## **Project Design Phase-I**

## **Proposed Solution Template**

| Date          | 17/10/22                        |
|---------------|---------------------------------|
| Team ID       | PNT2022TMID16722                |
| Project Name  | Project – NYC Bike Share System |
| Maximum Marks | 2 Marks                         |

## **Proposed Solution Template:**

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

| S.No. | Parameter                   | Description                            |
|-------|-----------------------------|--|
| 1.    | Problem Statement (Problem  | The government needs a way to          |
|       | to be solved)               | analyze 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,                  |

|    |                          | modeling, 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 | Bike share engages riders in physical  |
|    | Satisfaction             | 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     | This analysis might show that bike     |
|----|-----------------------------|--|
|    | Model)                      | share is a relatively inexpensive and  |
|    |                             | quick-to- implement urban              |
|    |                             | transportation option compared to      |
|    |                             | other transportation modes. The        |
|    |                             | relative cost of launching a bikeshare |
|    |                             | 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 moredata           |
|    |                             | becomes available, particularly in     |
|    |                             | otherareas 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.                 |