Signs with smart connectivity for better road safety

Date	25 October 2022
Team ID	PNT2022TMID33544
Project Name	Project – Signs with smart connectivity for better road safety
Maximum Marks	4 Marks

Technical Architecture:

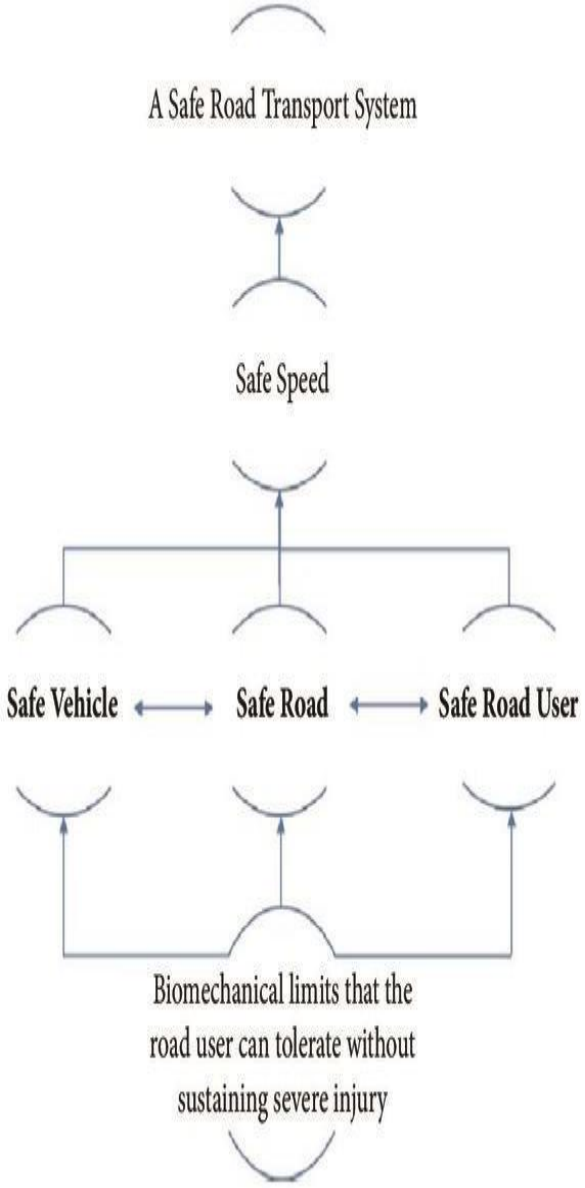

Table-1: Components & Technologies:

S .No	Component	Description	Technology
1.	User Interface	User access to the application through the mobile application.	HTML
2.	Application Logic-1	Creating an application interface.	Python
3.	Application Logic-2	Creating an AI assistant that gives medical services to the user.	IBM Watson STT service
4.	File Storage	File are stored in the local storage and stored in the cloud	IBM Block Storage or Other Storage Service or Local File system
5.	Database	Data Type, Configurations etc.	NoSQL
6.	External API-1	MQTT is used for data exchange between constrained devices and server applications.	MQTT
7.	Infrastructure (Server / Cloud)	IBM cloud app configuration is a centralized feature-management and configuration service on IBM cloud.	IBM cloud foundry, kubernetes

Table-2: Application Characteristics:

S .No	Characteristics	Description	Technology
1.	Open-Source Frameworks	There are no open-source framework in this application.	Python
2.	Security Implementations	Node-RED technology is used for security implementation.	Node-RED
3.	Scalable Architecture	User are provided with traffic symbol online .Give awareness to road rules.	IBM cloud
4.	Availability	Controller recommendation ,Symbol ,Road rules , accident provided zones are available in applications.	IBM Waston Assistant
5.	Performance	Artificial Intelligence (AI) such as Machine Learning (ML) algorithms are very helpful to improve the performance of the overall road safety management.	AI such as Machine learning