

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

Date	23 October 2022
Team ID	PNT2022TMID48013
Project Name	A new hint to transportation – Analysis of the NYC bike share system
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 usage analysis	Collect information of the number of bikes rented from the dataset
FR-2	Find number of trips taken	Find the number of trips taken by each customer.
FR-3	Find the popular times of travel	Find the popular times of travel by most common month, most common day of week, most common hour of the day
FR-4	Find the popular stations and trips	Find the popular stations and trips by most common start station, most common end station and most common trip from start to end.
FR-5	Visualize the data	Plotting the graphs and visualize the data
FR-6	Analyse the model	Use machine learning algorithms to analyse the system

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Customer should be able to use the system at any time if he wants.
NFR-2	Security	The customer's data should be kept in a secure manner.
NFR-3	Reliability	The system shall be completely operational for the full time.
NFR-4	Performance	The system should be able to support many simultaneous users.
NFR-5	Availability	The system should be available for 24/7 for customers without any interruption.
NFR-6	Scalability	The system can withstand the increase in the number of customers.