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

Date	03 October 2022
Team ID	PNT2022TMID02687
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	User Registration	Registration through Form
		Registration through Gmail
		Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email
		Confirmation via OTP
FR-3	Collection of Data	NYC Citi-bike Data is collected in the form of Datasets.
		This data helps to do analysis and provide to the
		customer in visualized form.
FR-4	Analysis of Data	Preparaing , preprocessing the collected data.Modern
		day Algorithms are used to analyze the collected
		data.Descriptive,prescriptive,predictive analysis will be
		done on the collected data.
FR-5	Visualization of Data	Analysed Data will be represented in visualized form in
		the user Dashboard.So that the user will get a idea
		about the bike share system.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The benefits of bike share system is financial savings
		for individuals, reduce global emissions. The
		interactive user dashboard helps to drill down and
		filter operational information so data can be viewed
		from different perspectives & in more detailed also.
NFR-2	Security	The data is well protected with appropriate caution
		We restricted access to the main dataset.But the
		user will be able to see the data from the given
		dataset in dashboard.
NFR-3	Reliability	This analysis makes use of the available dataset
		precisely and gives accurate data visualizations and

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		it ai also an efficient and reliable way to grasp on the
		performance of the citi bike share system.
NFR-4	Performance	It is important to evaluate the conditions of the bike
		lanes and bikes in order to improve the operational
		efficiency of the bike share system. The effectiveness
		of the bike share system dashboard aims at
		analyzing the characteristics of bike stations and
		accessibility between bike stations and other
		facilities. The evaluation results can be used to
		improve the citi bike share system
NFR-5	Availability	A bike share system is a shared transport where
		individuals use our transport service for some time
		at a low cost or through memberships. Citi bike
		includes both docking and dockless system .Docking
		system allows users to borrow a bike from a dock
		and return at another dock.Dockless systems which
		offer a node free system relying on smart
		technology . Both formats can use smartphone web
		mapping to locate available bikes and docks.
NFR-6	Scalability	Citi bike share system provides resilient transport
		system .The application becomes more scalable as
		more data is fetched involving areas that are
		currently inaccesssible through this transport
		metholodt , as well as new cities apart from the new
		York. City