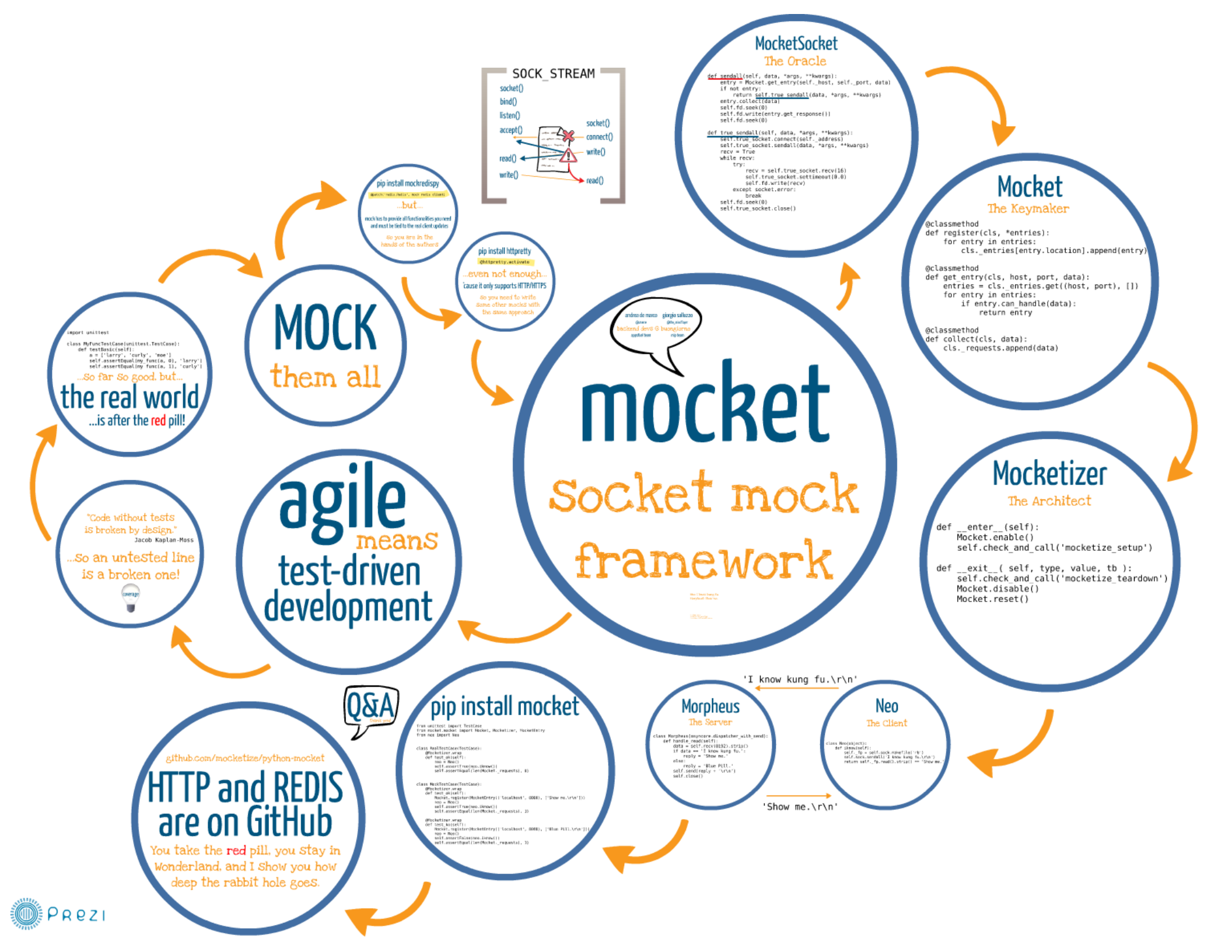
MocketSocket
The Oracle
Mocket
The Keymaker
Mocketizer
The Architect
Morpheus
The Server
Neo
The Client
'I know kung fu.\r\n'
'Show me.\r\n'
SOCK_STREAM
socket()
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pip install mockredispy
...but...
mock has to provide all functionalities you need and must be tied to the real client updates
So you are in the hands of the authors
pip install httpretty
...even not enough...
'cause it only supports HTTP/HTTPS
So you need to write same other mocks with the same approach
MOCK
them all
mocket
Socket mock framework
agile
means
test-driven
development
"Code without tests is broken by design."
Jacob Kaplan-Moss
...So an untested line is a broken one!
...So far So good. but...
the real world
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pip install mocket
Q&A
github.com/mocketize/python-mocket
HTTP and REDIS are on GitHub
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Prezi

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So you need to write some other mocks with the same approach

andrea de marco @z4erre appsfuel team

giorgio salluzzo @the_mindflayer mip team

backend devs @ buongiorno

mocket

socket mock framework

Neo: I know kung fu.
Morpheus: Show me.

```
def get_
    entr
    for


@classme
def coll
    cls.
```

```
def _
    M
    s

def _
    s
    M
    M
```

Neo: I know kung fu.

Morpheus: Show me.


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```
import unittest

class MyFuncTestCase(unittest.TestCase):
    def testBasic(self):
        a = ['larry', 'curly', 'moe']
        self.assertEqual(my_func(a, 0), 'larry')
        self.assertEqual(my_func(a, 1), 'curly')
```

...So far So good, but...

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pip install mockredispy

```
@patch('redis.Redis', mock_redis_client)
```

...but...

mock has to provide all functionalities you need
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pip install httpretty

```
@httpretty.activate
```

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Neo: Whoa. Déjà vu.
Trinity: What did you just say?
Neo: Nothing. Just had a little déjà vu.

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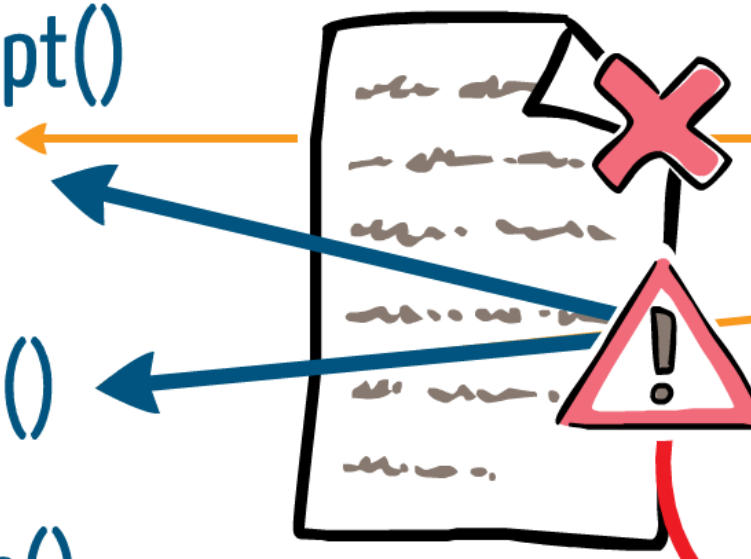
socket()

bind()

listen()

accept()



read()

write()

socket()

connect()

write()

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MocketSocket

The Oracle

```
def sendall(self, data, *args, **kwargs):
    entry = Mocket.get_entry(self._host, self._port, data)
    if not entry:
        return self.true_sendall(data, *args, **kwargs)
    entry.collect(data)
    self.fd.seek(0)
    self.fd.write(entry.get_response())
    self.fd.seek(0)

def true_sendall(self, data, *args, **kwargs):
    self.true_socket.connect(self._address)
    self.true_socket.sendall(data, *args, **kwargs)
    recv = True
    while recv:
        try:
            recv = self.true_socket.recv(16)
            self.true_socket.settimeout(0.0)
            self.fd.write(recv)
        except socket.error:
            break
    self.fd.seek(0)
    self.true_socket.close()
```

```
@classme
def regi
    for
```

Mocket

The Keymaker

```
@classmethod
def register(cls, *entries):
    for entry in entries:
        cls._entries[entry.location].append(entry)

@classmethod
def get_entry(cls, host, port, data):
    entries = cls._entries.get((host, port), [])
    for entry in entries:
        if entry.can_handle(data):
            return entry

@classmethod
def collect(cls, data):
    cls._requests.append(data)
```

Mocketizer

The Architect

```
def __enter__(self):
    Mocket.enable()
    self.check_and_call('mocketize_setup')

def __exit__( self, type, value, tb ):
    self.check_and_call('mocketize_teardown')
    Mocket.disable()
    Mocket.reset()
```

'I know kung fu.\r\n'

Morpheus

The Server

```
class Morpheus(asyncore.dispatcher_with_send):
    def handle_read(self):
        data = self.recv(8192).strip()
        if data == 'I know kung fu.':
            reply = 'Show me.'
        else:
            reply = 'Blue Pill.'
        self.send(reply + '\r\n')
        self.close()
```

Neo

The Client

```
class Neo(object):
    def iknow(self):
        self._fp = self.sock.makefile('rb')
        self.sock.sendall('I know kung fu.\r\n')
        return self._fp.read().strip() == 'Show me.'
```

'Show me.\r\n'

pip install mocket

```
from unittest import TestCase
from mocket.mocket import Mocket, Mocketizer, MocketEntry
from neo import Neo


class RealTestCase(TestCase):
    @Mocketizer.wrap
    def test_ok(self):
        neo = Neo()
        self.assertTrue(neo.iknow())
        self.assertEqual(len(Mocket._requests), 0)


class MockTestCase(TestCase):
    @Mocketizer.wrap
    def test_ok(self):
        Mocket.register(MocketEntry(('localhost', 8080), ['Show me.\r\n']))
        neo = Neo()
        self.assertTrue(neo.iknow())
        self.assertEqual(len(Mocket._requests), 1)

    @Mocketizer.wrap
    def test_ko(self):
        Mocket.register(MocketEntry(('localhost', 8080), ['Blue Pill.\r\n']))
        neo = Neo()
        self.assertFalse(neo.iknow())
        self.assertEqual(len(Mocket._requests), 1)
```

github.com/mocketize/python-mocket

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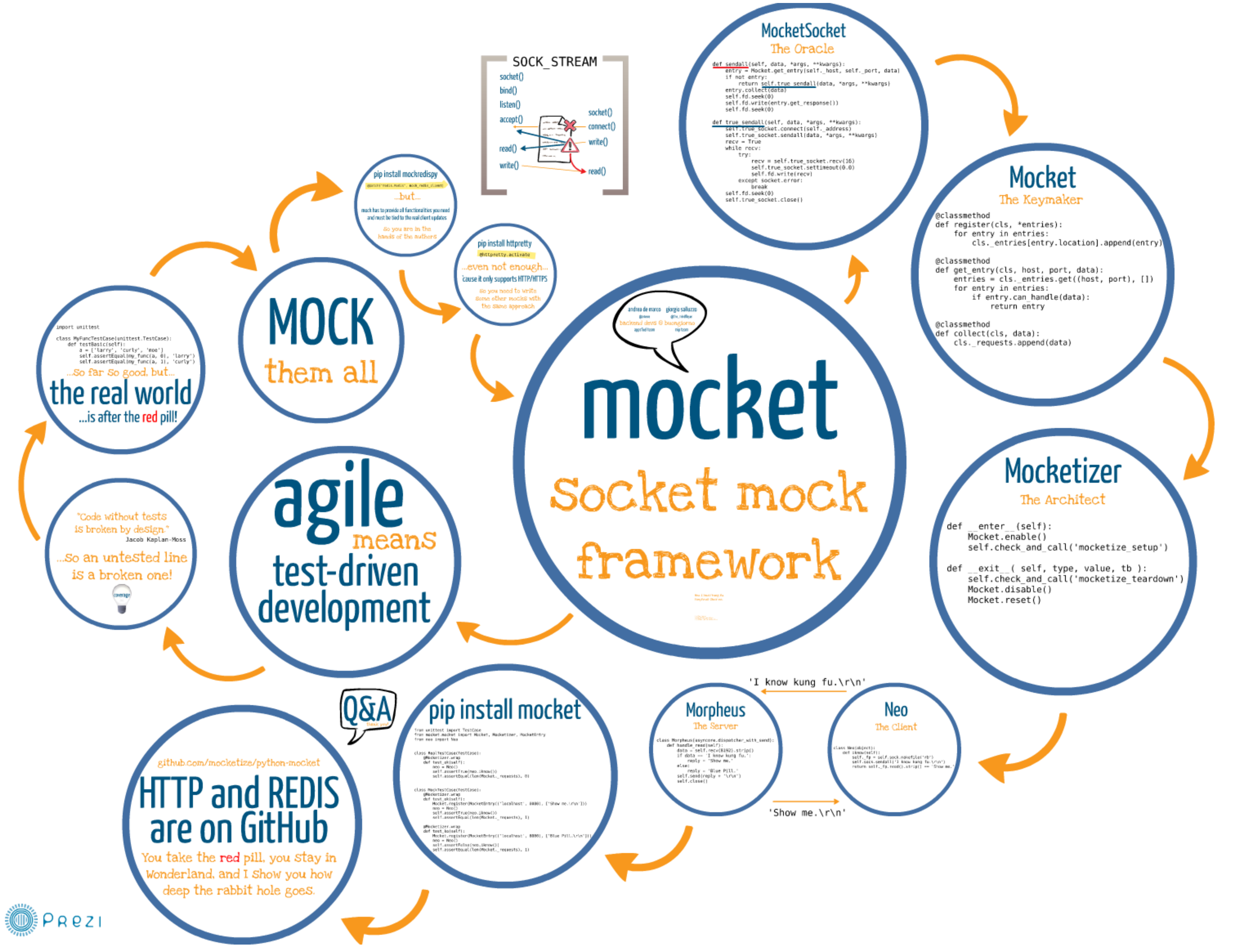

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