



PFE BOOK

2025



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About Us

SPARK-IT, a leading Digital Services Company, is recognized for its expertise in guiding clients toward success. By improving their performance, SPARK-IT helps businesses adapt effectively to the ever-evolving digital landscape.

Through cutting-edge technological solutions, SPARK-IT empowers clients in their digital transformation journey, ensuring they remain competitive and maximize the potential of technological innovations.



04 Offices: Tunisia - France - UK - Benelux



Projects

```
# mirror modifier script for Blender  
  
# if modifier_ob.type == 'MESH' and modifier_ob.type != "Curve":  
#     mirror_ob = modifier_ob # set to mirror_ob , hope the other  
#     modifier_ob.select = False  
#     mirror_ob = bpy.context.selected_objects[0]  
  
else:  
    #mirror_ob  
    mirror_ob = bpy.context.active_object  
    mirror_ob.select = False # pop modifier ob from sel stack  
    print("popped")  
  
#modifier_ob  
modifier_ob = bpy.context.selected_objects[0]  
print("Modifier object:" +str(modifier_ob.name))  
  
#modifier_ob.select=1  
  
print("mirror_ob",mirror_ob)  
print("modifier_ob",modifier_ob)  
  
# put mirror modifier on modifier_ob  
  
    mirror_mod = modifier_ob.modifiers.new("mirror_mirror","MIRROR")  
  
# set mirror object to mirror_ob  
    mirror_mod.mirror_object = mirror_ob  
  
if _operation == "MIRROR_X":  
    mirror_mod.use_x = True  
    mirror_mod.use_y = False  
    mirror_mod.use_z = False  
else:  
    mirror_mod.use_x = False  
    mirror_mod.use_y = True  
    mirror_mod.use_z = False
```



Python

language





Technology: Python

Title: AI-Powered Text Extraction Using Integrated NLP and Computer Vision Technologies

Description:

This project aims to develop an AI-driven system that extracts and interprets text from scanned documents, images, and PDFs using advanced NLP and CV technologies.

By integrating models like Llama 3.2 Vision or Claude 3.5 Sonnet, the system will process raw data, perform image recognition, and apply NLP techniques to categorize the extracted information.

The goal is to automate data extraction, reducing manual effort and improving reliability for applications such as document digitization and data entry automation.

Keywords: Python, Hugging Face Transformers, spaCy, NLTK, OpenCV, TensorFlow, PyTorch, Tesseract OCR, EasyOCR



Sfax



4 – 6
Months



02
interns



Technology: Python

Title: Multilingual Text Similarity Exploration Tool Using Pretrained Embedding Models

Description:

This project aims to create a powerful tool that analyzes and compares textual data using advanced multilingual embedding models.

The tool will convert input texts into high-dimensional embeddings with pretrained models, then calculate and visualize their similarities.

Supporting multiple languages, the tool will allow users to explore diverse textual datasets through functionalities like similarity scoring, text clustering, and interactive visualizations.

Key applications include plagiarism detection, document clustering, semantic search, and improving recommendation systems.

Keywords: Python, Hugging Face Transformers, Sentence-Transformers, spaCy, BERT, XLM-RoBERTa, LASER, FastText, Universal Sentence Encoder, Cosine Similarity, Euclidean Distance



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4 – 6
Months



01
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Data Engineering





Technology: Data Engineering

Title: A power BI CRM dashboard predicting suspicious leads

Description:

This project involves integrating raw data from the STARK ERP (CRM) system into an ETL process for seamless data extraction, transformation, and loading.

A data warehouse will store and organize the processed data efficiently.

A predictive model will analyze trends and provide insights.

Finally, a Power BI dashboard will visualize key metrics and facilitate data-driven decision-making.

Keywords: BI ,ETL, Data science, Machine Learning, Database, SQL, Python, Power BI



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Months



01
intern



Technology: Data Engineering

Title: A power BI finance dashboard forecasting transaction, fees and commissions amounts

Description:

This project involves the design and implementation of an ETL process to integrate raw data from the STARK ERP (Accounting) system.

Subsequently, a data warehouse will be meticulously designed and developed to efficiently store and manage the resulting data.

Furthermore, the project will explore forecasting using time series analysis to predict future trends.

Lastly, a dashboard will be crafted using Power BI to provide visual insights and facilitate informed decision-making for business stakeholders.

Keywords: BI ,ETL, Data science, time series, Database, SQL, Python, Power BI



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Months



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security



Technology: Security

Title: Practical implementation and audit of an Information Security Management System (ISMS) compliant with ISO/IEC 27001.

Description:

The goal of this project is to audit an ISMS for ISO/IEC 27001 compliance, ensuring adherence to information security requirements.

This includes assessing risks, evaluating the effectiveness of security controls (such as access management and data confidentiality) and recommending corrective actions.

A detailed audit report will be prepared, outlining findings and suggested improvements.

Additionally, recommendations for maintaining long-term compliance and supporting continuous improvement of the ISMS will be provided.

Keywords: ISO/IEC 27001 - Information Security Management System (ISMS)



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```
7   require 'rspec/mocks'
8
9   require 'capybara/rspec'
10  require 'capybara/matchers'
11
12  Capybara.javascript_driver = :webkit
13  Category.delete_all; Category.create
14  Shoulda::Matchers.configure do |config|
15    config.integrate do |with|
16      with.test_framework :rspec
17      with.library :rails
18    end
19  end
20
21  # Add additional requires below this line if you have additional dependencies
22
23  # Requires supporting files within the same directory as this file if you don't
24  # want to change the generator's search path.
25  # run as spec files by default
26  # in _spec.rb will both be required.
27  # run twice. It is recommended
28  # end with _spec.rb. You can
#       # automatically run these after
#       # running all of the other specs
#       # in this file by adding the following
#       # code to spec_helper.rb
#       # require 'spec/controllers'
```





Technology: JAVA

Title: Stark Ticketing & Case Management

Description:

Stark ERP is an integrated enterprise resource planning system designed to optimize business processes. As organizations grow, efficiently managing customer support requests and resolving issues becomes increasingly critical for maintaining customer satisfaction and operational performance.

This project aims to enhance Stark ERP by developing a dedicated ticketing and case management module. The module will streamline the management of customer service requests, complaints, and support tickets. It will improve after-sales service capabilities, increase customer satisfaction, and boost operational efficiency.

Additionally, the project involves creating a web application to serve as an external channel for customers to report their claims. This application will provide an easy-to-use interface for submitting complaints and service requests, which will then be integrated into the Stark ERP ticketing system for streamlined processing.

Keywords: Spring Boot, Postgres, Angular, SQL Server, Git, CI/CD, ticketing system, case management, external channel, customer satisfaction.



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Months



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Technology: .NET

Title: Cash Management and Transactions Reporting Web Application

Description:

This project involves the development of a robust web application for efficient cash management and transaction reporting.

The Application Cash Management and Transaction Reporting is a digital solution designed to manage cash flow, process transactions, and provide real-time reporting for financial operations. This application addresses the needs of businesses and organizations that handle substantial daily transactions and require robust tools for managing, tracking, and analyzing cash and transaction data.

The system will feature a comprehensive, user-friendly web interface and advanced transaction processing capabilities, supported by secure backend services and optimized for seamless data handling.

Keywords: .NET 8, Sql server, Postgres Api Rest, Model Mapper, Angular 19 , Docker



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PHP





Technology: PHP

Title: Foundation for a Configurable E-commerce Website Based on Frameworks

Description:

This project focuses on developing a dynamic e-commerce website, encompassing design, development and integration.

The preparation phase involves collaborating with the team to design a solution that aligns with business needs and best practices. The development phase emphasizes creating a configurable front-end and back-end solution.

The project will be integrated into the DevOps pipeline and include thorough testing and comprehensive documentation to ensure quality and maintainability.

Keywords: oop, php, sql, js, css



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4 – 6
Months



02
interns



QUALITY ASSURANCE



Technology: QA

Title: Automation of a B2B Application Using Playwright

Description:

This project focuses on designing an automated testing framework using Playwright to create maintainable test scripts.

The framework will incorporate best practices, modular structure, and coding conventions.

It will be integrated into the DevOps pipeline to run tests alongside software updates.

Existing manual tests will be converted to automated ones, and a detailed workflow for test automation will be established.

Sonar will be integrated to validate code quality, identifying potential issues and improving test script quality.

Keywords: Postman, Karate, Java, CI/CD integration, Docker



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Months



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Technology: QA

Title: Automation of API Tests for the HR Portal and the B2B Application

Description:

This project involves designing and implementing an automated API testing framework using Karate to ensure accurate data responses and high software quality.

The framework will validate API compliance with specifications, integrate seamlessly into the DevOps pipeline for continuous testing and streamline workflows through automation.

Existing manual tests will be enhanced and automated, while Sonar integration will ensure the framework and test scripts meet high-quality standards, identifying potential code issues and improving overall maintainability.

Keywords: Postman, Karate, Java, CI/CD integration, Docker



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Months



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MARKETING



Technology: Marketing

Title: Community Manager Intern

Description:

This project focuses on enhancing Stark Solutions' social media presence through strategic planning and creative content creation.

It involves developing and implementing a detailed editorial calendar for platforms like Facebook and LinkedIn to ensure consistent and timely posting.

The project includes designing visually appealing content, such as posters and banners, to support social media campaigns and create a strong visual identity.

Additionally, it emphasizes crafting and publishing high-quality, original content tailored to the target audience, aiming to boost engagement, strengthen brand visibility, and drive audience interaction.

Keywords: Community Manager, Social Media Management, Digital Marketing, Content Strategy.



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Application P R O C E S S



1. Pick Your Project

Choose the project that excites you and fits your skills.

2. Submit Your Application

Send your application with the project name as the subject line to:
stage@spark-it.fr

3. Show Your Expertise

Take a technical test to demonstrate your knowledge and abilities.

4. Ace the Interview

Join an interview to discuss your ideas and contributions (HR and technical interview).

PS: If you have not received a response within **two weeks**, it means your application has not been selected successfully this time.



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