Test Doubles and Acceptance Tests
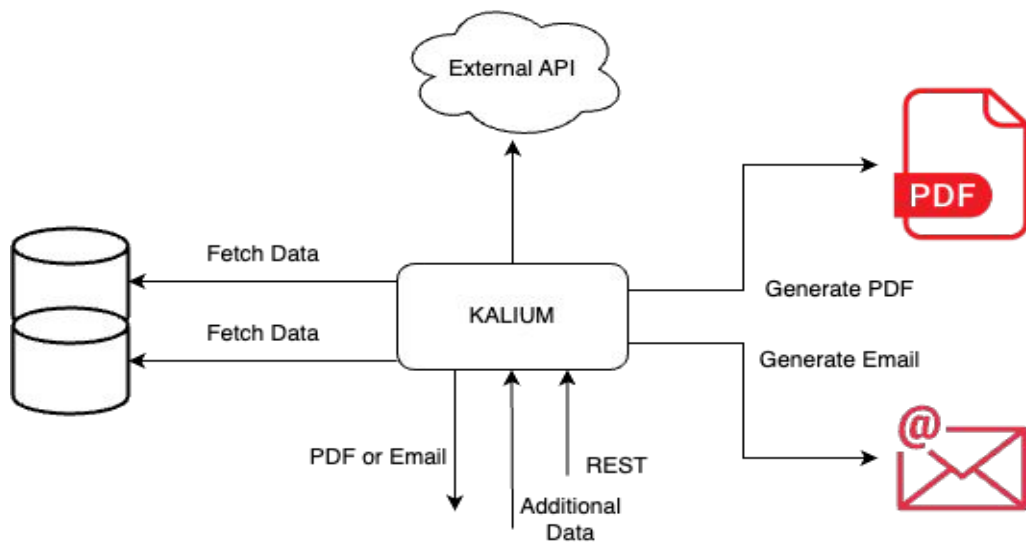
Let's write down acceptance test and introduce test doubles in a microservice application

elty

Mirko Di Lucia

The microservice

Example of a request

HTTP Request

/kalium/application/2/PENS_INV_100

HTTP Response

```
import { ApplicationTemplateFieldType, Applicati...

const fields = [
  { name: 'Tribunale', type: 'draw', source: '(prisma:application:application.court.name:$id)', posX: 208, posY: 102, fontSize: 14, page: 0, color: 'blac...
  { name: 'Nome Richiedente', type: 'draw', source: '(prisma:application:application.applicant.lastName:$id)', posX: 142, posY: 240, fontSize: 12, page: 0 },
  { name: 'Nome Richiedente', type: 'draw', source: '(prisma:application:application.applicant.firstName:$id)', posX: 224, posY: 240, fontSize: 12, page: 0 },
  { name: 'Citta di nascita Richiedente', type: 'draw', source: '(prisma:application:application.applicant.birthInfo.city:$id)', posX: 94, posY: 264, fontSize: 12, page: (
  { name: 'Data di nascita Richiedente', type: 'draw', source: '(prisma:application:application.applicant.birthInfo.date:$id)', posX: 382, posY: 240, fontSize: 12, page: (
  { name: 'Codice fiscale Rich...', ...draw', source: '(prisma:application:application.applicant.fiscalCode:$id)', posX: 106, posY: 310, fontSize: 12, page: 0 },
  { name: 'Citta di resider...ente', draw', source: '(prisma:application:application.applicant.residenceAddress.city:$id)', posX: 290, posY: 264, fontSize:
  { name: 'Indirizzo di re...Richieden...', draw', source: '(prisma:application:application.applicant.residenceAddress.street_1:$id)', posX: 98, posY: 290, font
  { name: 'Citta di domicil...iedente', aw', source: '(prisma:application:application.applicant.domicileAddress.city:$id)', posX: 358, posY: 310, fontSize: 1.
  { name: 'Indirizzo di ...Richiedente...', draw', source: '(prisma:application:application.applicant.domicileAddress.street_1:$id)', posX: 98, posY: 334, font
  { name: 'Data rifiuto...', ...draw', ...ma:application:application.applicant.rejectedAt:$id)', posX: 412, posY: 618, fontSize: 12, page: 0 },
  { name: 'Percentuale ...lidità', type: ...urce: '(prisma:application:application.applicant.invalidity:$id)', posX: 316, posY: 638, fontSize: 12, page: 0 },
  { name: 'Note motiva... type: 'draw', s...prisma:application:application.notes.motivationNote:$id)', posX: 80, posY: 140, fontSize: 10, page: 2, color: 'blac...
  { name: 'Note conclu... type: 'draw', se...(prisma:application:application.notes.conclusionNote:$id)', posX: 80, posY: 540, fontSize: 10, page: 2, color: 'blac...
];

export const RICORSO...CIVILE_100_PERCENT...E = {
  id: 12,
```

modelData {
  application: {
    id: 2,
    content: '',
    presentationDate: 2024-04-03T07:24:42.651Z,
    type: 'RICORSO_PENS_INV_CIVILE_100_PERCENTO',
    status: 'CREATO',
    search: 'Mario Rossi Mario RSSMRA75R15H269L',
    applicationTemplateId: 12,
    applicantId: 4,
    spouseId: null,
    sonId: null,
    noteId: null,
    assignedInpsId: 179,
    assignedPatronageId: 1,
    assignedLawyerOrderId: null,
    assignedCourtId: null,
    assignedCourtSectionId: null,
    userId: 4,
    assignedLawyerId: 5,
    domicileLawyerId: 3,
    trasmittedAt: 2024-04-03T07:24:15.655Z,
    rejectedAt: null,
    expiredAt: null,
    appealedAt: null,
    approvedAt: null,
    createdAt: 2024-04-03T07:24:42.651Z,
    updatedAt: 2024-04-03T07:29:08.409Z,
    court: null,
    applicant: {
      id: 4,
      type: 'APPLICANT',
      search: 'Mario Rossi RSSMRA75R15H269L MD12354323',
      firstName: 'Mario',
      lastName: 'Rossi',
      sex: 'MALE',
      fiscalCode: 'RSSMRA75R15H269L',
      documentCode: 'MD12354323',
      birthInfoId: 4,
      incomeInfoId: null,
      domicileAddressId: null,
      residenceAddressId: null,
      birthInfo: [Object],
      incomeInfo: [],
      residenceAddress: null,
      domicileAddress: null
    },
    spouse: null,
    son: null,
```

```
field.fontSize, page: field.page, color: field.color ?? null, datatype: field.datatype ?? null, format: field.format ?? null } },
```

Di Lucia, last month • chore: refactor kalium add create income info, …

SEZ. LAVORO E PREVIDENZA

RICORSO PER ACCERTAMENTO TECNICO PREVENTIVO

EX ART.445 bis c.p.c.

OGGETTO: RICONOSCIMENTO PENSIONE DI INVALIDITA'

CIVILE (100%)

Il signor Rossi   Mario   nato il   05/06/75

a Ribera   e residente a Ribera

in Via Roma 2

c.f.: RSSMRA75H05H269T   , elett.te dom.to a   Ribera

elty

Mirko Di Lucia

Layers

Unit Test

For URI processor
- Should process immediate URI
- Should recover data from URI
- Should handle inconsistent URI
- Should process iterative URI
- Should handle hook for URI

For DocumentDrawer
- Should add text in pdf
- Should add text in pdf in certain position
- Should add text in pdf with color
- Should add text in pdf with font
- Should add multiple text in pdf in certain position, gap and spacing

For DocumentFiller
- Should add text in pdf in a specific placeholder
- Should add multiple text in pdf in a placeholder using progressions rules

For MailComposer
- Should intercept URI text in html file
- Should replace URI text with the correct text

Mirko Di Lucia

Acceptance Test

Send Data and Template → Process URI → Compile Email → Read Email

Process URI → Draw PDF → Read PDF

Process URI → Fill PDF → Read PDF

Test doubles

Stubs

MongoProcessor

PrismaProcessor

DataProcessor

Commands

HTML PDF

FPDF Drawer

Mirko Di Lucia

Thanks

Benefit of use Acceptance Test and Test Doubles
- Guaranteed isolations
- Avoid Connascence
- Helps to complete single functionalities before add a new one
- Fun

Mirko Di Lucia
Email: dlmrk95@gmail.com
https://www.linkedin.com/in/mirko-di-lucia-3764701b1/