

Stop Breaking Things Every Time You Move

Oleg Šelajev






some very cool and important changes #27


 Merged kiview merged 1 commit into `master` from `step3-varchar-update` on Apr 26, 2022


 Conversation **1**  Commits **1**  Checks **0**  Files changed **1**

 **GannaChernyshova** commented on Apr 26, 2022 Member ...


No description provided.







  updated `id` in `schema.sql` to `VARCHAR(64)` be1c7be

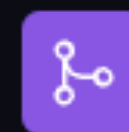
 **kiview** commented on Apr 26, 2022 Member ...

Thanks, this is a simple change, looks good to me.



  **kiview** approved these changes on Apr 26, 2022 View reviewed changes

  **kiview** merged commit `ac2c535` into `master` on Apr 26, 2022

 **Pull request successfully merged and closed** Delete branch

You're all set—the `step3-varchar-up...` branch can be safely deleted.

Production





TESTS WEREN'T THAT GOOD?

topic: **servings**

body:

```
{ "beverages": [  
  {  
    "uuid": "16b439a4-6ace-4901-8fb6-728588c12da8",  
    "coffee": {  
      "name": "Latte",  
      "coffeeContent": 60,  
      "steamedMilkContent": 180,  
      "milkFoamContent": 5  
    }  
  }  
  // ...  
]
```

headers:

```
"contentType": "application/json"  
"testKey1": "testValue1"
```


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Contract tests



Oleg Šelajev

Head of Developer relations

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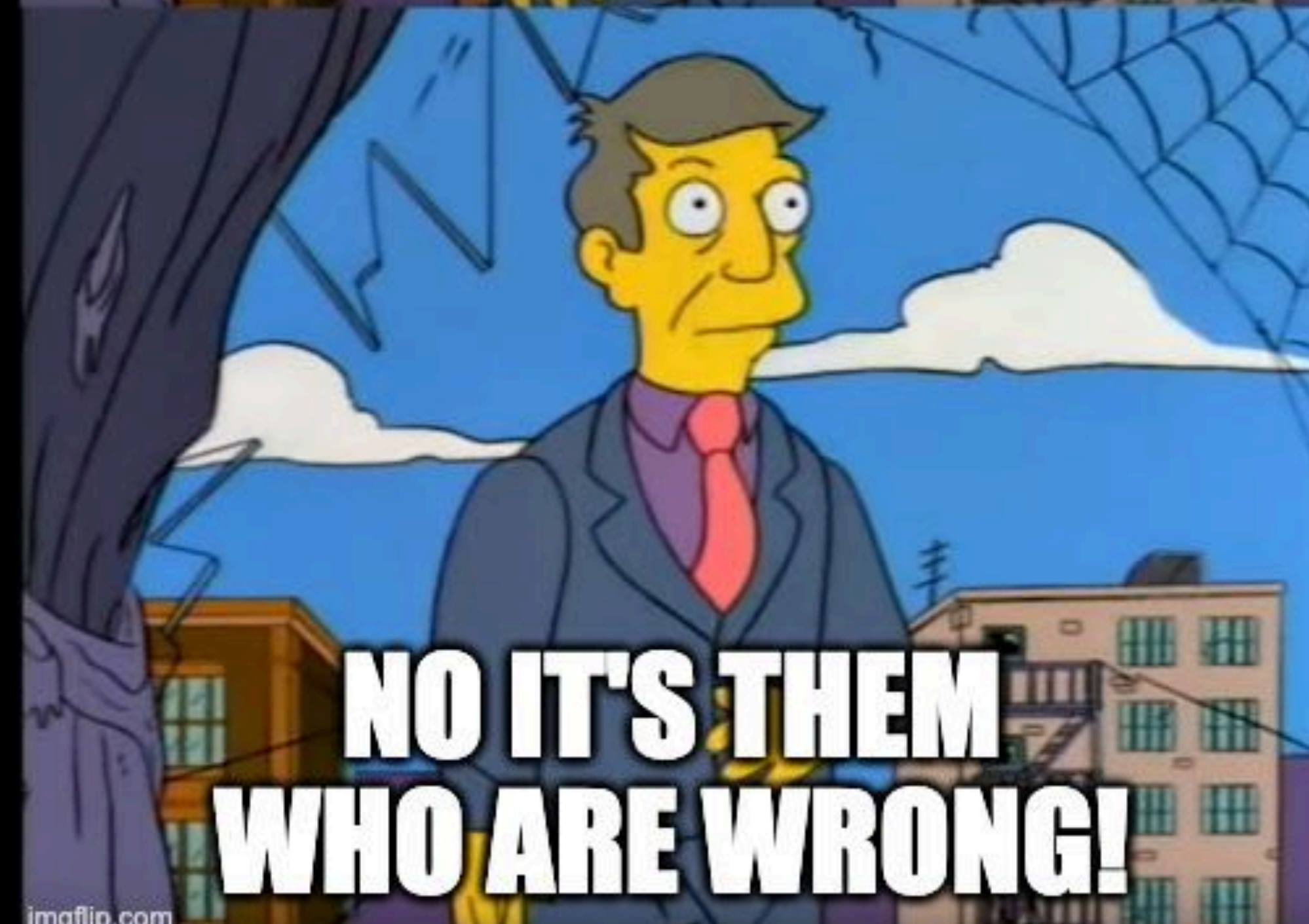


Production





DID I BREAK IT?



**NO IT'S THEM
WHO ARE WRONG!**





Consumer



Producer



Consumer



HTTP

Producer



Consumer



gRPC

Producer



Consumer



Producer





INTEGRATION TESTS





**STUBS ALONE
DON'T GUARANTEE
ANYTHING**



Contract tests

... However
we must
renew
supply goods



Testcontainers
BY ATOMICJAR

Unit Tests with Real Dependencies

Testcontainers is an open source framework for providing throwaway, lightweight instances of databases, message brokers, web browsers, or just about anything that can run in a Docker container.



Testcontainers

WE ♥ OPEN SOURCE
& EMPLOY MAINTAINERS



FOR YOUR ENTIRE STACK

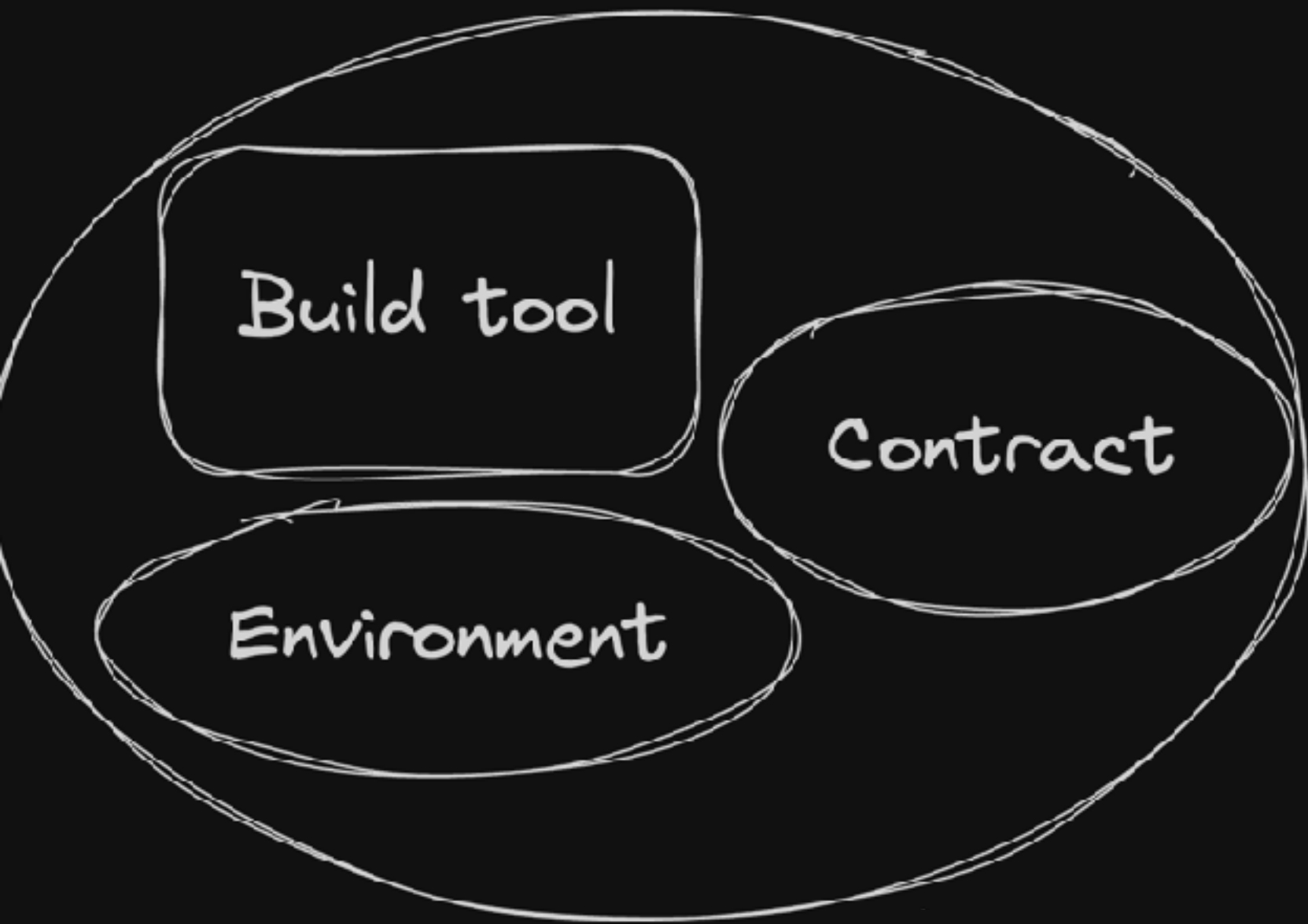
Test against any database, message broker, browser...
or just about anything that runs in a Docker container!





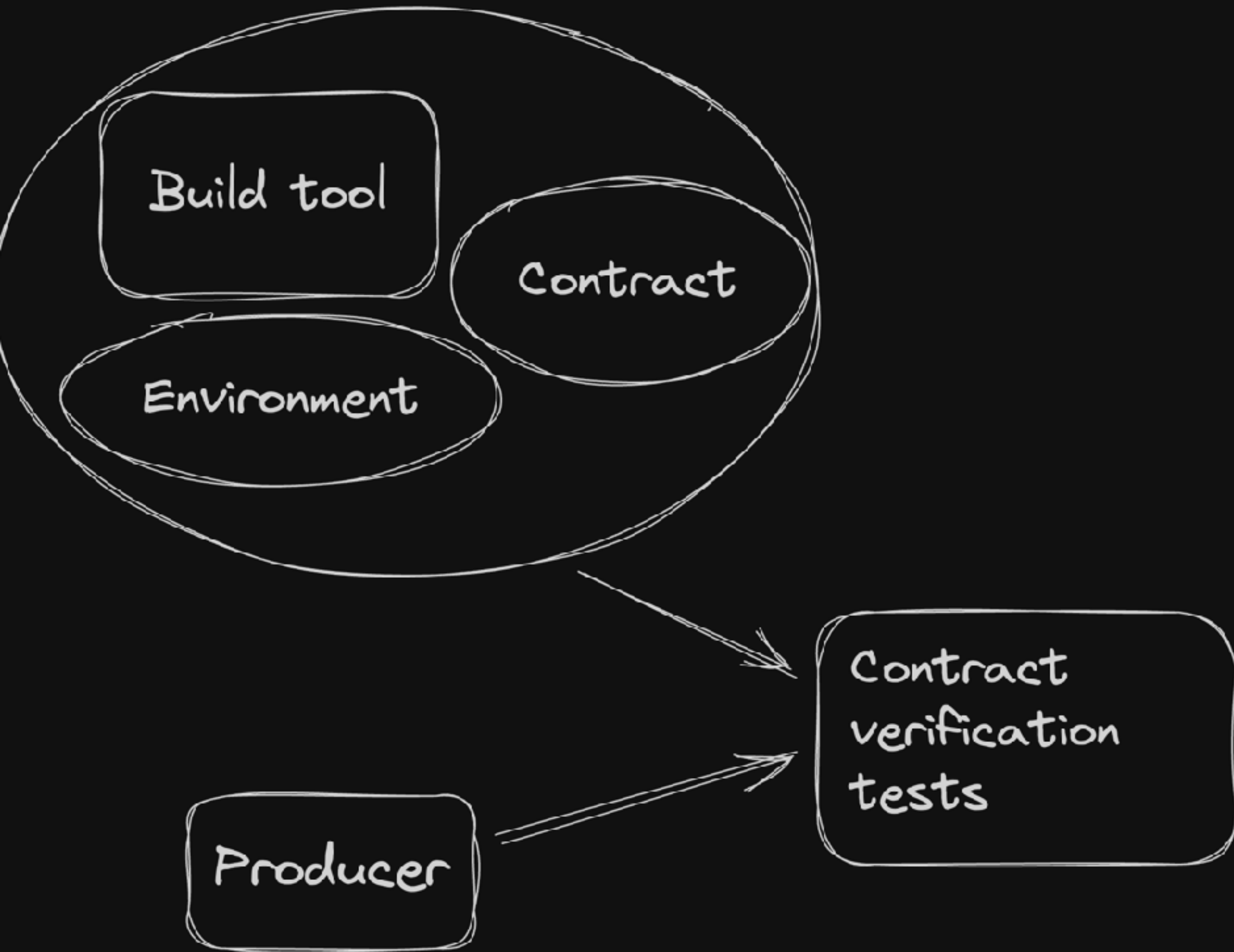
***SPRING CLOUD
CONTRACT***

Consumer-driven contract tests

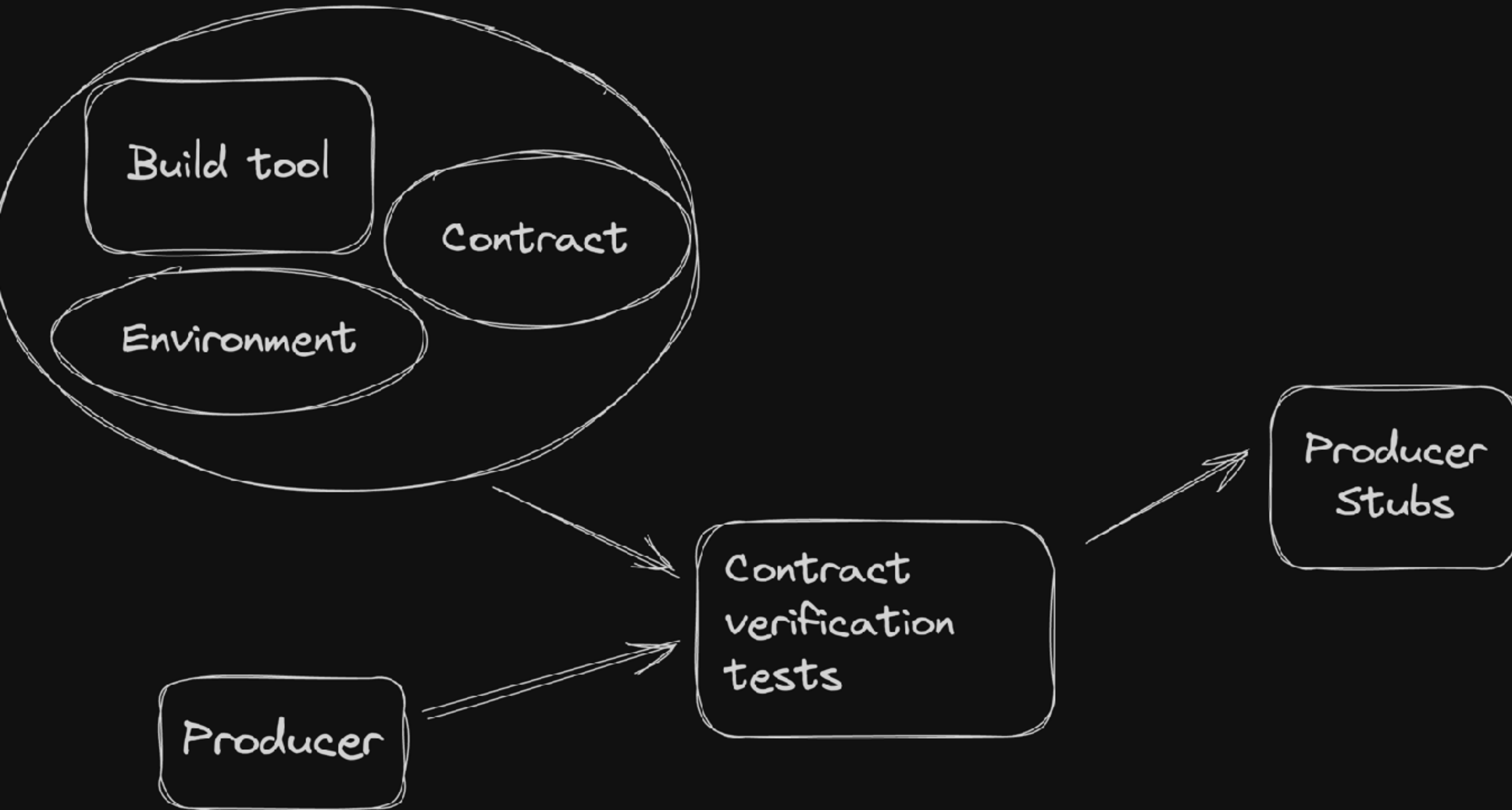


Producer

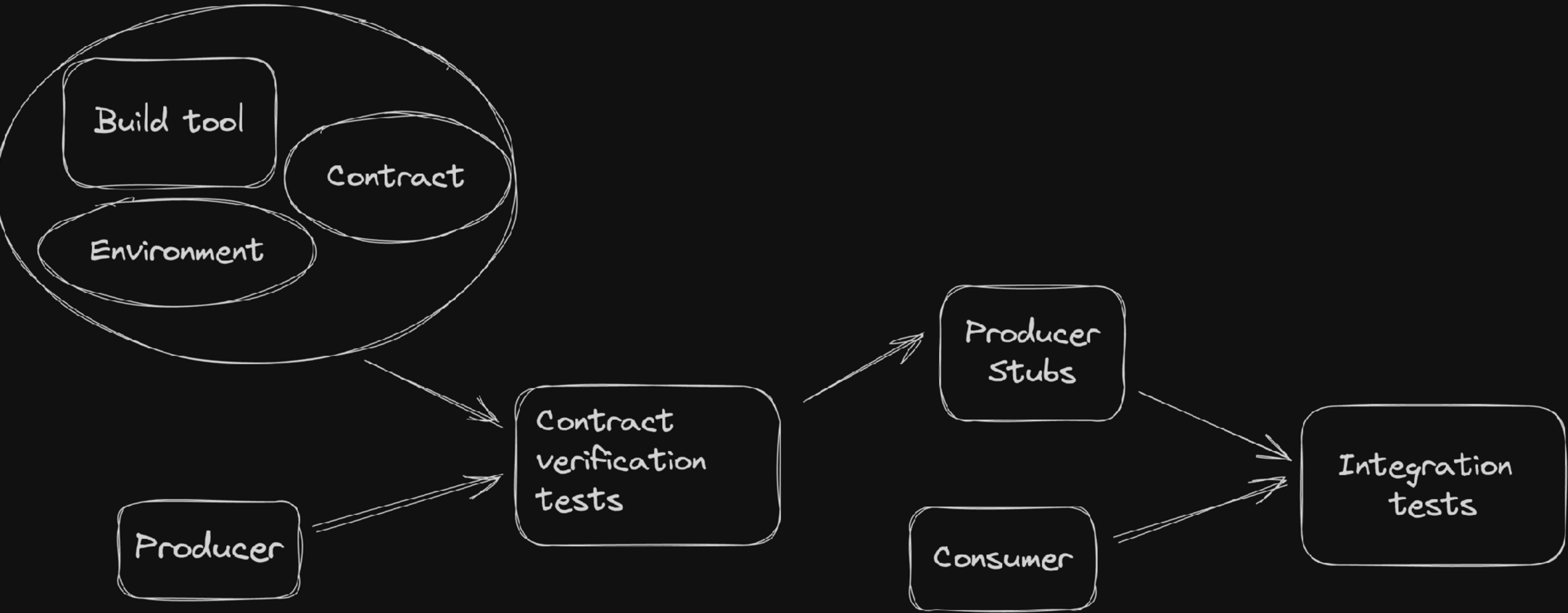
Consumer-driven contract tests



Consumer-driven contract tests



Consumer-driven contract tests

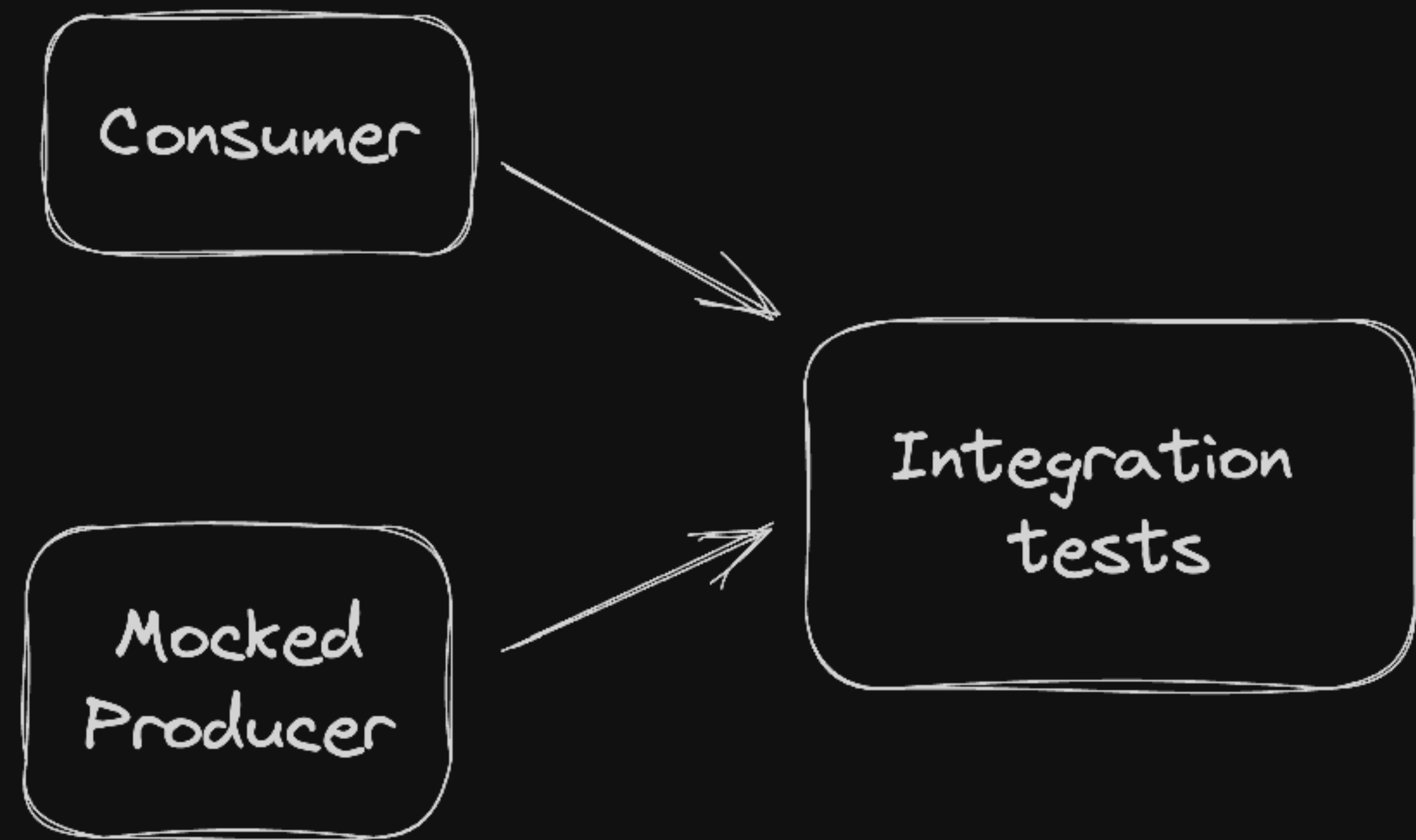


LITTLE DEMO

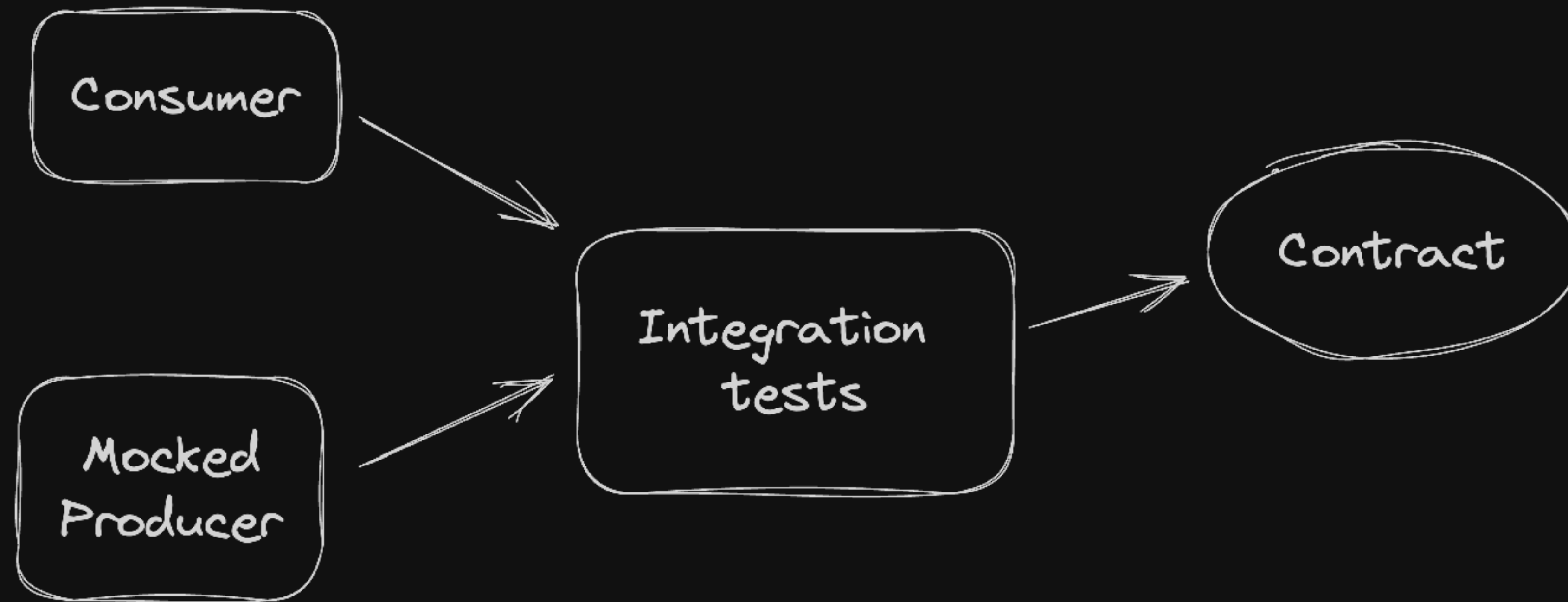


РАСТ

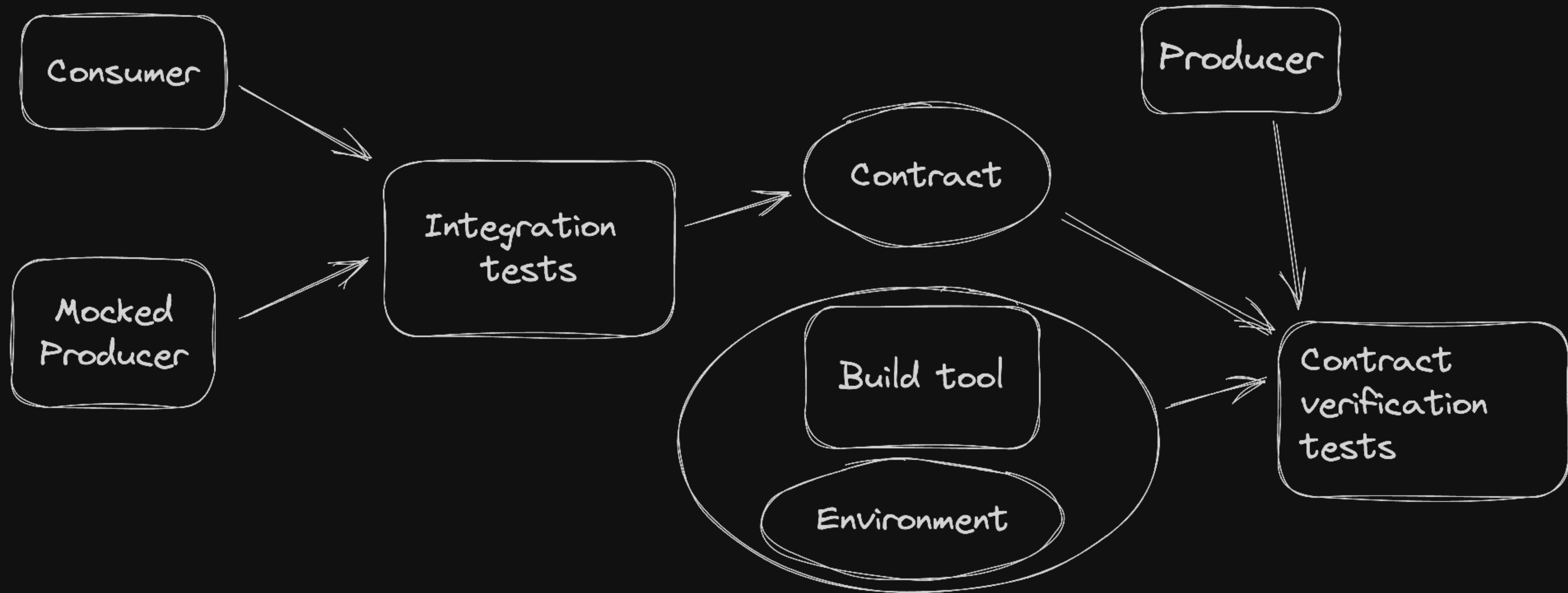
Integration contract testing



Integration contract testing



Integration contract testing



A large, intense fire is burning at night, with bright orange and yellow flames rising into a dark sky. In the foreground, a wooden structure, possibly a building or a stage set, is partially visible, with smoke and fire rising from it. The overall scene is dramatic and high-contrast.

**ANOTHER
LITTLE
DEMO**

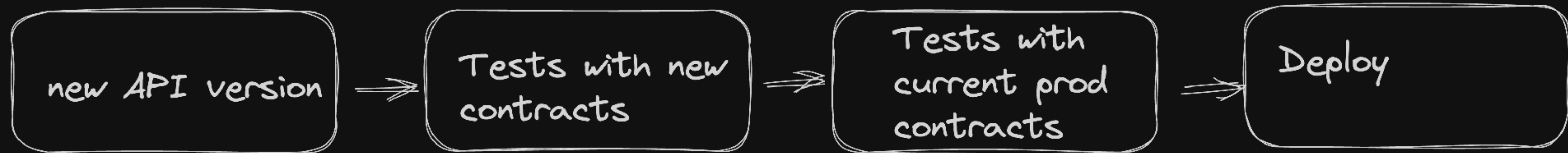
Contracts vs. Schemas



Evolution



Backward compatibility checks



Where next?



– testcontainers.com



– pact.io



– spring.io/projects/spring-cloud-contract