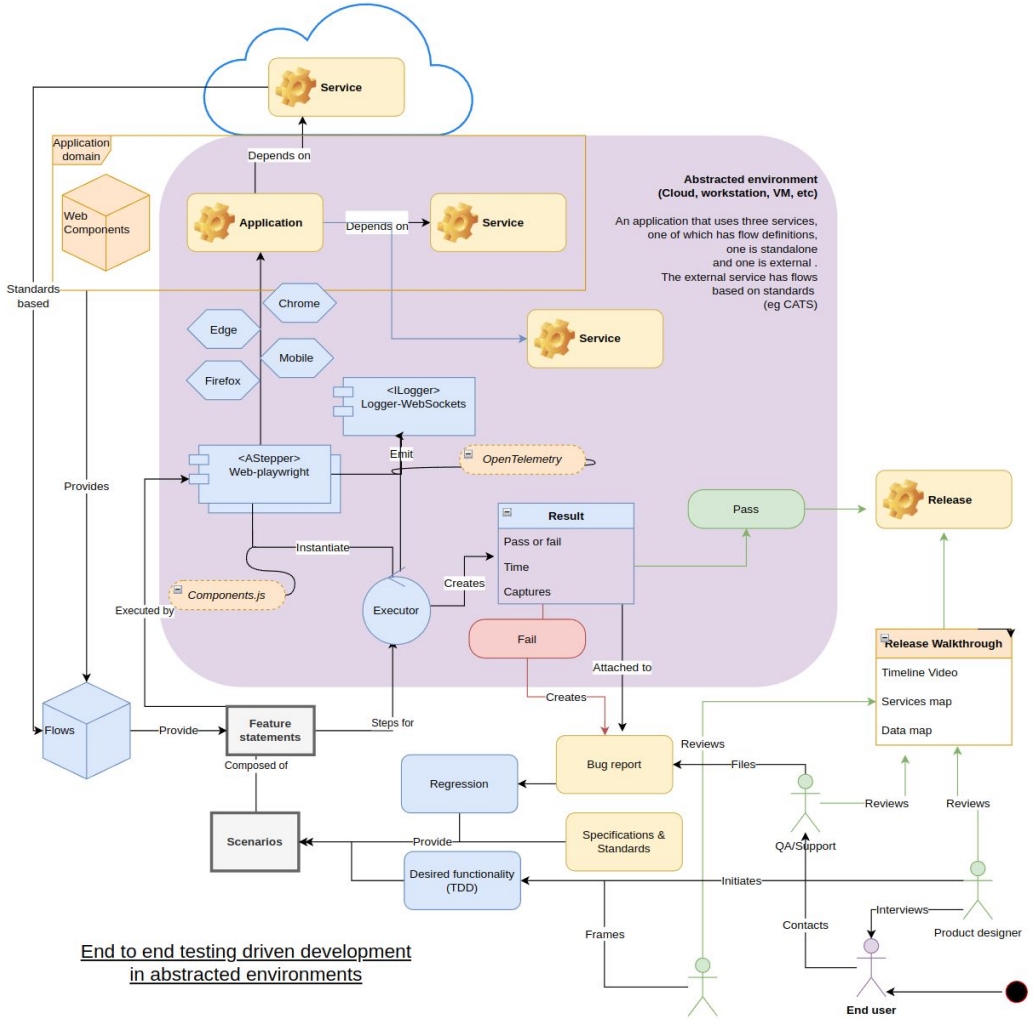
Haibun

End to end specification driven development in abstracted environments

Load tests

November, 2023



[Overview diagram]

Important elements of Haibun

Reduce the friction for developing high standard products (specs, tests, documentation)

Understandable by anyone, produce clear artifacts

Fits into existing systems, one piece of the puzzle

- Development pipelines
- Local or cloud environments

Very high level of re-use: Specification → flows → features → scenarios -> steps

Re-use for load tests

How Haibun fits into development

Runs in cloud pipeline
Local or cloud resources

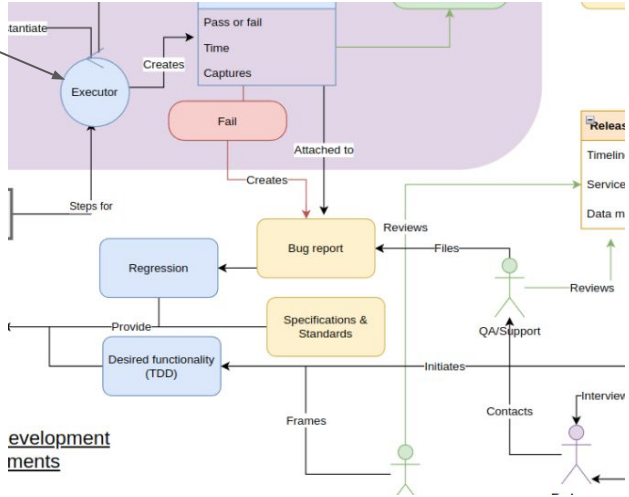
Define product through specification & features

Run feature tests locally for wide / repetitive tasks

Run in pipeline to verify features and standards
- Functional
- Accessible
- ...

Product up to date documentation

Support quality prompt driven development?
https://githubnext.com/projects/speclang/



Standalone test

Feature: A form and counter

Backgrounds: counter

When I have a valid random username <username>

Go to the form webpage
When I input <username> for user name
And I click the button Submit

Then I should see Success
And the URI query parameter username is <username>

Test dispatcher

Feature: Simulated load test

Background features are loaded for the test environment.

Files crucial for load testing are served for the automated testing process.

serve files at /counter from "counter"

The test navigates to the authentication page and performs simulated login actions.

The load testing settings are configured to trigger tests from the a local folder.

Dispatch load tests from **"local-tests/client-test"**

Clients

```
Feature: Client load test

  start load test client
```

Feature

```
FROM mcr.microsoft.com/playwright:v1.39.0-jammy

WORKDIR /usr/src/app

COPY package*.json ./

RUN npm install

COPY . .

COPY . ./
COPY .dockerignore ./

CMD ["npm", "run", "local-client"]
```

Dockerfile

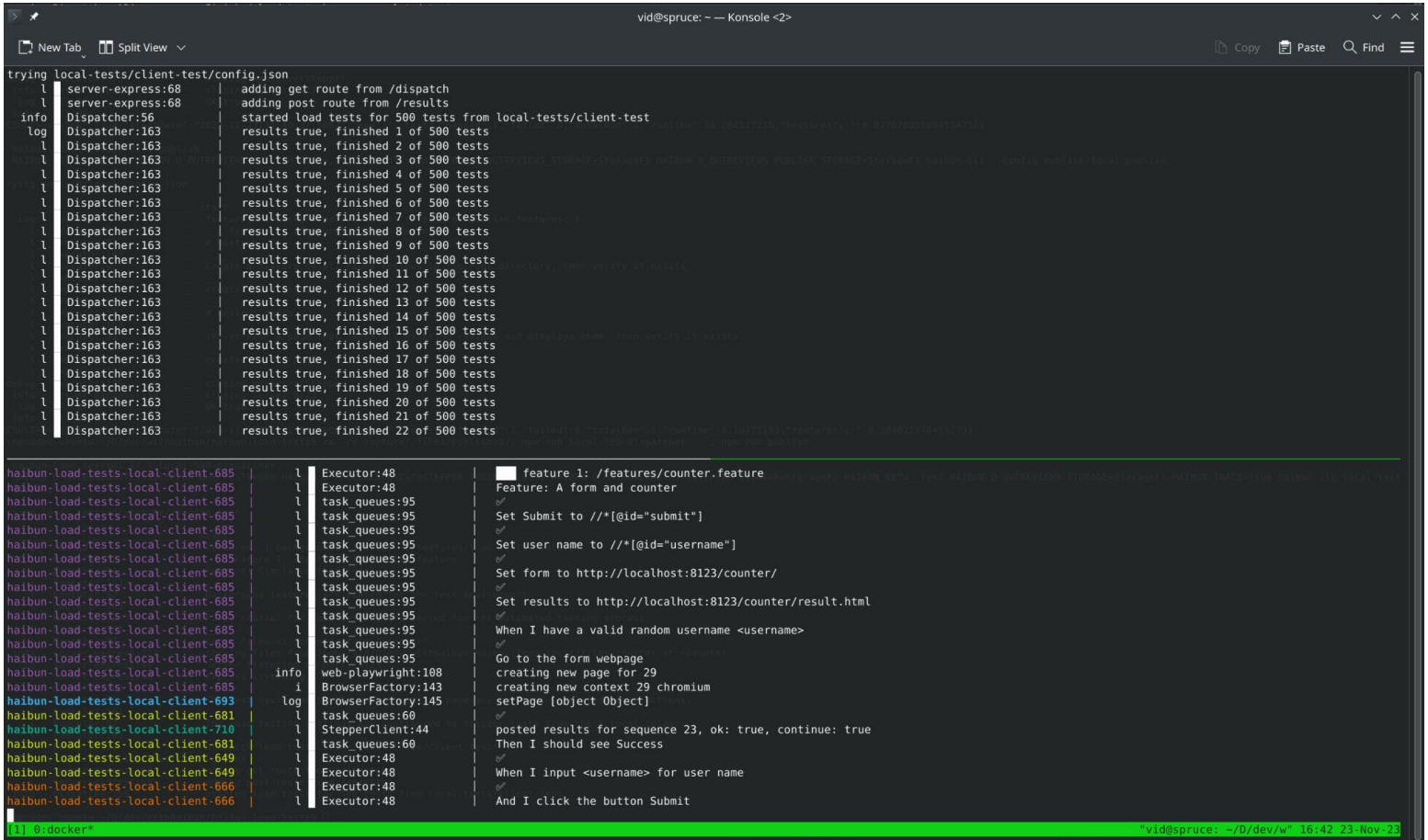
```
version: '3.8'
services:
 local-client:
   build: .
   env_file:
     - env-client
   network_mode: "host"
```

docker-compose.yml

```
HAIBUN_O_WEBPLAYWRIGHT_STORAGE=StorageFS
HAIBUN_O_WEBPLAYWRIGHT_HEADLESS=true
HAIBUN_O_HAIBUNLOADTESTSSTEPPER_TOKEN=local92
HAIBUN_O_HAIBUNLOADTESTSSTEPPER_TRACKS_STORAGE=StorageFS
HAIBUN_TRACE=true
HAIBUN_O_OUTREVIEWS_STORAGE=StorageFS
HAIBUN_O_HAIBUNLOADTESTSSTEPPER_DISPATCHER_ADDRESS=http://192.168.0.200:8123
```

env-client

Running the load test locally using Docker



Report

Load test results are added to the set of generalized Haibun test artifacts.