

>_ Singleton

PFE BOOK

2025-2026



Company Presentation

Founded in 2025 , Singleton is a cutting-edge company specializing in AI-powered development and automation solutions. Our mission is to turn ideas into scalable, efficient products faster than ever, without compromising quality.

At Singleton, we focus on rapid development, AI solutions, and process automation, helping businesses innovate, streamline workflows, and boost productivity. Our approach is simple: Code less. Do more. We create custom software for startups and enterprises, designed to adapt to future needs.

Our philosophy is to innovate boldly, automate everything that slows you down, and deliver smart, fast solutions for a more productive future.

>_ Why Singleton

At Singleton, we believe speed should never compromise quality. In a world where time is precious, we deliver smart solutions, built fast — but always with a focus on precision and sustainability.

Here's how we make it happen:

- **Agile Development:** We break projects into smaller milestones, ensuring continuous improvement and rapid delivery without losing sight of quality.
- **Automated Testing:** Early detection of bugs through automated testing means a flawless final product, fast.
- **Intelligent Tools:** Leveraging AI and automation, we speed up development while maintaining high standards of performance and security.
- **Future-Ready Solutions:** Scalability is in our DNA. We design for tomorrow, today — ensuring long-term value and adaptability.



Sbujects

1

Development web & mobile

2

Inelligence Artificielles

3

Internet of things (IOT)

Project I: E-Learning Dashboard with AI Integration

Description:

This project aims to develop a dynamic e-learning dashboard for professors and students, using React.js for the front-end and Golang for the back-end, with AI integration to enhance the learning experience. Professors can create and upload courses, design quizzes and exercises, and use AI for tasks like content generation and personalized recommendations. Students can access courses, receive instant feedback on exercises through AI-powered correction, and get tailored content suggestions based on their performance. The platform streamlines the learning process and leverages AI to provide a more efficient and personalized education experience.

Skills/ technologies:

React.js, Go, AI integration

Profile :

Engineer

Duration:

6months

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Project 2: “Smart School” Platform & mobile application

Description:

The "Smart School" project aims to create a web dashboard and mobile app that allows parents to track their child's academic progress in real time. Parents can view details about their child’s courses, schedules, grades, and attendance, as well as access information about teachers, exams, and school events. The platform enhances communication between parents, teachers, and schools, empowering parents to stay engaged and informed about their child's education and overall performance.

Skills/ technologies:

React.js, Go, AI integration, Flutter

Profile :

Engineer

Duration:

6 months



Project 3: Smart Farm Solution

Description:

This project aims to create a smart farming solution that integrates hardware and a web platform to control and monitor the conditions of greenhouses for optimal plant growth. The system will use embedded technology to regulate humidity, temperature, watering systems, and other environmental factors essential for healthy crops. The hardware will be installed in the greenhouse to automatically adjust the conditions, while the web platform allows farmers to monitor and control these factors remotely in real-time. This smart farming solution aims to improve efficiency, reduce water usage, and maximize crop yield, bringing technology into agriculture for a more sustainable and productive farming experience.

Skills/ technologies:

React.js, Embedded Systems,
IoT

Profile :

Bachelor

Duration:

4 months

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Project 4: Smart Vehicle Health Monitoring System

Description:

The goal of this project is to develop a mobile application that interfaces with an embedded OBD-II device to provide real-time vehicle diagnostics. The app allows car owners and mechanics to monitor critical data—such as engine performance, fuel efficiency, and tire pressure—directly from their smartphones. By integrating AI-driven analytics, the application doesn't just detect current faults; it predicts potential mechanical failures before they occur and sends proactive alerts for preventive maintenance. This project combines mobile development, IoT connectivity, and intelligent data visualization to create a modern, "connected car" experience.

Skills/ technologies:

Flutter, Embedded Systems, IoT, AI integration

Profile :

Bachelor

Duration:

4 months



Project 5: Mobile App for Personal Training

Description:

This project involves developing a mobile application designed to digitize the relationship between a professional coach and their clients. The app provides a central platform where coaches can assign personalized workout and nutrition plans, while students or athletes can log their daily progress and receive direct feedback through an integrated chat system. It is an ideal project for students looking to master cross-platform mobile development and real-time database management through a practical, user-centered health and fitness solution.

Skills/ technologies:

Flutter, GoLang, Ai Integration

Profile :

Engineer

Duration:

6months

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Project 6: Web App for Personal Training

Description:

This project focuses on developing a comprehensive web dashboard designed for coaches to manage their entire client base and application content from a single interface. While the mobile app serves the athletes, this web platform empowers coaches to build complex training libraries, analyze long-term client data through visual charts, and manage subscriptions or memberships. It is an excellent project for students aiming to master front-end framework integration (like React or Angular), data visualization, and administrative backend architecture for a scalable fitness ecosystem.

Skills/ technologies:

ReactJs, GoLang, Ai
Integration

Profile :

Engineer

Duration:

6 months

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Project 7: Advanced Project Planner-Odoo

Description:

The goal of this project is to develop a high-performance project management module for Odoo that bridges the gap between basic task tracking and professional resource planning. The system introduces advanced visualization tools, such as dynamic Gantt charts and Kanban automation, allowing managers to handle complex workflows with ease. By integrating a resource allocation engine, the module can track team availability in real-time, manage task interdependencies (Critical Path Method), and generate automated profitability reports based on logged timesheets.

Skills/ technologies:

Python, JavaScript, OWL

Profile :

Engineer

Duration:

6 months

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Project 8: Advanced Fleet Management with Predictive Diagnostics

Description:

This project aims to develop an advanced fleet management module for Odoo that integrates real-time diagnostics and intelligent planning to optimize vehicle operations. The system uses embedded technology and API integrations to monitor engine performance, fuel levels, and mechanical health, providing managers with a detailed overview of their fleet's condition. The module features a centralized planning interface that allows for the efficient scheduling of vehicle assignments and driver shifts, ensuring maximum asset utilization. By combining diagnostic data with automated alerts, the system enables predictive maintenance, allowing users to schedule repairs before failures occur and reduce operational downtime. This smart fleet solution aims to improve safety, lower maintenance costs, and increase logistical efficiency, bringing data-driven management to the transportation sector.

Skills/ technologies:

Python, JavaScript, OWL

Profile :

Engineer

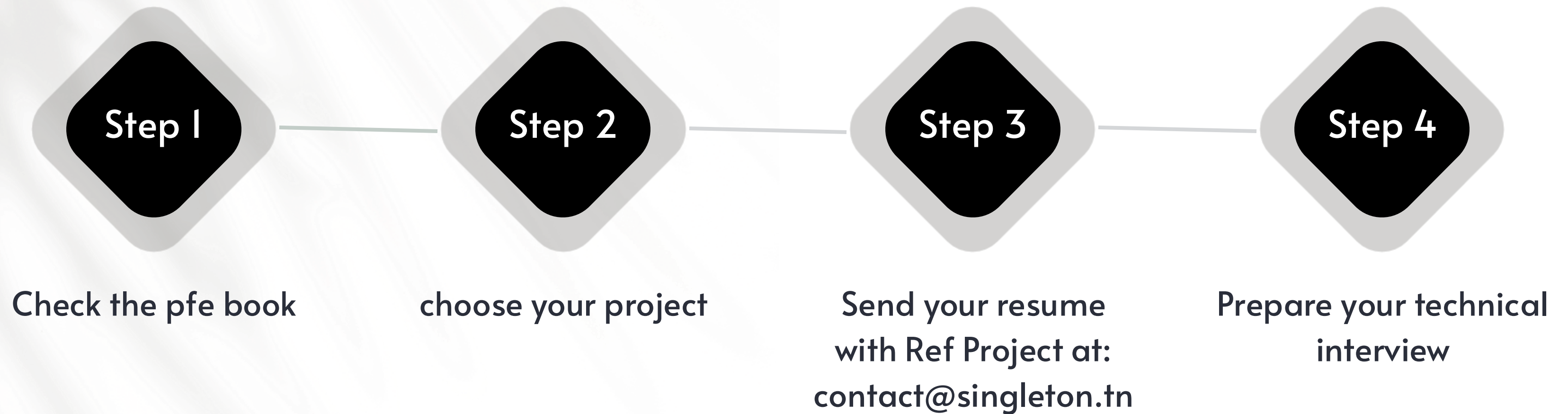
Duration:

6 months

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HOW TO APPLY



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