

Feature requirements

User Authentication System

- Secure login page with username and password input fields.
- Password encryption using a secure hash algorithm for safe storage.
- Session management to maintain user state between pages.

Version Control with Git

- Initialize a Git repository for the project to manage source code and changes.
- Define a simple branching strategy for developing new features and fixing bugs.
- Implement pull requests for reviewing code changes before merging, promoting code quality.
- Use Git tags to mark release versions, making it easy to track and revert to specific versions if necessary.
- Set up a README file in the repository with project setup instructions and contribution guidelines.

Web Scraping for Real-time Data

- Development of web scraping scripts tailored to each key supplier's website for data extraction.
- Data normalization process to standardize information from different sources for consistent display.
- Implementation of ethical scraping practices, ensuring compliance with web usage policies and legal considerations.
- Regular updating mechanism to refresh data in the application database with the latest information.

Backend Data Processing

- Robust database design to efficiently store and manage tire data, user accounts, and supplier information.
- Development of RESTful APIs for secure and scalable communication between the frontend and backend.
- Implementation of business logic for complex operations such as price comparison, filtering, and sorting.
- Ensuring data integrity and security through regular backups, transactional operations, and access controls.

Tire Information Display

- Detailed display of tire specifications, including images, sizes, and type descriptions.
- Pricing information from various suppliers, including discounts or special offers if available.
- Supplier details, including name, and delivery terms.

Quick Finder for Tires Display

- Search bar to input search queries based on tire attributes like brand, type, or size.
- Dynamic filtering options to narrow down search results based on specific criteria such as tire size, type, or brand.
- Sorting functionality to organize search results by price, delivery time, and other relevant metrics.
- Auto-suggestion of search terms to enhance user experience and facilitate quicker searches.