



CS ANTIQUE SHOP MARKETPLACE

Diploma in Software Engineering 22.1F
Final Project Proposal

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Introduction of the Company

In the Panadura region, CS Antiques Showroom is a well-known merchant of antiques and replicas. Antique furniture such as pettagms, cabinets, chairs, tables, beds, coffee tables, brass items, and more are among the specialties of the store. Additionally, the showroom provides top-notch replicas of well-known antique furniture items, including warandar chairs.

Since the company's founding, CS Antiques Showroom has been committed to giving customers distinctive, superior products that suit their individual requirements and preferences. The business is dedicated to providing outstanding customer service and making sure that every customer has a satisfying and enjoyable purchasing experience.

Customers looking to buy antiques or replicas can get expert guidance and advice from CS Antiques Showroom's team of qualified and experienced professionals. The personnel at the showroom is an expert in determining the authenticity of antique goods and can help clients choose the ideal piece for their residence or place of business.

In addition to taking pleasure in being a dependable supplier of genuine antiques for consumers, CS Antiques Showroom is dedicated about protecting the rich history and cultural heritage of antique objects. The business is committed to offering a wide variety of one-of-a-kind and uncommon antique products, as well as premium replicas that perfectly reflect the beauty and elegance of antique furniture.

Overall, CS Antiques Showroom is a reputable and reliable seller of antiques and replicas, renowned for its first-rate customer service, experienced employees, and top-notch goods.

Problem Definition

We have determined that CS Antiques Showroom is dealing with a serious problem, and we think we can offer a solution that will be highly advantageous to the business. Despite having a Facebook page, the showroom does not have a website, which is a crucial tool for businesses to create an online presence and reach a wider audience.

Without a website, the business is losing out on a big chance to get in touch with potential clients who prefer to look for antique and replica things online. The company's Facebook page also has limited functionality and does not make it simple to update information on new products, construction specifics, or new designs.

By creating a complete website that will allow the business to present its enormous collection of distinctive antique and replica objects, our proposed software project would alleviate this problem. Customers will have access to an easy-to-use platform on the website where they can examine and buy products as well as learn more about the carpentry work that went into producing each one.

The website will also enable the business to routinely update its inventory, announce new arrivals, and present fresh designs. Customers will have a motivation to return to the website regularly as a result, giving them a chance to learn about the newest products that CS Antiques Showroom is presenting.

In general, we think that the proposed software solution would give CS Antiques Showroom an essential instrument to build its online presence and engage with a wider audience. This will assist the business in expanding, gaining more clients, and finally achieving its objectives.

We appreciate your consideration of our request. We are eager for the chance to collaborate with you and address this significant problem.

Proposed Solution

We are thrilled to make a suggestion that, in our opinion, will completely transform CS Antiques Showroom's web presence and make it a pioneer in the antique and replica business.

The goal of our suggested software project is to create a unique and incredibly appealing web page that will be a crucial instrument for the business to reach a larger audience and engage with its consumers more successfully. The website will integrate the most recent design trends and functionalities and will have a sleek, contemporary appearance.

Customers will be able to simply peruse the company's large range of distinctive antique and replica items thanks to the website's user-friendly interface. Customers will have access to comprehensive product information, which includes descriptions, prices, and photographs of the highest caliber. In order to help the business continuously improve its services, customers will also be able to provide reviews and ratings for products.

The website will have an easy-to-use function that will allow the business to constantly update its inventory, ensuring that clients are aware of the newest items. Additionally, the website will feature new designs and have a section for new arrivals, giving customers a reason to return often.

The website will showcase products as well as offer thorough details about the carpentry labor required to create each item. Customers will be able to see the company's distinctive craftsmanship through this, which will distinguish it from other players in the market.

In general, we think the suggested software solution would give CS Antiques Showroom a crucial instrument to build its web presence, interact with clients more skillfully, and ultimately expand its business. Our team has the knowledge and experience necessary to create a top-notch website that will surpass your expectations, and we are confident in their abilities.

We appreciate your consideration of our request. We are eager to collaborate with you and assist CS Antiques Showroom in achieving its objectives.

Project Scope

The goal of the suggested software project is to create a web application for CS Antiques Showroom so that clients can browse and buy the business's products online. The application's scope will be as follows:

Functional Requirements:

Admin Login: The first functional requirement It is specified by this criterion that an administrative login page be present. To access the system's administrative services, the user must enter their login and password on the page. In case the user forgets their password, there should also be a way for them to update it.

Functional Requirement 2 - User Login for Salespersons: This specification outlines the requirement for a user login page for salespeople. To use the system's sales functions, the user must enter their login and password on the page. In case the user forgets their password, there should also be a way for them to update it.

Add Item: Provide a feature for the administrator to add new items. The page should allow entering the item's details such as name, description, category, quantity, and price.

Remove Item: Provide a feature for the administrator to remove items from the system. The page should allow searching for the item by its name or ID and confirm the deletion before removing its record. The system should ensure proper handling and removal of any associated data.

Check Item Details: Provide a feature for users to view the details of an item. The page should display the item's name, description, category, quantity, and price. The user should be able to search for the item by its name or ID. The system should ensure proper handling and protection of sensitive information.

Functional Requirement 6: Verify Stock Information This need outlines the requirement for a page where the administrator can view the specifics of stock items that are both available and unavailable.

Excel file for the functional requirement 7 (Import Stock): The feature described in this need must enable the administrator to import an item list from the browser in Excel format.

Functional Requirement 8 - Add Stock(s): The page where the administrator can add stock items is required, according to this requirement. The administrator should search for the stock after entering the item code, name, current stock, and added stock.

The page where the salesperson can generate a bill for a customer is required by Functional Requirement 10 - Generate the Bill. The salesperson needs to input the item name, unit price, quantity, item discount, and payment method. The gross total amount, discount amount, and net total amount should all be calculated automatically by the system. The system should then calculate the balance when the user enters the cash or credit card amount.

Functional Requirement 10 - Generate the Invoice - calls for the creation of a page where salespeople can print an invoice for a client. The information from the payment GUI should be imported by the system.

Functional Requirement 11 - Generate Daily Report - outlines the necessity of a feature that generates a report for daily sales. A pie chart representing daily sales by item type, the total number of sales for the day, revenue, costs, and profit should all be included in the report.

The feature that provides a report for inventory management is required by functional requirement number 12, which is labeled "Generate the Inventory Report." Information about acquired stock, damaged stock, and unavailable and unavailable stock should all be included in the report.

The necessity for a feature that generates a financial report is outlined in functional requirement number 13, "Generate the Financial Report." The revenue, cost, and profit figures in the report should be both monthly and annual.

Manage re-seller information (input re-seller name, address, phone number, and status) - Using this feature, the system may keep track of data on re-sellers who make large purchases of merchandise.

Sold in bulk (find the re-seller and the item name, add the item to the order list, enter the quantity, remove a single order, remove all orders simultaneously) - This feature enables users to search for a re-seller by name and an item by name, allowing the system to manage bulk sales to re-sellers. The user can then enter the quantity, add the item to the order list, and, if necessary, remove orders. Additionally, this feature enables users to cancel all orders at once, simplifying the process of placing a new order.

Functional Requirement 17: Show order details (retrieve order details) - With this functionality, users can access and inspect the specifics of a particular order, including the items bought, their quantities, pricing, and other pertinent data. For controlling inventory levels and order tracking, this is useful.

Update Carpenter Details: Provide a feature for the administrator or authorized personnel to update the details of carpenters in the system. The page should allow editing the carpenter's name, contact information, experience level, and other relevant details. The system should ensure proper handling and protection of sensitive information and require authentication to perform updates. The page

should provide clear instructions and a user-friendly interface to facilitate the updating process. The changes made should be reflected immediately in the system and other relevant modules.

Add New Branch: Provide a feature for the administrator or authorized personnel to add new branches to the system when the shop opens in a new location. The page should allow entering the branch's details such as name, address, phone number, email, and operating hours. The system should assign a unique identifier to each branch to ensure proper handling of data.

Hardware Requirements

Computer: A laptop with the following specifications:

- Processor: Intel Core i3 or higher
- RAM: 4GB or higher
- Hard Disk: 500GB or higher
- Display: Minimum 15" monitor with a resolution of 1366x768 or higher
- Keyboard and Mouse: Standard wired or wireless keyboard and mouse
- Internet Connection: A reliable and high-speed internet connection is required for smooth functioning of the website.

Web Server

- Operating System: Windows
- Processor: Intel Xeon or higher
- RAM: 8GB or higher
- Hard Disk: 1TB or higher
- Bandwidth: 100Mbps or higher
- Domain Name: For the website, a domain name is necessary. It must be distinctive, simple to remember, and pertinent to the company.

Backup System: A backup system will be necessary to make sure that data is not lost in the case of a system breakdown or other unforeseen circumstances.

These hardware and network elements will enable the CS Antiques Showroom website to function effectively and efficiently, providing customers with quick access to information about the business and its products.

Technologies

For the development of the CS Antiques Showroom website, we propose the following technologies and software tools:

Front-end development: HTML, CSS, JavaScript, jQuery, Bootstrap

These technologies will be used to develop a responsive website design that is interactive and user-friendly on all devices and browsers.

Back-end development: PHP, MySQL

We will use PHP and MySQL to build a robust back-end system that will handle all website functionalities, including product management, user management, and order management.

Content Management System (CMS): WordPress

WordPress will serve as our CMS, allowing the client to easily manage and update the website content, including product information, images, and pricing.

E-commerce integration: WooCommerce

We will integrate WooCommerce, a powerful e-commerce platform, into the website to allow customers to easily purchase products online, track their orders, and make payments securely.

Analytics and Tracking: Google Analytics

We will use Google Analytics to track website traffic, user behavior, and conversion rates, providing the client with valuable insights to optimize the website's performance.

Social Media Integration: Facebook, Instagram

We will integrate the client's social media pages, including Facebook and Instagram, into the website, allowing customers to easily follow and share the client's products on social media.

With the use of these technologies and software tools, we hope to build a website that not only satisfies the client's needs but also offers a top-notch user experience for visitors, boosting the standing and expansion of CS Antiques Showroom.

Budget and Timeline

A budget of about 10,00,000 is needed to implement the suggested solution to build a website for CS Antiques Showroom. This budget will pay for any required third-party software licenses or hosting expenses in addition to the cost of web development, design, and content creation.

The suggested method will take about 3 to 5 months to implement. The time needed for requirements gathering, design and development, testing and quality assurance, content generation, and deployment is included in this. The development schedule may change based on the intricacy of the website and any unanticipated problems that may appear.

To guarantee that the project is finished on schedule and under budget, we will collaborate closely with the CS Antiques Showroom team. In order to keep the client updated during the development process, we will also deliver frequent updates and progress reports.

Task	Estimated Time (weeks)	Estimated Cost
Requirements gathering	1-2	LKR 75,000- LKR 125,000
Wireframing and Design	2-3	LKR 150,000-LKR 270,000
Front-end Development	4-6	LKR 220,000- LKR 330,000
Back-end Development	4-6	LKR 220,000- LKR 330,000
Testing and Quality Assurance	2-3	LKR 75,000- LKR 125,000
Deployment and Launch	1-2	LKR 50,000- LKR 100,000
Contingency (10%)	N/A	LKR 55,000
Total	14-22	LKR 945,000- LKR 1,315,000

Software Limitations

While we strive to create a comprehensive and user-friendly web page for CS Antiques Showroom, there are a few limitations to keep in mind:

- **Compatibility:** Not all browsers and devices may be able to access the website. The website will be optimized for widely used browsers and devices, but some users might still encounter compatibility problems.
- **Internet connectivity:** For the website to work, there must be a current internet connection. Customers who don't have internet access or who have a sluggish connection can have trouble getting on the site or might have slower load times.
- **Security:** We will put strong security measures in place to safeguard the website and user data, but we cannot guarantee perfect defense against all security risks.
- **Maintenance:** Just like any software, the website will need regular upkeep to keep it functioning properly and to fix any bugs or problems that may occur. Beyond the first development stage, this will require more time and resources.

Recommendations

- User testing: It is advised to carry out user testing prior to the launch of the website to make sure that the functionality and interface satisfy the needs and expectations of users. This can aid in locating potential problems and possibilities for development.
- Regular updates are necessary to reflect new products and designs as well as any changes to the company's information. Customers' engagement and interest in the business's products can be maintained in this way.
- Mobile optimization: It's critical to make sure the web page is optimized for mobile viewing given the growing number of visitors visiting websites on mobile devices. This can improve the company's website's accessibility and reach to a larger audience.
- Search Engine Optimization (SEO): By making the website more visible to search engines, a business can draw in more potential clients. This can be accomplished using a variety of strategies, including backlinking, content generation, and keyword optimization.
- Security measures: It is advised to put in place suitable security measures, including SSL encryption, two-factor authentication, and regular backups, to protect the security of client data and prevent any unwanted access.
- Social media integration: It is advised to link the website to the business's social media profiles in order to boost client interaction. This can boost website traffic and raise public knowledge of the brand.

Deliverables

CS ANTIQUES SHOWROOM now has a fully working, aesthetically pleasing, and responsive website that not only enables clients to browse and buy antique and replica objects but also offers information on the business and its services.

- A content management system (CMS) to control the website's content, which includes blog entries, news updates, and user reviews in addition to product descriptions, costs, and photographs.
- Integration of social media sites like Facebook and Instagram to display the business's goods and services, interact with clients, and develop a following.
- Search engine optimization (SEO), which raises a website's exposure and standing on search engines and brings more visitors and potential consumers to the site.
- User guides and documentation to aid the CS ANTIQUES SHOWROOM staff in maintaining and upgrading the website's content and to help customers use the site and place orders.
- Optional: A mobile app for iOS and Android smartphones that offers features comparable to those of the website, enabling users to browse and buy products as well as access news and updates about the business.
- To track and manage the company's product stock levels, orders, and shipments, an inventory management system is optional.
- Optional: A customer relationship management (CRM) tool to assist CS ANTIQUES SHOWROOM in better managing and corresponding with its clients, tracking sales and order histories, and offering tailored recommendations and promotions.

Conclusion

In conclusion, our recommended solution is a piece of software that will enable CS Antiques Showroom to increase the effectiveness of all of its business processes. By implementing this system, the business will be able to efficiently manage customer orders, keep track of their inventory, and produce the necessary antique items. This software will also provide the company with a platform to market its products to a wider market, thus increasing sales and revenue. Overall, the offered solution is a workable and affordable choice for CS Antiques Showroom to modernize its operations and keep its competitiveness in the market.

References

From Showroom Owner (CS ANTIQUES SHOWROOM Panadura)

Facebook pages (CS ANTIQUES Fb page)