Software

Requirements

Specification

for

Auto Market

Version 1.0

9/18/2023

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Project Title: Auto Market

Members:

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Meetings date Participants

09/19/2023 Mohammad-Reza Ghoddoussi, Omer Mohammed, Ali Alsalman, Ashraf Saadeh, Usman Saiyed

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Functional Requirements:

FR1. User Registration and Authentication:		
Goal: Enable users to create accounts, authenticate themselves, and securely access the application.		
Stakeholders: Registered Users		
Without a registration and authentication system, the application would lack a way to uniquely identify and differentiate users		
Origin: Based on group concept discussion during the first team meeting 9/19.		
Version: 1.0	Date: 09/19/2023	Priority: 1

FR2. User Profile Management		
Goal: Enable users to create, update, and manage their profiles, including vehicle information and preferences.		
Stakeholders: Registered Users		
The need for a user profile management system is to provide users with a seamless and personalized experience within the application. It ensures that users can easily manage their information, preferences, and interactions, leading to enhanced user satisfaction and engagement.		
Origin: Based on group concept discussion during the first team meeting 9/19.		
Version: 1.0	Date: 09/19/2023	Priority: 1

FR3. Part Listing
Goal: Enable users (sellers) to list auto parts for sale with detailed and structured information.
Stakeholders: Users
The need for a user profile management system is to provide users with a seamless and personalized experience within the application. It ensures that users can easily manage their information, preferences, and interactions, leading to enhanced user satisfaction and engagement.
Origin: Based on group concept discussion during the Second team meeting 9/20.

Version: 1.0	Date: 09/20/2023	Priority: 2

FR4. Shopping Cart and Purchasing
Goal: To facilitate a seamless buying experience, allowing users to select multiple car parts, review their choices, and make secure online payments.
Stakeholders: Customers and Sellers
The "Shopping Cart and Purchasing" feature is a core component of Auto Market. It allows users to temporarily store their desired items before finalizing their purchase. The feature supports adding, viewing, and removing items from the cart. Additionally, it integrates with various payment gateways, ensuring that users have multiple, secure methods of payment. The checkout process should be intuitive, guiding the user from selecting items to confirming payment and order placement.
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.

Version: 1.0	Date: 09/20/2023	Priority: 2

FR5. Order Management
Goal: To provide a systematic, efficient, and user-friendly mechanism for both buyers and sellers to track, manage, and review transactions, ensuring transparency and trustworthiness in the purchase process.
Stakeholders: Customers and Sellers
The "Order Management" function serves as the bridge between buyers and sellers after a transaction is initiated. It provides tools and interfaces for monitoring the status of orders, accessing past transaction records, and giving feedback on transactions. This function aims to streamline the post-purchase process, ensuring that buyers receive their desired parts in the expected condition and time frame, while sellers can monitor and fulfill their sales efficiently.
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.

Version: 1.0	Date: 09/20/2023	Priority: 2

FR6. Admin Panel
Goal: To provide a centralized control interface for the platform administrators, ensuring smooth website operations, user management, content updates, and effective oversight on all transactions and listings.
Stakeholders: Platform Administrators and Users
The "Admin Panel" is the command center of the auto market platform. It is an interface designed specifically for platform administrators, allowing them to execute essential management tasks, ranging from user account oversight to content modification. With the power to control and influence most aspects of the platform, the admin panel ensures that the website operates with integrity, quality, and user-centricity.
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.

Version: 1.0	Date: 09/20/2023	Priority: 1

FR7. Car Make and Model Selection
Goal: To allow the user to select their car's make and model so that they can search for parts that will fit their car.
Stakeholders: Users
This will allow the user to be able to select their cars' year, make, model, engine, transmission, and drivetrain. Instead of the user inputting the information manually, the user will be able to select their cars' specifications using dropdown menus.
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.

Version: 1.0	Date: 09/21/2023	Priority: 1

FR8. Search Engine
Goal: To return accurate results to the user's search for parts that fit their car.
Stakeholders: Users
This will allow the user to be able to search only for things that fit on the user's car. This will also allow the user to search for things that can fit on any car. The search engine will also be able to handle filters such as price, brand, category, and subcategory.
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.

Version: 1.0	Date: 09/21/2023	Priority: 1

FR9. Parts Database		
Goal: To store all relevant information about the car parts being sold by Auto Market.		
Stakeholders: Users		
The parts database needs to store all relevant information about the car parts that are being sold on the website such as the parts' name, partID, category, subcategory, brand, rating, price, and all the cars that the part fits.		
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.		
Version: 1.0	Date: 09/21/2023	Priority: 1

FR10. User Recommendations		
Goal: When user sets up their car profile, it shows the parts needed that's recommended for that user		
Stakeholders: Users		
When the user is looking for a specific part, it will make it much simpler for the user when they set up their car profile. Once the car profile is set up, from the database and backend aspect, it will recommend the best options for the user's car and show them what the best options for them will be.		
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.		
Version: 1.0	Date: 09/21/2023	Priority: 2

FR11. Retrieving data
Goal: Receives data when the user clicks on a product
Stakeholders: Users
When the user clicks on a product the website or clicked product will go in the the database to retrieve the information and will be able to pull that information from where it is stored
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.

Version: 1.0	Date: 09/21/2023	Priority: 1

FR12. Contact Form
Goal: A contact form for the user to enter any question a user may have
Stakeholders: Users
This part of the functionality of the Contact form is primarily used for when a user would have a general question and once said user enters the question it will be sent straight to the database
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.

Version: 1.0	Date: 09/21/2023	Priority: 2

FR13. Filters
Goal: To easily narrow down product choices using our intuitive website product refinement options.
Stakeholders: Customers
After the customer uses the search bar, they should be able to use the filter tabs to categorize and reorder the recommended products using filters referencing the vehicle or specific to the part details.
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.

Version: 1.0	Date: 09/21/2023	Priority: 2

FR14. Vehicle ID
Goal: To allow users to create and remember their specific vehicle specifications to create a more personalized website experience.
Stakeholders: Users
The Vehicle ID needs to store the user ID's vehicle specifications from make, year, type, etc. utilizing the database to store and remember that specified users to present a more personalized website front end.
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.

Version: 1.0	Date: 09/21/2023	Priority: 2

FR15. Footer
Goal: To enhance content clarity and user engagement by implementing informative footnotes on the website.
Stakeholders: Users
The footer can be used at the bottom of our website to access essential navigation links, including 'Shop' for browsing products, 'Product' categories for specific item listings, 'Help' for assistance and support resources, and 'About Us' to learn more about our company, ensuring a seamless and informative browsing experience.
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.

Version: 1.0	Date: 09/21/2023	Priority: 2

Non-Functional Requirements:

NFR1. Availability:
Goal: Make sure the auto parts web application is highly available and accessible to users, minimizing downtime and disruptions to provide a seamless user experience.
Stakeholders: All Users
The web app must maintain constant availability and accessibility to customers, ensuring uninterrupted operation and responsiveness, which is crucial for delivering a valuable service.
Origin: Based on group concept discussion during the first team meeting 9/19.

Version: 1.0	Date: 09/19/2023	Priority: 1

NFR 2. Performance Requirements
Goal: Ensure the Response time and the Resource usage are within acceptable parameters
Stakeholders: Customers
When a customer tries to access our website, we want to ensure that the website's response time is as fast as we can possibly get it to be. As of now, the goal is to make the response time below 5 seconds and aim for 3. We will try to make this possible by reducing the resources used in developing our project.
Origin: Based on the initial project specification document, team members came up with this description during the first meeting.

Version: 1.0	Date: 09/19/2023	Priority: 2

NFR3. User Interface
Goal: The goal is to make the user interface as user friendly and simple as possible. We don't intend to make this a complicated program that requires a deep understanding of our product to use it.
Stakeholders: Customers
When a customer logs onto our website, we want everything to be as easily understandable as possible. Everything will be clear and easy to use. The goal is to try and reduce the need to take the time to understand what everything does on the front-end side as much as possible. We hope to achieve 0 documentation for users required.
Origin: Based on the initial project specification document, team members came up with this description during the first meeting.

Version: 1.0	Date: 09/19/2023	Priority: 4

NFR4. Maintainability
Goal: The goal is to try and make this system as easily maintainable as possible. Make it easy for us developers to modify the website, if need be, as well as attempt to put it into a sort of auto-pilot mode when the product is complete.
Stakeholders: Developers
For those of us who are developing the project, we want to make understanding our program and modifying it as simple as we can. The hope is to perhaps make a series of reusable functions that will aid in developing any additional add-ons to our website.
Origin: Based on the initial project specification document, team members came up with this description during the first meeting.

Version: 1.0	Date: 09/19/2023	Priority: 4

NFR 5. Security
Goal: To safeguard the platform, its users, their data, and transactions from threats, unauthorized access, and breaches, ensuring a trustworthy and reliable online trading environment.
Stakeholders: Users
The "Security" function encompasses measures, protocols, and technologies that defend the platform against both internal and external threats. This includes encryption of sensitive data, ensuring secure transaction processes, protection against cyber-attacks, and compliance with data privacy regulations. The essence of the security function is to instill confidence in users by demonstrating that their information and transactions are safe.
Origin: Based on the initial project specification document, team members individually came up with this when functional requirements were delegated.

Version: 1.0	Date: 09/20/2023	Priority: 1