Ideation Phase
Literature Survey

Date	9-11-2022
Team ID	PNT2022TMID05133
Project Name	Project – Signs with smart connectivity for better road safety

S.no:1

TITLE OF THE PAPER: Internet of Things (IoT): A Vision, Architectural Elements, and Future Directions

Year of Publication: 2005

Journal name: PubMed Central

Authors: P. Kumar, S. Ranganath, W. Huang, K. Sengupta

Theme: using IOT make the safety of a road

Inference: Ubiquitous sensing enabled by Wireless Sensor Network (WSN) technologies cuts across many areas of modern day living. This offers the ability to measure, infer and understand environmental indicators, from delicate ecologies and natural resources to urban environments. The proliferation of these devices in a communicating-actuating network creates the Internet of Things (IoT), wherein, sensors and actuators blend seamlessly with the environment around us, and the information is shared across platforms in order to develop a common operating picture (COP). Fuelled by the recent adaptation of a variety of enabling device technologies such as RFID tags and readers, near field communication (NFC) devices and embedded sensor and actuator nodes, the IoT has stepped out of its infancy and is the the next revolutionary technology in transforming the Internet into a fully integrated Future Internet. As we move from www (static pages web) to web2 (social networking web) to web3 (ubiquitous computing web), the need for data-on-demand using sophisticated intuitive queries increases significantly. This paper presents a cloud centric vision for worldwide implementation of Internet of Things

S no:2

TITLE OF THE PAPER: Adding sense to the Internet of Things An architecture framework for Smart Objective systems

YEAR OF THE PUBLICATION: 2012

JOURNAL NAME:Pers Ubiquit Comput.

AUTHOR NAMES: T.S. Lopez, D.C. Ranasinghe, M. Harrison, D. McFarlane

THEME: To add sense to the IOT an architecture of framwork

INFERENCE:

Healthcare industries generate enormous amounts of data, so called big data that accommodates hidden knowledge or patterns for decision making. The huge volume of data is used to make decisions which are more accurate than intuition. Exploratory Data Analysis (EDA) detects mistakes, finds appropriate data, checks assumptions and determines the correlation among the explanatory variables. In the context, EDA is considered as analyzing data that excludes inferences and statistical modeling. Analytics is an essential technique for any profession as it forecasts the future and hidden pattern. Data analytics is considered as a cost- effective technology in the recent past and it plays an essential role in healthcare which includesnew research findings, emergency situations and outbreaks of disease. The use of analytics in healthcare improves care by facilitating preventive care and EDA is a vital step while analyzing data. In this paper, the risk factors that cause heart disease are considered and predicted using the K-means algorithm and the analysis is carried out using publicly available data for heart disease. The dataset holds 209 records with 8 attributes such as age, chest pain type, blood pressure, blood glucose level, ECG in rest, heart rate and four types of chest pain. To predict heart disease, K-means clustering algorithm is used along with data analytics and visualization tools. The paper discusses the pre-processing methods, classifier performances and evaluation metrics. In the result section, the visualized data shows that the prediction is accurate.

S no:3

TITLE OF THE PAPER: IBM cloud analytics on project

Year of Publication: April 29, 2017

Journal name: Journal of NODE-RED

Authors: V. Mayer-Schönberger

Theme: Visualizing the IOT terms

Inference:the Internet of Things (IoT), wherein, sensors and actuators blend seamlessly with the environment around us, and the information is shared across platforms in order to develop a common operating picture (COP). Fuelled by the recent adaptation of a variety of enabling device technologies such as RFID tags and readers, near field communication (NFC) devices and embedded sensor and actuator nodes, the IoT has stepped out of its infancy and is the the next revolutionary technology in transforming the Internet into a fully integrated Future Internet. As we move from www (static pages web) to web2 (social networking web) to web3 (ubiquitous computing web), the need for data-on-demand using sophisticated intuitive queries increases significantly. This paper presents a cloud centric vision for worldwide implementation of Internet of Things. The key enabling technologies and application domains that are likely to drive IoT research in the near future are discussed. A cloud implementation using Aneka, which is based on interaction of private and public clouds is presented. We conclude our IoT vision by expanding on the need for convergence of WSN, the Internet and distributed computing directed at technological research community**S.No 4**