

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

Date	03 November 2023
Team ID	NM2023TMID4205
Project Name	Creating Blog using Wordpress Platform
Maximum Marks	4 Marks

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Bike Customization	<ul style="list-style-type: none"><li>Customization Platform: Provide a user-friendly bike customization platform for customers.</li><li>Visual Options: Allow customers to select and visualize various bike frame designs, colors, and materials.</li></ul>
FR-2	Recommendations and Comparisons	<ul style="list-style-type: none"><li>Recommendation Engine: Offer recommendations for compatible components and accessories based on selected frame and style.</li><li>Budget Consideration: Ensure recommendations consider the customer's budget and intended use.</li></ul>
FR-3	Sharing Customizations	<ul style="list-style-type: none"><li>Social Media Sharing: Allow customers to share their custom bike configurations on social media platforms.</li><li>Unique Links: Generate a unique link for each shared configuration.</li></ul>
FR-4	User Management	<ul style="list-style-type: none"><li>User Account Management: Provide system administrators with the ability to manage user accounts and access privileges.</li><li>Deactivation and Deletion: Allow administrators to deactivate or delete user accounts as needed.</li></ul>

## Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	<ul style="list-style-type: none"><li>• Response Time: The bike customization platform must respond to user actions within 2 seconds, ensuring a smooth and responsive user experience.</li><li>• Accessibility: The platform should adhere to accessibility standards (e.g., WCAG) to make it usable for all customers, including those with disabilities.</li></ul>
NFR-2	<b>Security</b>	<ul style="list-style-type: none"><li>• Data Encryption: All customer and configuration data must be encrypted both in transit and at rest to protect user privacy and prevent unauthorized access.</li><li>• Authentication: Implement robust user authentication mechanisms to ensure secure access to user accounts and configurations.</li></ul>
NFR-3	<b>Reliability</b>	<ul style="list-style-type: none"><li>• Traffic Handling: The platform should be able to handle a minimum of 1,000 concurrent users without performance degradation, and it should be scalable to accommodate additional load.</li><li>• Component Scalability: The system should support the addition of new bike components and options with ease.</li></ul>
NFR-4	<b>Performance</b>	<ul style="list-style-type: none"><li>• Load Testing: Perform load testing to ensure the platform's performance under peak usage conditions, with a target of handling 5,000 concurrent users.</li><li>• Page Load Time: Individual page load times should be under 3 seconds to keep users engaged.</li></ul>
NFR-5	<b>Availability</b>	<ul style="list-style-type: none"><li>• Availability: Aim for 99.9% platform availability, with planned maintenance communicated to users in advance.</li><li>• Fault Tolerance: Implement mechanisms to handle system failures gracefully and ensure minimal disruptions to the user experience.</li></ul>