

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

Date	24 September 2022
Team ID	PNT2022TMID15660
Project Name	A new hint to transportation - Analysis of the NYC bike share system
Maximum Marks	2 Marks

**Proposed Solution:**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The government needs a way to analyse the NYC bike share system so that they can enhance the system and give residents and visitors a fun, safe, affordable and convenient alternative to walking, taxis, buses etc.
2.	Idea / Solution description	The goal of this analysis is to create an operating report of Citi Bike for the year 2018. We are going to create different types of data visualizations using the various features of IBM Cognos Analytics so that the user can better understand the results of the analysis. It integrates reporting, modelling, analysis, dashboards etc so that the users can understand the available data, and make effective decisions. It includes predictive, descriptive, and exploratory techniques and provides an intuitive and straightforward interface that is easy to understand. Python's analytical functions can also be used for generating descriptive statistics and visualizations can also be created using Python's visualization libraries.
3.	Novelty / Uniqueness	Our solution gives faster results, reduces maintenance due to complete report coverage, and improved decision making our reports and dashboards present the data in easily-understood formats.

4.	Social Impact / Customer Satisfaction	Bike share engages riders in physical activity, beneficial to health. In addition, it promotes green mobility and contributes to carbon neutrality. This analysis will help in understanding the association between bike share usage and the environment which is essential for system management and urban transportation planning.
5.	Business Model (Revenue Model)	This analysis might show that bike share is a relatively inexpensive and quick-to-implement urban transportation option compared to other transportation modes. The relative cost of launching a bike share system is less than investments in other transportation infrastructure, such as public transit and highways.
6.	Scalability of the Solution	This analysis presents evidence of the possible contribution of bike sharing systems to a more resilient transport system, as it can quickly provide alternative transport options to urban residents. As more data becomes available, particularly in other areas with identically comprehensive bike sharing systems, a clearer picture of the role of this transport mode in these emergency situations can be better evaluated by this analysis and provide results with an increased accuracy.