

**“Online Marketplace for Vehicle Parts: Proposal”**

**Team members**

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**Undergraduate Project Proposal**

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# 1 ) Problem Statement

Developing a Website for the Purchase and Sale of Vehicle Parts

Our idea aims to fill the need for a user-friendly online marketplace for the purchase and sale of vehicle parts. Three different user types will be served by the website we're building: site administrators, retailers selling parts, and buyers.

This project is significant since Jordan lacks specific platforms for vehicle parts and the automotive industry is shifting toward internet sales. Our website will close this gap by giving consumers a streamlined way to search for, purchase, and sell parts while maintaining convenience and security.

Our idea is significant because it will facilitate the easier and more accessible purchase and sale of vehicle parts, which will benefit both individuals and businesses in the automotive market.

# 2) Objectives

* Make an Easy-to-Use Website: To make it easier for administrators, sellers, and buyers to locate and manage vehicle components, create a website that is easy to use.
* Create Various User Accounts: Ensure that the admin, seller, and buyer user types have the necessary resources and authorizations to carry out their respective roles on the website.
* Organize postings Effectively: Create a mechanism that allows vendors to submit their parts, administrators to look over them, and postings that have been approved to be published promptly.
* Simplify Components Searching: By including search filters, customers may locate the precise components they require quickly by filtering results according to criteria like type, brand, price, and location.
* Assist Users in Locating Nearby Sellers: Make it easier for consumers to select the closest choice by using location features to display merchants' locations.
* Allow Customers to Save Favorites: Provide customers the option to save parts they like in a list of favorites for quick access and comparison.
* Verify the Website Functions on Mobile Devices: To enable customers to access the website from anywhere, make sure it functions and looks well on smartphones and tablets.
* Protect User Data: To protect user data, implement strong safety protocols.
* Test Everything Before Launching: Make sure the website satisfies all requirements, functions perfectly, and is simple to use. Test it frequently.
* Launch and Track Performance: After launching, monitor the website's performance, take note of user comments, and make any adjustments to ensure that users are satisfied.

Expected Outcomes:

* A fully functional online marketplace for buying and selling vehicle parts.
* Improved user experience with user-friendly interfaces, advanced search options, and location-based services.
* Enhanced productivity in post-approval workflow for improved post-management efficiency.
* increased user interaction with features like mobile responsiveness and favorites lists.
* Positive feedback from users, increased site traffic, and improved conversion rates, leading to a successful and sustainable online platform for the automotive industry.

# 3) Scope

Scope of the Project -> This project focuses on creating a user-friendly website where people can buy and sell used vehicle parts. It includes:

* Designing the website with separate sections for admins, sellers, and buyers.
* Allowing sellers to submit parts for approval by admins before listing.
* Adding search filters for buyers to find specific parts easily.
* Using location features to show nearby sellers.
* Letting buyers save favorite parts for future reference.
* Making sure the website works well on mobile devices.
* Implementing security measures to protect user information.
* Testing the website thoroughly before launching.

Limitations:

* The project will not include extensive marketing efforts.
* It may not integrate with external systems or APIs beyond basic functionalities.
* Customization and additional features may be limited due to time and resources.

# 4) Methodology

Project Design:

* Assign tasks to students according to their areas of expertise: a student may specialize in database management, website development, or user interface design.
* Continuous meetings of the team to talk about issues, developments, and modifications to the project plan.
* Agile methodology to effectively organize work and adjust to changes.

Data Collection Methods:

* To understand the needs and preferences of future users (admins, retailers, and customers), gather requirements through surveys or interviews.
* To get input and adjust your design, use prototypes and mock-ups.
* After the launch, gather user input to determine what needs to be improved and developed further.

Analysis Strategies:

* Examine performance indicators for your website, including user traffic, bounce rates, conversion rates, and engagement levels.
* Perform usability testing to determine usability problems and assess user experience.
* To compare several design or functionality options and identify the best solutions, conduct A/B testing.

Feasibility:

* The approach is feasible because it emphasizes user-centric design and continual improvement, makes use of each team member's specific skills and abilities, and promotes effective communication and teamwork.
* Testing and feedback loops regularly make sure the project stays on track and produces a high-quality final product.

# 5) Significance

Importance of the Project:

* Our idea is crucial because it responds to the growing need for a dedicated online marketplace where vehicle parts can be purchased and sold.
* In addition, students, mechanics, car enthusiasts, and companies in the automotive industry can all profit from its useful and easy-to-use solution.

Contribution to the Field:

* The project contributes to the field by bridging the gap between traditional methods of buying vehicle parts and the modern digital era.
* It introduces innovative features such as location-based services, and favorites list, setting a new standard for online marketplaces in the automotive sector.

Potential Impact and Benefits:

* Our approach has the potential to save users time and effort by simplifying the process of locating and buying vehicle parts.
* More accessibility and convenience may result, especially for those who favor mobile-friendly platforms and online purchasing.

Practical Applications:

* Our technology has practical uses for multiple parties, such as helping users locate and purchase parts more effectively and potentially partnering with companies in the future.

Broader Implications and Future Improvements:

* Once our project is successful, it could act as an example for similar projects in other sectors or industries that could benefit from online marketplaces.
* Future enhancements can include adding more features to the platform, improving user interaction, and looking at partnerships with businesses for new features or services.

Value and Relevance:

* Our project's value lies in its relevance to current market trends, technological advancements, and user preferences.

# 6) Deliverables

* User-friendly Website: An easy-to-use website that is accessible from PCs and mobile devices for buying and selling vehicle parts.
* Different User Accounts: Separate accounts for admins, sellers, and buyers, each with specific features and controls.
* Post Management System: A platform where sellers may submit posts, administrators can examine and authorize them, and once approved, they are automatically posted.
* Search and Filters: Tools for buyers to easily find parts based on type, brand, price, condition, and location.
* Location Services: Features to show users where sellers are located, helping buyers find nearby options.
* Favorites List: An option for customers to organize and store elements they like for future reference.

* Mobile-Friendly Design: Making sure the website works properly for access while on the go on tablets and smartphones.
* Security measures: Robust safeguards that guarantee user privacy and safety for data.

* Testing & Quality Assurance: Extensive testing to identify and address any problems before launch, ensuring an uninterrupted user experience.

* Documentation and Support: After the website goes live, users can access resources such as manuals and guides to help them navigate and use it efficiently.