

**Project Design Phase-I**  
**Proposed Solution Template**

<b>Date</b>	<b>22 October 2023</b>
<b>Team ID</b>	<b>Team -591172</b>
<b>Project Name</b>	<b>Project – Ford GoBike Analysis</b>
<b>Maximum Marks</b>	<b>2 Marks</b>

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

<b>S.No.</b>	<b>Parameter</b>	<b>Description</b>
1.	<b>Problem Statement (Problem to be solved)</b>	<ul style="list-style-type: none"> <li>Ensuring that bikes were readily available to all the users at all times proved to be a challenge.</li> <li>Distributions of Bikes across docking stations was often imbalanced.</li> <li>Downtime due to maintenance issues also resulted in a lot of problems.</li> <li>Simplifying the payment process is essential for retaining and attracting users.</li> <li>The goal of this project is to enhance the overall user experience ,increase the bike availability,reduce downtime and promote the usage of bike as a feasible mode of transporation .</li> </ul>
2.	<b>Idea / Solution description</b>	<p>To address the challenges faced by this project:</p> <ul style="list-style-type: none"> <li>We can implement an AI -driven algorithm to dynamically redistribute bikes based on the real-time demand data.</li> <li>Implement regular checks based on the data to reduce downtime,ensuring bikes are always in an optimal condition.</li> <li>Enhance the mobile app with many more features such as real-time bike availability,station maps and route suggestions.</li> <li>Gather feedback from users to understand their needs and preferences.</li> <li>Establish a dedicated team for data analysis to gain insights .</li> </ul>
3.	<b>Novelty / Uniqueness</b>	<ul style="list-style-type: none"> <li>An innovative method is the use of AI-driven algorithms for dynamic station management, which guarantees real-time bike redistribution based on demand. It is different from stationary, static bike-sharing systems in that it adapts dynamically to user patterns.</li> <li>The user-friendly mobile app not only provides real-time information but also includes a built-in feedback system.</li> <li>Implementing predictive maintenance based on data analytics allows for proactive problem-solving, reducing bike downtime.</li> <li>Offering incentives for combining bike rides with public transport is a unique</li> </ul>

		strategy, promoting a holistic approach to urban mobility.
4.	<b>Social Impact / Customer Satisfaction</b>	<ul style="list-style-type: none"> <li>• By offering flexible membership options, including discounts for low-income users, the bike-sharing program becomes more accessible to a wider demographic.</li> <li>• Affordable access to bikes enhances customer satisfaction, especially for individuals with limited financial means.</li> <li>• Safety campaigns, helmet vending machines, and discounts for helmet usage promote responsible riding habits, enhancing overall road safety for both riders and pedestrians.</li> <li>• Integrating bike-sharing with public transport encourages eco-friendly commuting options, reducing traffic congestion and environmental pollution.</li> <li>• By utilizing data to understand user behavior and preferences, the program can tailor its services more effectively, meeting the specific needs of the community.</li> </ul>
5.	<b>Business Model (Revenue Model)</b>	<p><b>1. Mobile App Partnerships</b> Partnering with local businesses ,restaurants to offer exclusive discounts through the mobile application.</p> <p><b>2. Premium Services</b> Including premium services such as faster bikes,exclusive parking spaces ,guided city tours for a premium fee.</p> <p><b>3. Government Subsidies and Grants</b> Apply for government subsidies and grants aimed at promoting eco-friendly transportation and urban mobility solutions.</p> <p><b>4. Late Fees and Penalties.</b> Impose late fees on users who exceed the allotted time for their rides or penalize for damages caused due to negligence.</p> <p><b>5. Integration with Public Transport</b> Collaborate with public transport agencies and receive a portion of the fare when users combine bike rides with public transport.</p>
6.	<b>Scalability of the Solution</b>	<ul style="list-style-type: none"> <li>• Implement a modular technology system that can accommodate more number of users ,bikes and docking stations. This will allow the system to expand seamlessly as demand grows.</li> <li>• Utilize data analytics and machine learning algorithms to analyze real time user behavior and demand pattern.Hence ensuring optimal bike availability.</li> <li>• Collaborate with local government officials to obtain support for infrastructure expansion. This can ensure funding for expansion.</li> <li>• Partnerships with businesses willing to sponsor new stations or bikes in exchanhge for advertising opportunities. This can</li> </ul>

		<p>ensure funding for expansion while providing visibility to sponsors.</p> <ul style="list-style-type: none"><li>• Equip bikes and docking stations with smart IoT devices that allow remote monitoring and management. This Technology ensures the scalability of operations by maintaining a large fleet efficiently.</li></ul>
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