EN2560 - Internet of Things Design and Competition
Course Project - Proposal

Group No : *09*
Group Members :
- *Udara A.W.T.*   *– 180650P*
- *Sewwandi B.L.P.N.*   *– 180589K*
- *Rathnayaka R.G.H.V. – 180529E*

Problem intended to be solved :

Providing the user aware of the news around him/her depending on his most concerned categories.

Conceptual Overview :

Sorting out the most relevant news with high priority and notifying it to the user through smart mobile device.

Data Source that will be used :

Node red is connected to an open API called **News API** through a HTTP request. Futher information on the API is available at : https://newsapi.org/docs/get-started

Planned usage of each of the components in Figure 1 :

- Open Source API   : Getting the required data on News.
- Node-red   : Processing the data as suit to the user requests and sorting out only the things that are important.
- MQTT Broker   : Establishing the connection between Node-Red and Node MCU.
- Node MCU   : Subscribing the relevant data from the MQTT Broker and retrieving the to the Client.
- Mobile (Client)   : Receiving the news notification by maintaining the connection with Node MCU through HTTP.

System functions and features :

Functions

- Ability to supply the news to the user with high priority to low priority according to the popularity and time relevancy of the source when a source is mentioned.
- Top headline news relevant to a certain country can be supplied.
- Top news related to a certain specific source can be supplied.
- News can be sorted out depending on country and its category.
- User may able to receive news in different forms and able to sort out what he/she want by giving relevant inputs with the use of Node-Red Dashboard and finally receiving the news through a smart phone.

Features

- User is capable of finding more information regarding the news if he/she want via the link provided with the news notification.
- Some more information regarding with the news also can be attached with the notification.
  Ex : Date of publish, Source of the news
- Reducing the time wastage of the user in getting a reliable comprehension on news through sorting out under category and time relevancy.