Project Description: Estramipyme

The process of creating Estramipyme involved five stages: ideation, review with the strategy think tank, review with SME experts, application and validation of the methodology with an SME, and presentation of the final version of the methodology.

The Estramipyme website is designed to provide an online space where small and medium-sized enterprises (SMEs) can access resources and services to support their growth and development. Estramipyme focuses on providing tools and information that enable entrepreneurs and SME owners to strengthen their businesses and improve their competitiveness in the marketplace.

Estramipyme's Objective

Estramipyme's main objective is to provide an accessible and functional platform that facilitates SMEs access to training resources and a network of business contacts. In addition, Estramipyme seeks to accompany micro-businesses and SMEs in the development of a strategic process that allows them to recognize what their customers value most about their business in order to leverage their differentiation and growth.

It is important to highlight that Estramipymes has a history of knowledge, experiences, research and reflections of professors, students, managers and consultants who have participated for more than twenty years in the Strategy Study Group (GEE) of the EAFIT School of Management.

Key Functions

Resource Information: Provides a database of resources for SMEs, including guides, articles and links to support programs.

Training and Courses: Includes access to online courses and webinars focused on topics such as business management, finance and marketing for SMEs.

Customized Consulting: Provides access to consulting services for SMEs to receive specialized advice in key areas such as business strategy, accounting and digital marketing.

Templates for the analysis of the external environment: There are more sophisticated strategy tools for external analysis, such as PESTEL, which Estramipyme suggests focusing on the most critical global trends for the business.

Another very useful tool for analyzing the industry is the strategic watch, as it allows to identify the competitive strategy in which the business is currently engaged.

Technologies Used

For the development of Estramipyme, the following technologies were selected due to their scalability capabilities, ease of maintenance, and support for robust enterprise applications:

HTML: HTML (HyperText Markup Language) is the fundamental language for structuring Estramipyme's web pages. HTML defines the organization of content, making the site accessible and understandable to users and compatible with various browsers.

CSS: CSS (Cascading Style Sheets) is used to style and design the web page. With CSS, it ensures that the user interface is visually appealing and consistent. In addition, responsive design is implemented so that the page adapts optimally to different screen sizes, improving the user experience on mobile and desktop devices.

Java: Java is the main programming language used in the development of Estramipyme's business logic. It is known for its stability, performance and security, essential qualities in business applications. Java allows handling complex processes efficiently, ensuring that the platform works reliably.

Spring Boot: Spring Boot is a Java framework that facilitates the creation of web applications and APIs. It was chosen because of its ability to simplify configurations and enable rapid development. Spring Boot provides a suitable environment for implementing drivers, services and repositories, efficiently managing communication between the frontend and backend. In addition, its integration with security and data management technologies ensures that the application is secure and scalable.

Spring Boot dependencies included: spring-boot-devtools, spring-boot-starter-web, mysql-connector and lombok, which streamline development and database connection and provide useful development tools and annotations to reduce repetitive code.

SQL: SQL (Structured Query Language) is the language used for relational database management. SQL allows you to store, query and manipulate data efficiently. At Estramipyme, SQL is used to manage information related to resources, courses and consulting services, ensuring data integrity and accessibility.

Postman: In this case with Java and Spring Boot, Postman is mainly used for: Create and send HTTP requests: Postman allows you to build HTTP requests of different types (GET, POST, PUT, DELETE,).

Using the HTTP GET method, you can request information about a specific resource or a list of resources, using the HTTP PUT method, you can modify the data of an existing resource, using the HTTP DELETE method, you can delete a resource, using the HTTP POST method, you can send a request to a specific endpoint to create a new resource.

Task Tracking Platform: Trello

To organize and track Estramipyme's development, Trello has been selected as a project management tool. Trello allows the project to be divided into individual tasks, assign responsibilities, and keep track of progress in real time. Each task can be detailed on cards containing descriptions, attachments, and due dates, which facilitates collaboration and ensures that all team members are aligned on goals and deadlines.

The team held weekly virtual meetings through the Microsoft Teams platform on Mondays to distribute the tasks and on Thursdays to show results, clarify doubts or provide support for the difficulties that arose in each of the assigned tasks.

GitHub: https://github.com/mauro258/Estramipyme-API

This repository contains the backend API for the Estramipyme project.

It handles all the backend configuration, including:

- Database integration and management.
- API endpoints for data processing and retrieval.
- Business logic implementation.

GitHub: https://github.com/mauro258/Estramipyme-FullStack

This repository contains the front and backend connection for the Estramipyme project.

- This repository manages the connection between the frontend and backend of Estramipyme.
- It integrates the backend API with the user interface, ensuring seamless communication and functionality.
- It includes the implementation of user interface functionalities, data visualization and user interaction flows.

Database Diagram:

