



Testing & Software Quality Assurance

# Crowdar

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Crowdar helps software development teams to **improve quality** of their software products by delivering **testing services** including **Manual, Automation, Stress&Performance and Security Testing** with a team of **remote skilled professionals** using **Agile Methods**

# Software Development Challenges



Digital  
Transformation



Agile and DevOps  
methods



Faster changes

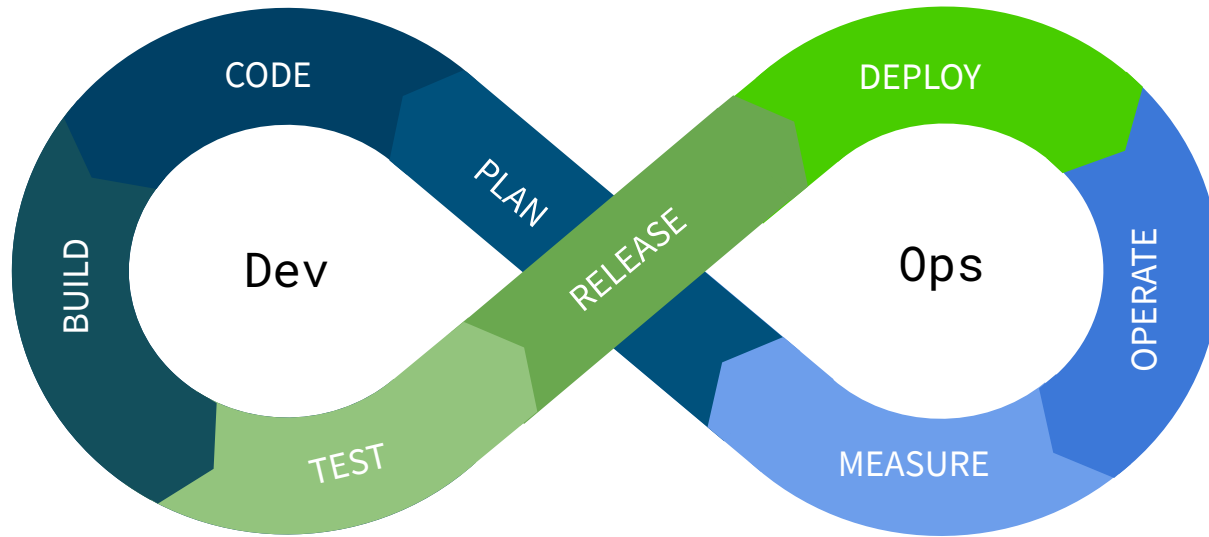


Security is a must



Performance matters

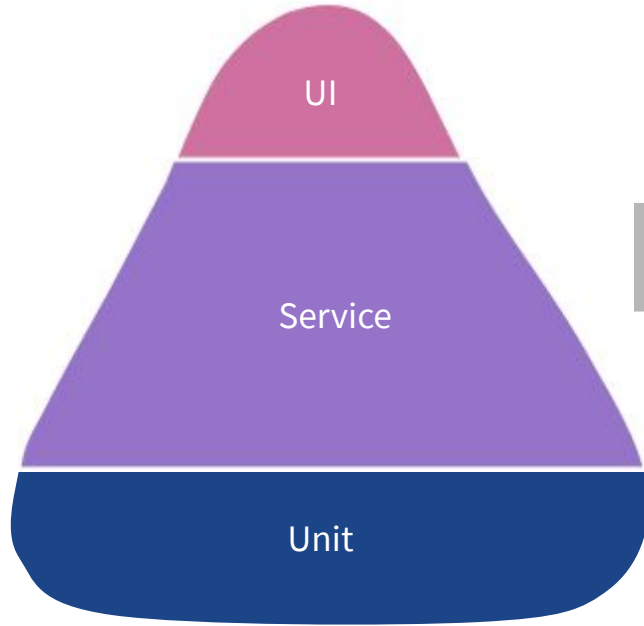
# Enabling Testing on DevOps



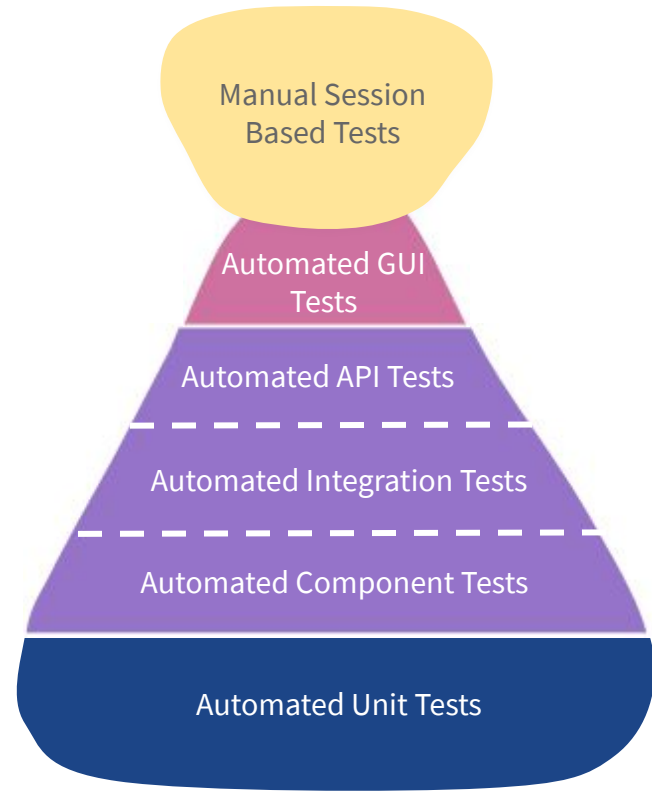
We enable CI/CD with the implementation of Best Practices like:  
Test Automation, Stress&Performance Testing, Security Automated Testing and  
Pipelines construction

# Enabling CI/CD

## Continuous Testing



Test Automation Pyramid



Testing Pyramid

- *Development Team*
- *Test Team*

# Services



## Test Automation

Test Automation combining from Test Conception to Deploy using **Lippia test Automation** on any platform: Web, Mobile, Desktop.



## Manual Testing

Vetted team of professional testers managed with agile methods. Fast team set-up, often in less than 1 week.



## UI-UX Testing

We provide UI-UX QA services to ensure excellence in quality of the designs



## Security Testing

Automated Penetration tests for Apps and Infrastructure. Static & Dynamic scan for Web and Mobile.



## Load, Performance & Stress

Test the limits of your app to reassure that can support the volume of users and transactions you expect before go live.



## Coaching/Mentoring

Agile Coaching  
Software Quality Mgmt  
Development Process  
Architecture, CI/CD, DevOps



# What we solve

- Senior testers
- Savings on regression testing
- Faster time to market with Testing Automation
- Focus internal QA resources on new projects
- Launch products to markets with professional quality assurance

# Solutions for each customer segment

## Corporations

Savings in Testing  
Improved Time to Market

- Test Automation
- Manual Testing
- Security Testing
- Performance



## Universities

Part and Full-Time Jobs

- Training
- Paid internships
- Apprenticeships
- Crowdar Academy



## Startups

Quality assurance  
Access to Testing at low cost

- Exploratory Test
- Stress Test
- Test Automation





# Tools and platforms



Test Automation  
Selenium

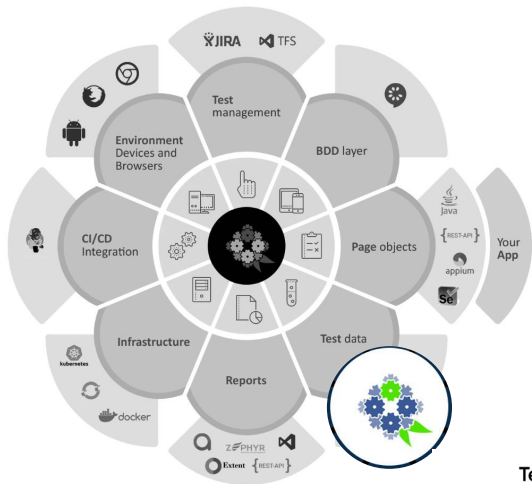


TestNG

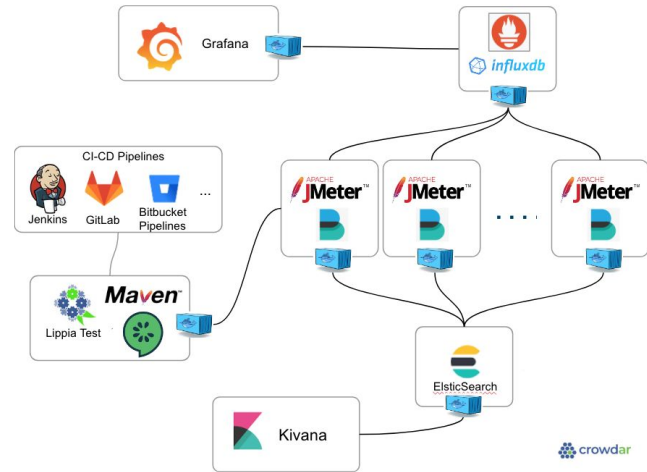


# We build tools

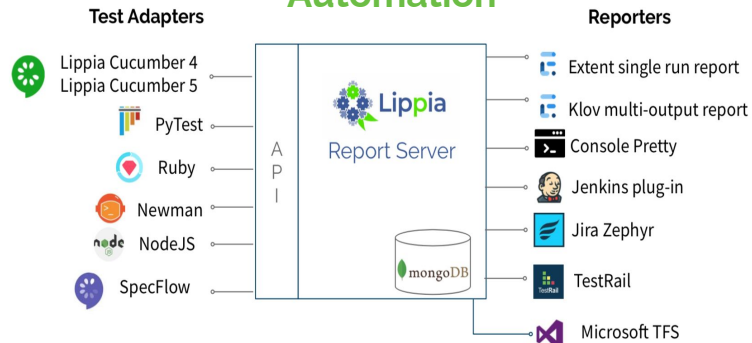
## Lippia Test Automation



## Lippia Performance



## Lippia Report Server Automation



# We train the best testers



Company

First Job

Programs

Contact us



## Looking for your first job

Crowdar Academy give people the necessary knowledge to perform as QA or Automation Engineer. We train people giving them the necessary tools to afford your lack of resource needs.



### Program

We have a theoretical and practical program to perform in each speciality. The class are taught by professional with a wide range of experience working as QA and Automation Engineers at Crowdar.



### Full stack

Crowdar Academy graduate can obtain full stack knowledge as QA and Automation Engineer



### Final Exam

To be graduated and available to work, the graduate must pass an exam in every speciality. We provide this results with the candidate resume where shows their knowledge

<https://crowdar.academy>

Verified by

**Gartner**<sup>®</sup>

**Market Guide for Crowdsourced  
Application Testing Services  
2015, 2016, 2018**

<http://www.gartner.com/document/3018219>

**FORRESTER**<sup>®</sup>

**Uncover Unexpected App Insights  
Through The Crowd 2016**

[https://www.forrester.com/report/Uncover+Un  
expected+App+Insights+Through+The+Crowd/-  
/E-RES134821](https://www.forrester.com/report/Uncover+Unexpected+App+Insights+Through+The+Crowd/-/E-RES134821)

# Customers by segment

Banking /  
Finance



BANCO COMAFI



SUPERVIELLE

BancoSaenz



*rapipago*



Corporate



THOMSON REUTERS



Kimberly-Clark

raet

*kapsch* >>>

Energy /  
Telecom



Software /  
Consulting



10 Pines



INTERSERVICES



ECommerce

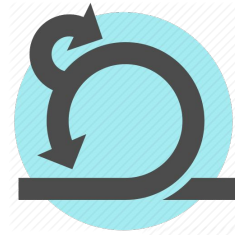
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# Our strengths

Agile



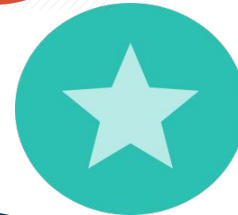
Senior Team



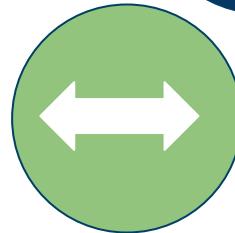
Corporate experience



Quality



End to End  
Testing Services



Elastic



# Why Crowdar?



- We are committed with Quality in everything we do



- We can set-up a team in days and start delivering



- We are agile by nature, and our team is agile Certified



- We have 100% successful projects track record

[info@crowdaronline.com](mailto:info@crowdaronline.com)



UK: +44 7812 038 601

Argentina: +54 911 3150 1702



<http://lnked.in/crowdar>



[@crowdarinfo](https://twitter.com/crowdarinfo)



# Backup

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Detailed Services

# Test Automation



## The Problem

- Long-lived software products makes regression testing almost impossible to execute on time.
- Quicker changes in products needs faster testing.
- Organizations adopting agile methodologies need to automate their process.
- Time to build a test automation framework usually takes 3-6 months.



Lippia

## The Solution

- **BDD** to communicate better.
- Integrated devices: Browsers and Android devices
- Orchestration and Data to enable CI/CD.
- 1 Framework → Web, Mobile, API, Windows)
- Based on Containers (Docker)



## Benefits

- Develop a smoke test in **< 1 month**.
- **Building block** solution to choose what you need, when you need it.
- **Better ROI** compared to build in-house framework
- Scale from single PC to Server or Cloud



Target

Medium and large companies that needs to automate their development process and product quality.

Companies which are adopting agile and/or devops methodologies.

# Crowdsourced Testing



## The Problem

- Dedicate existing testing team to new projects
- Bug verification that can take a lot of time
- Staff augmentation



## The Solution

- Senior testers managed with agile methods
- Team set-up in 1 week



## Benefits

- Fast knowledge transfer
- Skills to test different platforms: Web, Mobile, Windows



## Target

Medium and large companies that dedicate their existing testing teams to new projects

# UI-UX Testing



## The Problem

- Big brands have strict Brand Design principles Digital Agencies must follow
- Problems appears when Design is translated into HTML and CSS



## The Solution

- Visual Designs validation(Depending on Mockups / Wireframes)
- Images, Videos, Animations checking
- Cross-Browser and Device/Resolutions validation
- Accessibility Testing
- Content Validation (Copy)



## Benefits

- Proven implementations before going live
- Quick corrections after go live
- Brand protection for Digital Agency's customers



## Target

Digital Agencies and companies that have to stick to brand design guidelines

# Security Testing



## The Problem

Manual Penetration Tests are expensive, take time and are prone to error.  
Need to check security before deployment.



## The Solution

Automated Penetration Test  
Infrastructure Check - OWASP Top 10  
PCI App Security - HIPAA App Security  
CVSS App Security Automated script on web and mobile apps



## Benefits

Reduce costs of Pen Testing with a reliable and automated approach  
Integrate into CI/CD Pipeline



## Target

Medium and large companies that need to deploy products verifying security in their apps.  
Companies adopting DevDecOps methodology.

# Load, Performance & Stress



## The Problem

- Apps with large amount of transactions and users which needs to perform to avoid hanging up or system outage.



## The Solution

- Lippia Performance tool, which provide a set of solutions to check performance in database, hardware, services, etc. Avoiding system outage in advance.



## Benefits

- Avoid system outages
- Avoid poor application performance when under load.



## Target

Software with heavy traffic on internet like ecommerce.  
Software with tight Response time required by contract.

# Coaching / Mentoring



## The Problem

- Organization wants to adopt agile methodologies.
- Organization needs to tidy up processes to avoid production issues



## The Solution

- Agile coaching and mentoring to improve organization process and obtain ROI faster.
- Proof of concept and Lean practices to implement solutions and tools.



## Benefits

- Improve process with an outsider who can see with a different point of view, to detect opportunities for continuous improvement.



## Target

Companies who want to accelerate the time to market and obtain a faster ROI. Companies which wants to adopt agile or DevOps methodologies.