



WEB APPLICATIONS

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I. INTRODUCTION

EN The following works will showcase the project's progress and how each diagram performed.

II. FUNCTIONAL REQUIREMENTS:

II-A. *PRODUCT MANAGEMENT:*

Catalog: Display products with images, descriptions, and prices. Categorization: Organize products into categories and subcategories to facilitate search. Inventory: Manage inventory, display real-time availability. Related Products: Show related products to increase cross-selling.

II-B. *USER EXPERIENCE:*

Intuitive Navigation: User-friendly interface and intuitive navigation for users. Advanced Search: Advanced search function by name, category, price, etc. Search Filters: Allow users to filter products by different attributes. Shopping Cart: Functionality to add, remove, and modify products in the cart. Checkout Process: Integration with secure payment gateways for safe transactions. Purchase History: Allows users to view their purchase history and previous order details. Order Tracking: Function to track the order status in real-time.

II-C. *SECURITY AND PRIVACY:*

SSL and Data Security: SSL certificate for secure connections and user data protection. Privacy Policy: Clearly display the privacy and data protection policy. Payment Security: Ensure the security of transactions and financial information.

II-D. *ADAPTABILITY AND PERFORMANCE:*

Responsive Design: Ensure the site is accessible and functional on mobile devices and tablets. Speed Optimization: Ensure fast loading times to enhance the user experience. Scalability: The site should be capable of handling increased traffic and product quantity seamlessly.

III. NON-FUNCTIONAL REQUIREMENTS:

III-A. *LOADING TIME:*

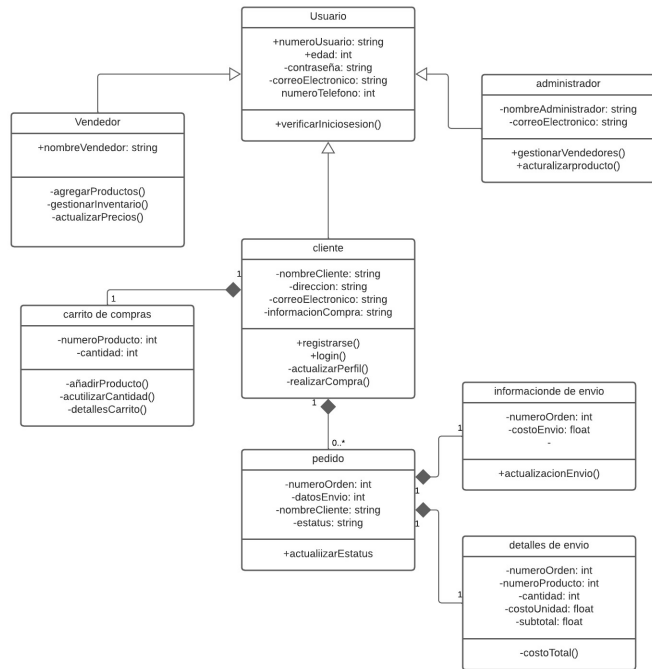
The page must load quickly to retain visitors.

III-B. *SCALABILITY:*

It must be able to handle a large number of visitors and concurrent transactions without performance degradation.

VII. CLASS DIAGRAMS:

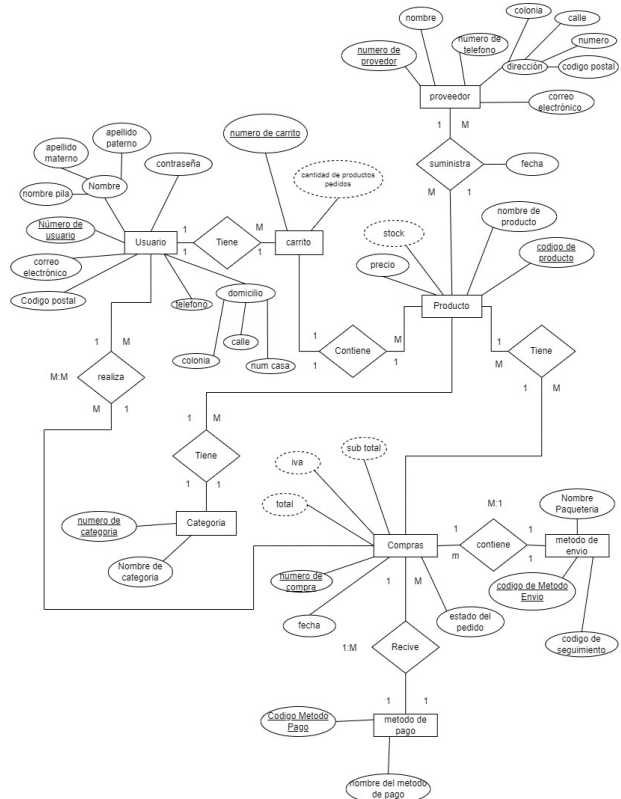
Here, we have drawn the fundamental pieces of our systems, as if we were assembling a puzzle, to understand how all the parts fit together.



[CLICK HERE TO VIEW EXTENDED IMAGE](#)

VIII. ENTITY-RELATIONSHIP DIAGRAM (ERD)

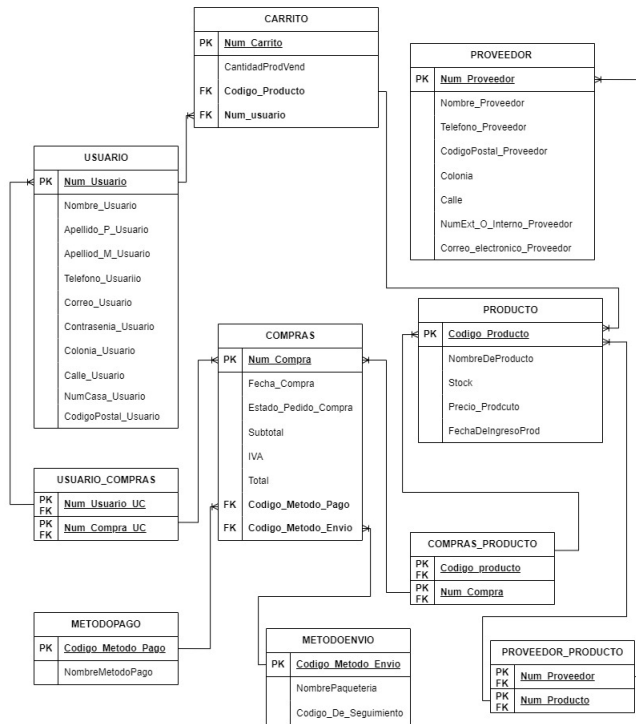
The ERD was developed with the purpose of organizing data and having a simpler framework when developing the website before moving directly to a database engine.



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RELATIONAL MODEL (RM):

In the context of databases, work has been done on defining the relational model, which specifies the structure and relationships between database tables, contributing to efficient data management.



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