

FINLOGIK PFE BOOK 2022-2023

ABOUT FINLOGIK

At **Finlogik**, we develop a passion for financial innovation.

Finlogik has been providing value-added **fintech** solutions to the Canadian market for over 20 years.

The company designs and manages cloud-based investment solutions, in addition to analytical dashboards that provide tools for benchmarking, reporting and large-scale data processing to help investors assess portfolio risk, their exposure and performance in a wide range of financial instruments.

Finlogik is a member of **Canaccord Genuity Group Inc.**





ABOUT CANACCORD GENUITY

Canaccord Genuity Group Inc. is a leading independent, full-service financial services firm, with operations in two principal segments of the securities industry: wealth management and capital markets.

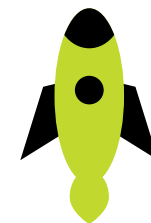
Since its establishment in 1950, the Company has been driven by an unwavering commitment to building lasting client relationships. We achieve this by generating value for our individual, institutional and corporate clients through comprehensive investment solutions, brokerage services and investment banking services.

The Company has Wealth Management offices located in Canada, the UK, Guernsey, Jersey, the Isle of Man and Australia. The Company's international capital markets division operates in North America, UK & Europe, Asia, Australia and the Middle East.



Vision

We aim to be the company where people feel empowered to satisfy their client's expectations with the help of all their partners.



Mission

Fully utilize our knowledge, expertise and experience to offer innovative tools to meet the needs of our clients.



Values

Excellency
Expertise
Humanism
Dynamism

PFE TOPICS

#01

DESIGN AND DEVELOPMENT OF AN APPLICATION LOG ANALYSIS SOLUTION

- Analyze logs
- View the logs in real time events
- Centralize system logs
- Make logs visible from a single interface

Graylog Splunk



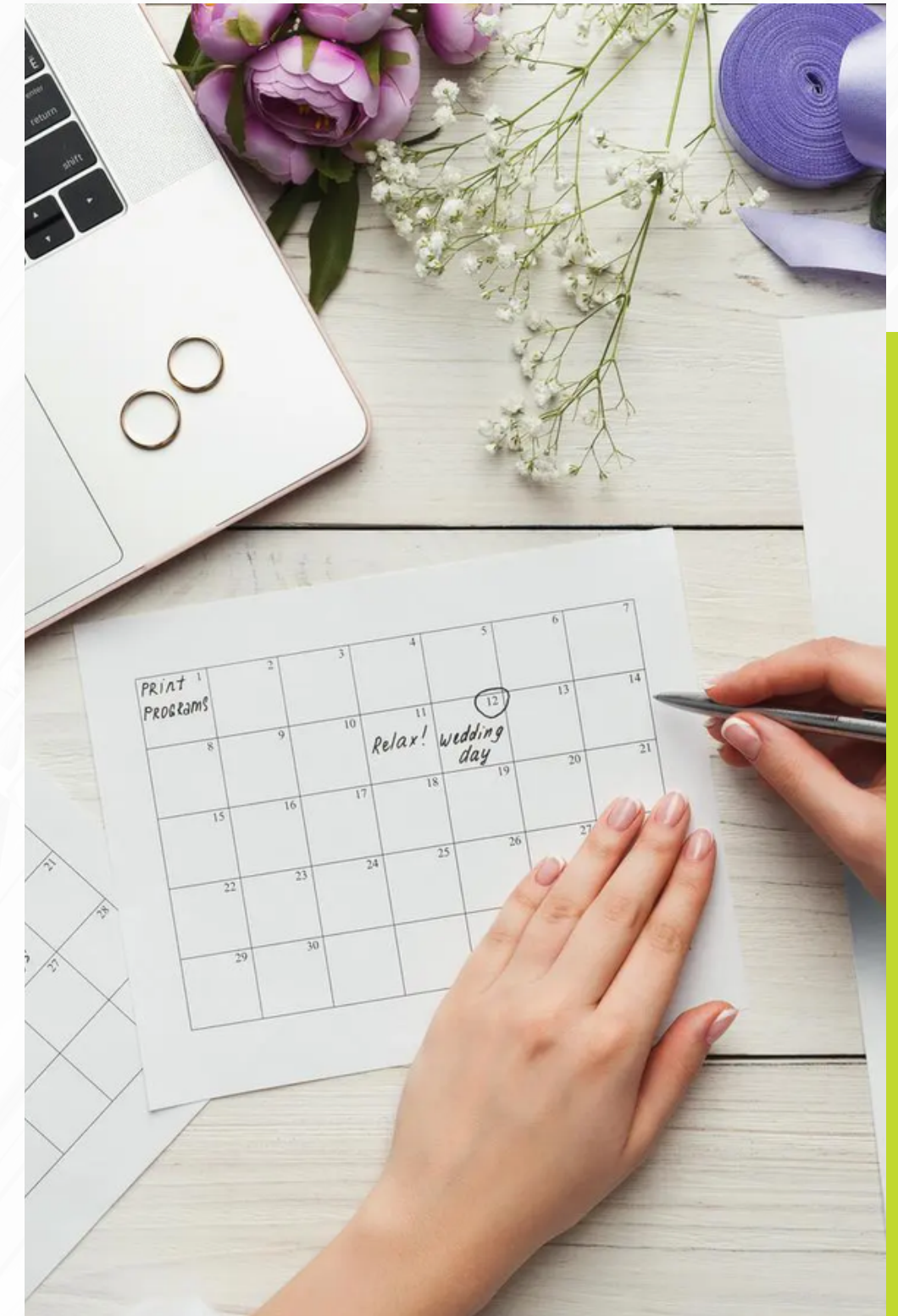
#02

EVENT PLANNER

Create an Android application/website to manage all types of events: weddings, family parties, work parties, dinners, funerals.

This app can cover budget management, ad and promotion search, contact with other apps, geolocation, etc.

**ASP.NET, REST API Microservices,
Mobile Frameworks, SQL Server**



#03

CONFIGURING PROJECT WITH BUILD CAKE

- Describe the state of the art of existing DevOps solutions (Azure DevOps)
- Propose a DevOps architecture for .NET Core projects
- Implement CI/CD pipelines using scripting tools (Cake)

Azure DevOps, .NET Core



#04

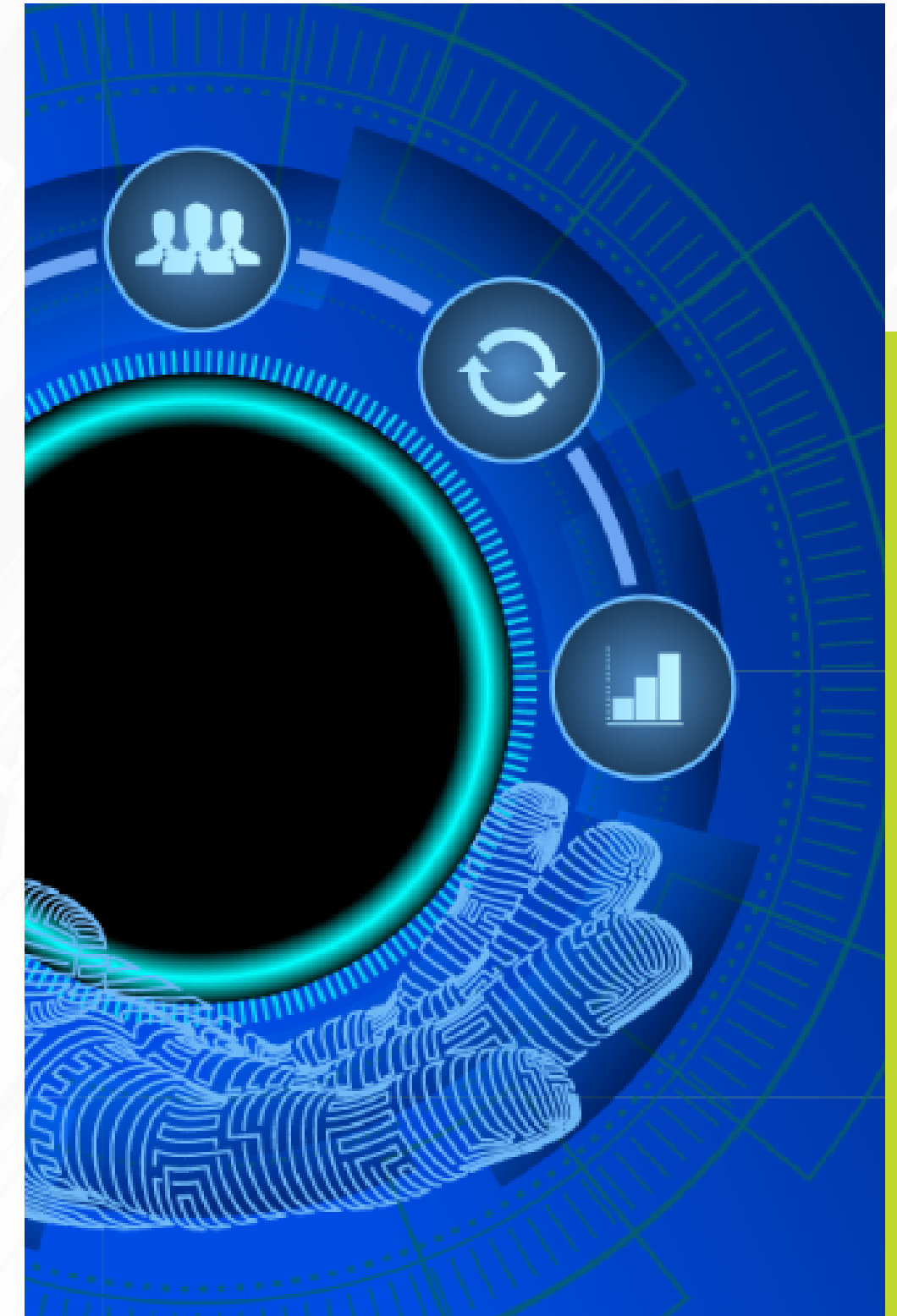
TRAINEE MANAGEMENT: DIGITALISING THE PFE PROCESS

Development of a web application for the management of trainees within the company.

It will help to:

- define their profiles
- track the various training courses carried out
- facilitate the research of the trainees

Angular, .NET Core



#05

PREPARE A BUDGET USING DELUGE PROGRAMMING LANGUAGE

The project consists of automating the budget preparation process using Deluge scripts.

With Deluge, we will transform our workflow from an active process, which constantly requires our attention, to a passive process where we do not have to participate in a few key steps such as handling excel files before sending them to Zoho.

Zoho, Deluge



#06

ROBO-ADVISOR WITH MACHINE LEARNING

Develop a Robo-Advisor solution allowing the management of diversified portfolios and automated investment advice.

Big Data, Machine Learning, SQL, Python, C#, .NET, Angular

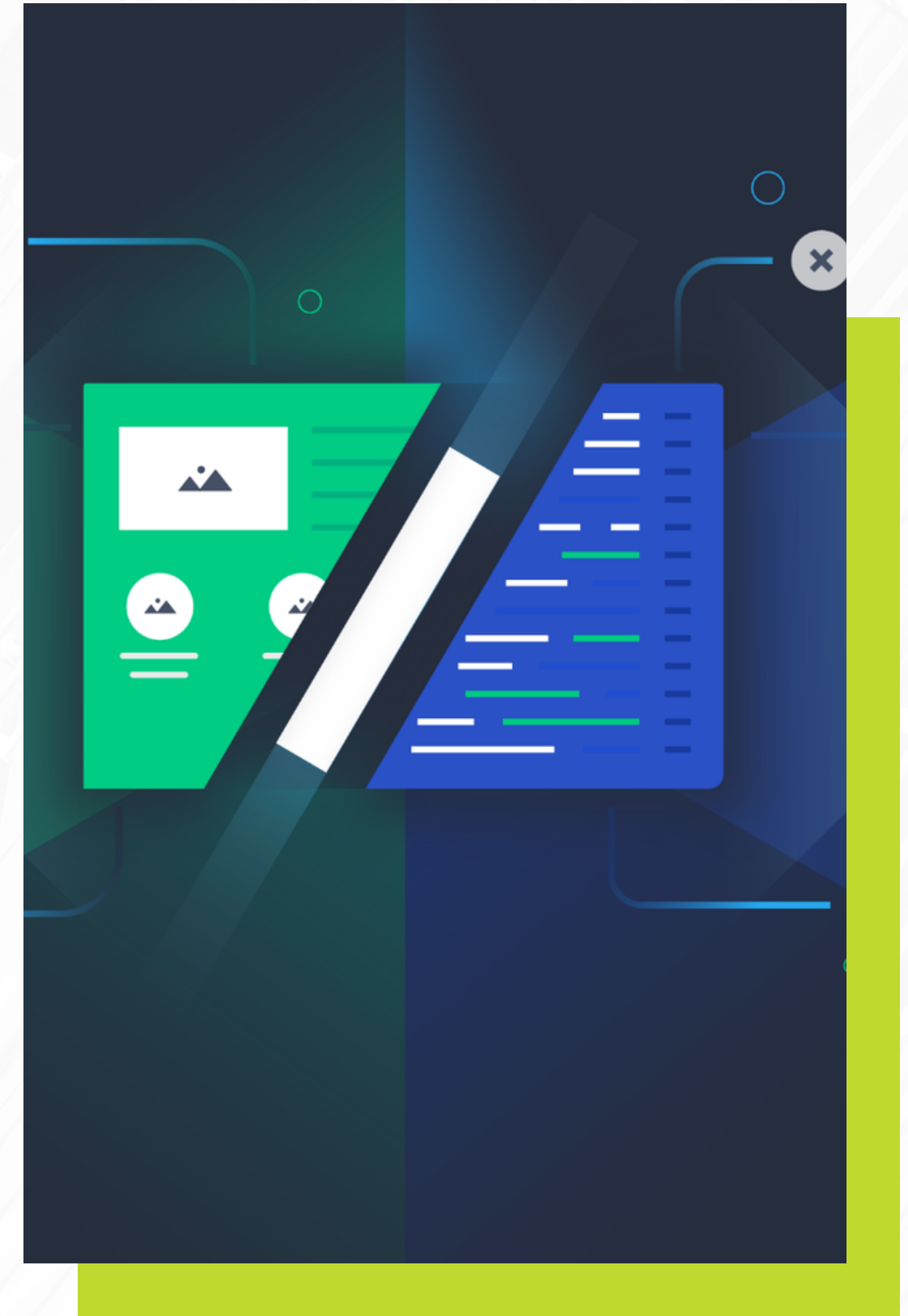


#07

AUTOMATION OF FUNCTIONAL NON-REGRESSION TESTS VIA CYPRESS

- Prepare test cases
- Develop test cases with Cypress
- Generate test reports
- Integrate test cases into the CI/CD pipeline

Cypress, Cucumber, JavaScript, BDD, Jenkins

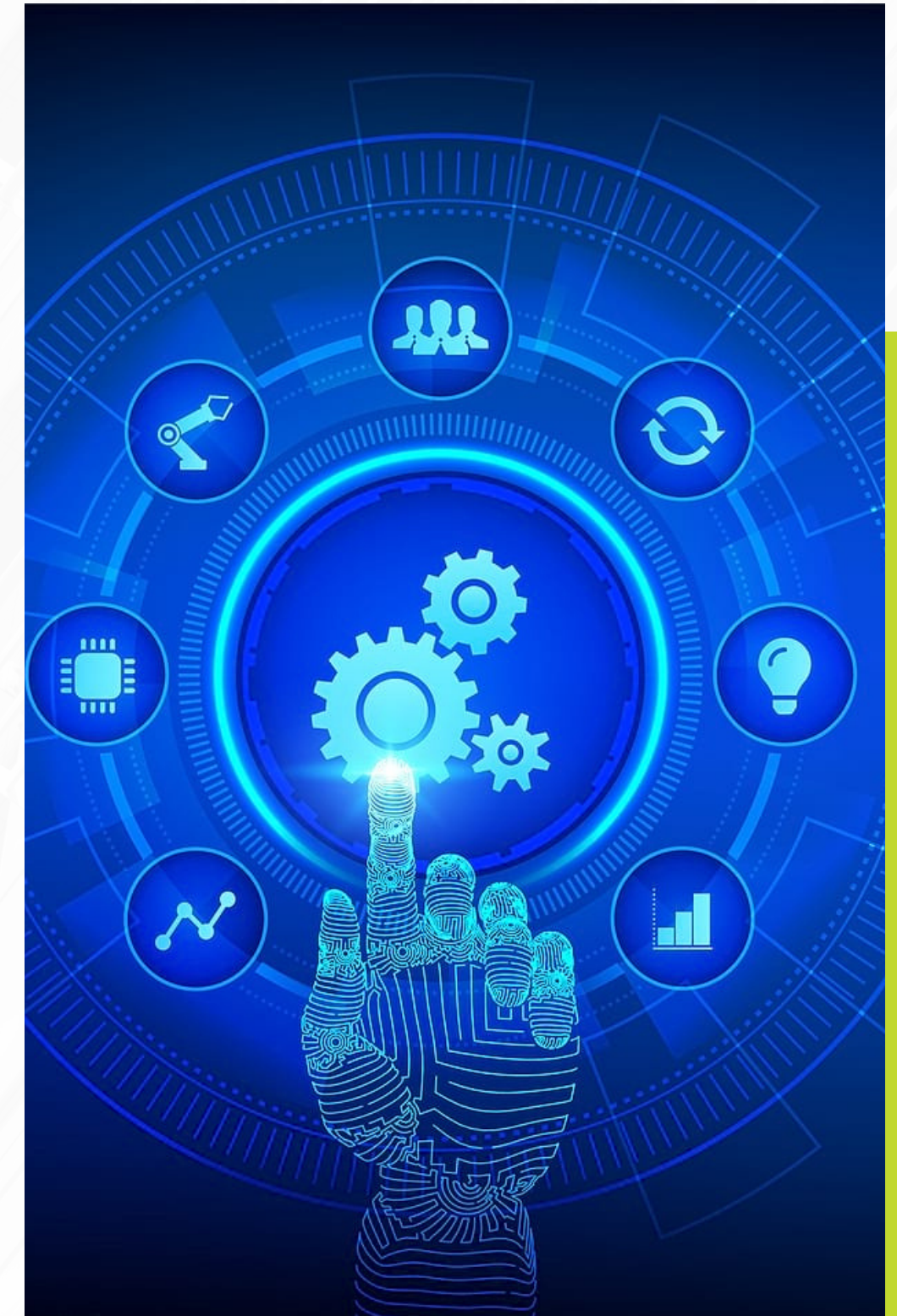


#08

TEST MANAGEMENT AND AUTOMATION IN JIRA

- Prepare test cases
- Generate test reports
- Execute tests via Xray
- Trigger automated tests with Xray and Jira
- Remote execution: cross browser (lambdatest and browserstack)

DevOps, Cucumber, Java, BDD, testing, Jenkins



#09

AUTOMATION OF FUNCTIONAL NON-REGRESSION TESTS VIA ROBOT FRAMEWORK

- Create test automation scripts in Robot Framework
- Generate test reports
- Improve the automatic tests in place

Robot Framework, Python, SQL



#10

AUTOMATION OF TEST SCENARIOS BASED ON THE DESCRIPTION OF FUNCTIONALITIES

Browse the possible documentation on a feature (User Story, documents describing the need) and forecast the possible scenarios.
The result will be an STP in Excel format containing nominal and alternative scenarios.

Machine Learning/Deep Learning, Natural Language Processing (NLP)



#11

AUTOMATION OF TEST SCENARIOS BASED ON VIDEOS

Development of a solution based on Deep Learning that allows to generate a test scenario from a video.

**Python, Java, Computer Vision, Data Science,
Machine Learning, Deep Learning**



#12

CREATION OF A WEB PLUGIN FOR SCENARIO GENERATION

Design and development of a Web browser plugin to record a user's activity on a site and translate it into a BDD scenario described in Gherkin language.

**Plugin development, Web development, Python/Java,
Gherkin**

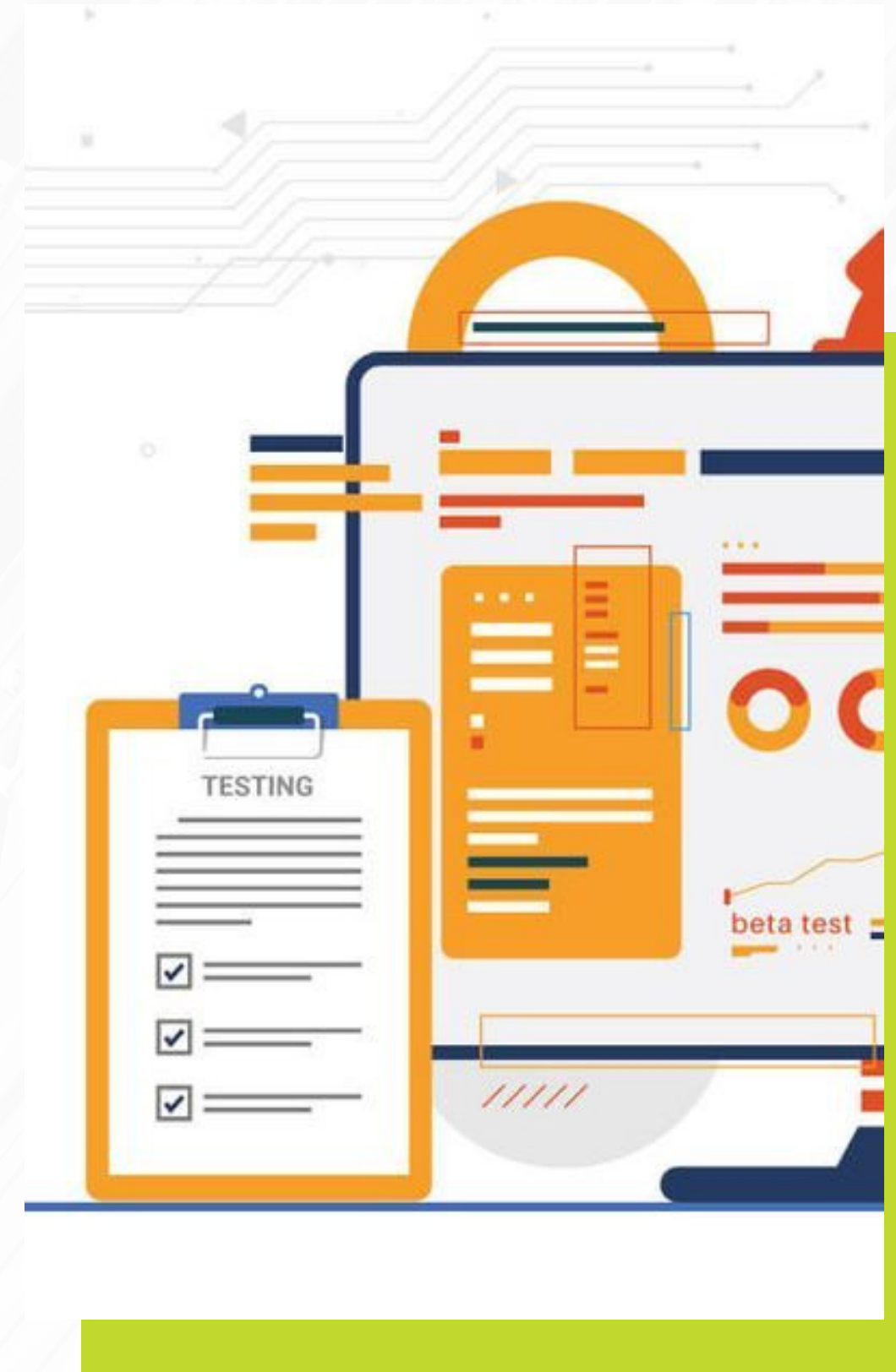


#13

IMPLEMENTATION OF A PLATFORM THAT MANAGES PERFORMANCE TESTS

- Measure performance in KPI's
- Implement different performance tests
- Design and implement a test launch solution according to a planning table
- Display the results of the tests
- Send reports to recipients
- Follow up on performance problems

Jenkins, JMeter, Microsoft Build, SQL Server, Java



#14

CREATION OF A WEB PLUGIN FOR UI CHANGE DETECTION

Design and development of a web browser plugin for UI change detection based on a prototype in Gherkin language.

**Plugin development, Web development, Python/Java,
Gherkin**



#15

SUPPORT CHAT BOT CREATION

Create a chat bot capable of providing first level of guidance and dispatching the incident to the appropriate team.

Jira



#16

MONITORING A LOCAL NETWORK USING ZABBIX APPLICATION

- Deploy a virtualization tool (Eve-ng, VMware workstation pro)
- Build a custom enterprise network
 - Install and configure Linux servers
 - Create site to site and clients to site VPN tunnels
 - Install windows 10 clients
- Install Zabbix virtual machine including advanced features (database, web,...)
- Test monitoring tasks (Exp: packet sniffing)

VMware, Fortinet firewall, Cisco Switch, Linux Servers (Zabbix, Web, SFTP...), Windows 10 client



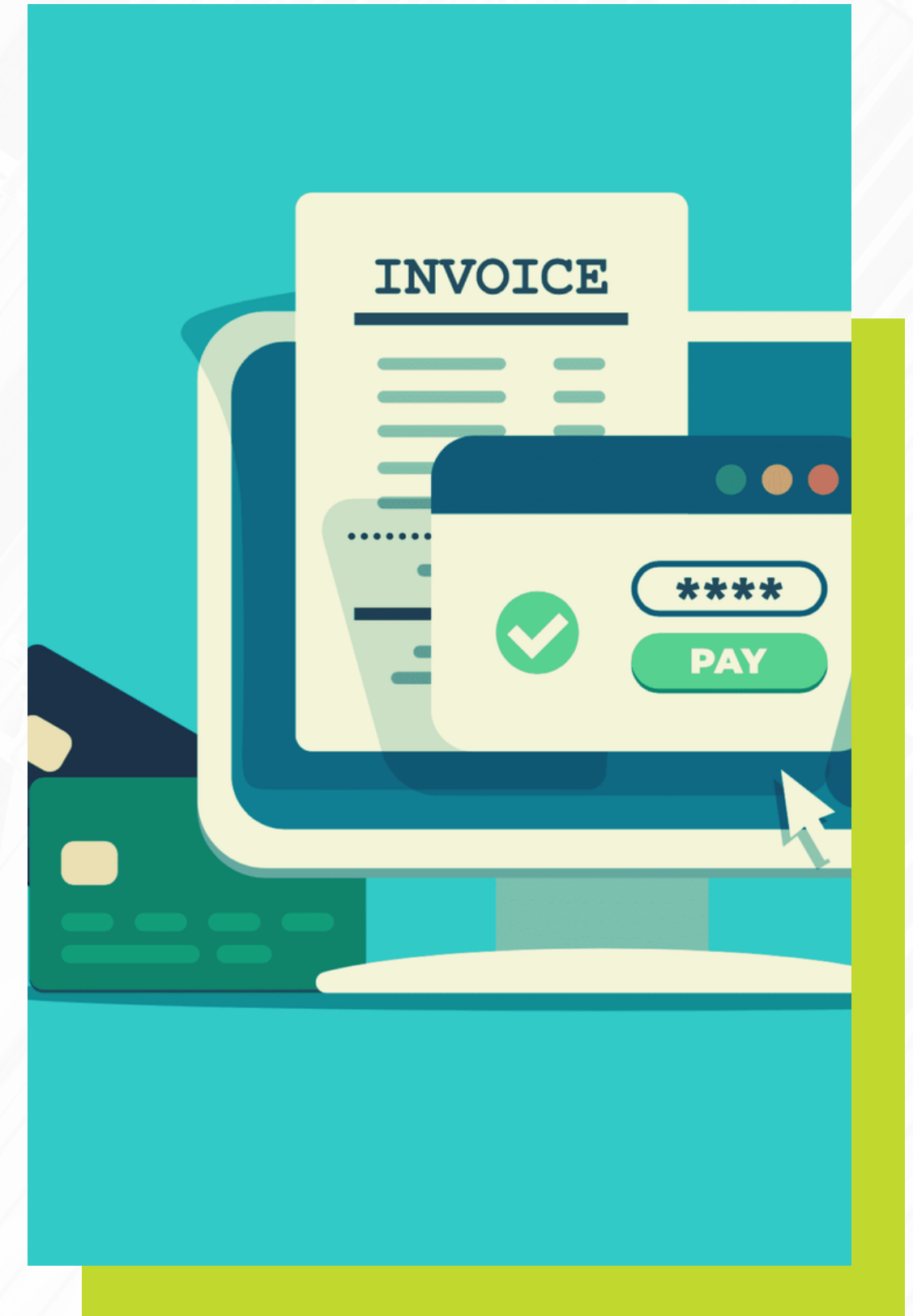
#17

COST CENTER BILLING SYSTEM: WEB APPLICATION

This application will allow to:

- Monitor the project budget and make it conform to the forecasts
- Visualize planned and actual expenses
- Invoice according to staff hours, fixed costs and variable costs

C#, Angular, SQL, Tempo, Zoho



APPLICATION PROCESS IN 3 STEPS



1 - PFE BOOK Review

Please read the proposed topics carefully.

2 - Topic Selection

Choose **2** topics that interest you the most.

3 - Application

Submit your application via the link below:

<https://secure.collage.co/jobs/finlogik/34118>



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THANK YOU!