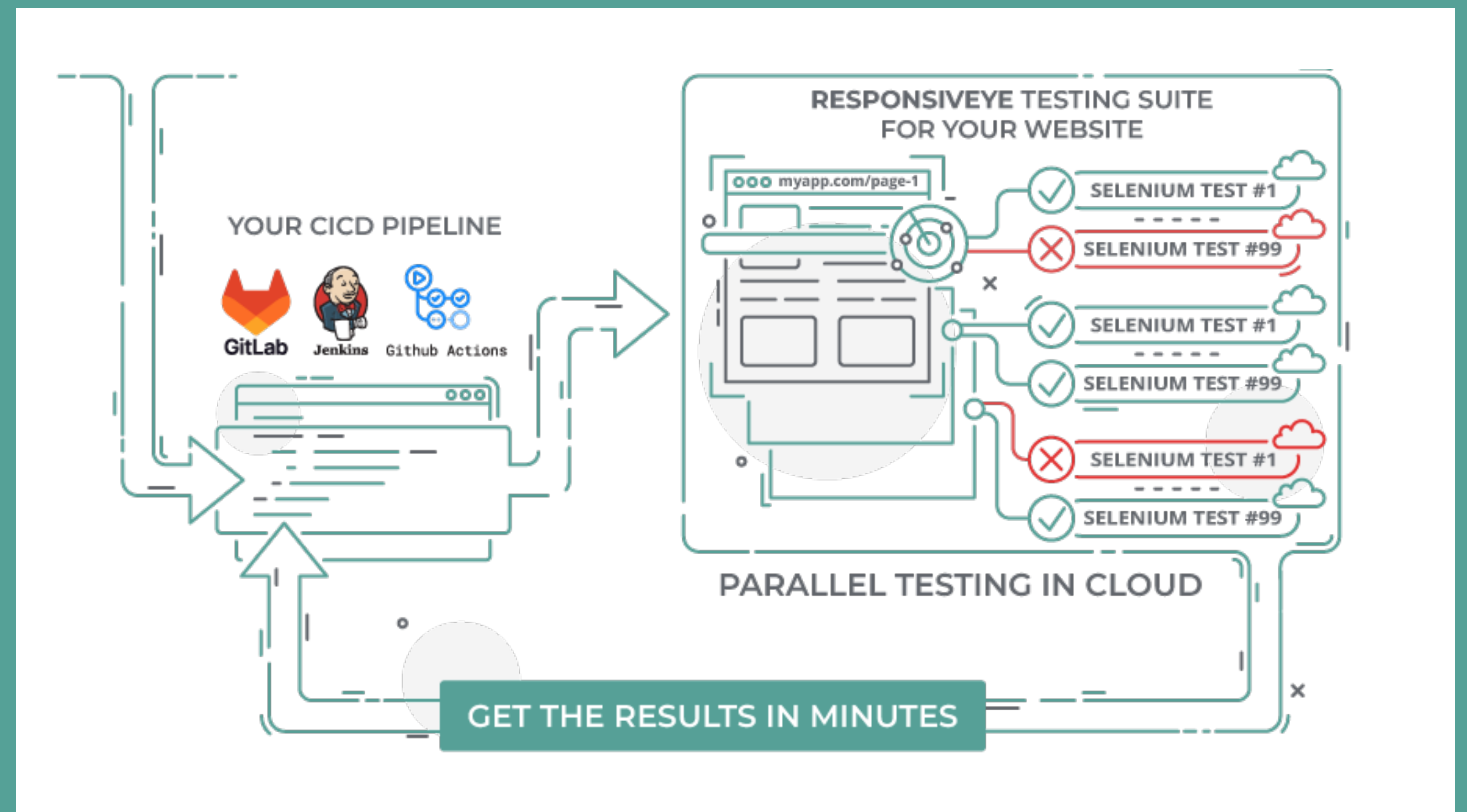


Responsiveye Beta

Funkcionalno testiranje sa snippetom koda

Potrebno je pasteati Responsiveye code snippet u HTML head

- Pokriva sve unikatne test slučajeve stranice
- Pokrivenost testova do 95%



Roadmap

Alpha Stage

0 user input for **up to 30%** test coverage

Beta Stage

JS code snippet to boost test coverage **to 95%**

Full release (v1.0)

Security features, on premise, reporting, and more...



Feedback? Pitanja?

Više detalja možete vidjeti na <https://responsiveye.com>

Ako želite isprobati Responsiveye, javite se nakon prezentacije pa možemo dogovoriti privatni demo