Project Design Phase-I
Solution Architecture
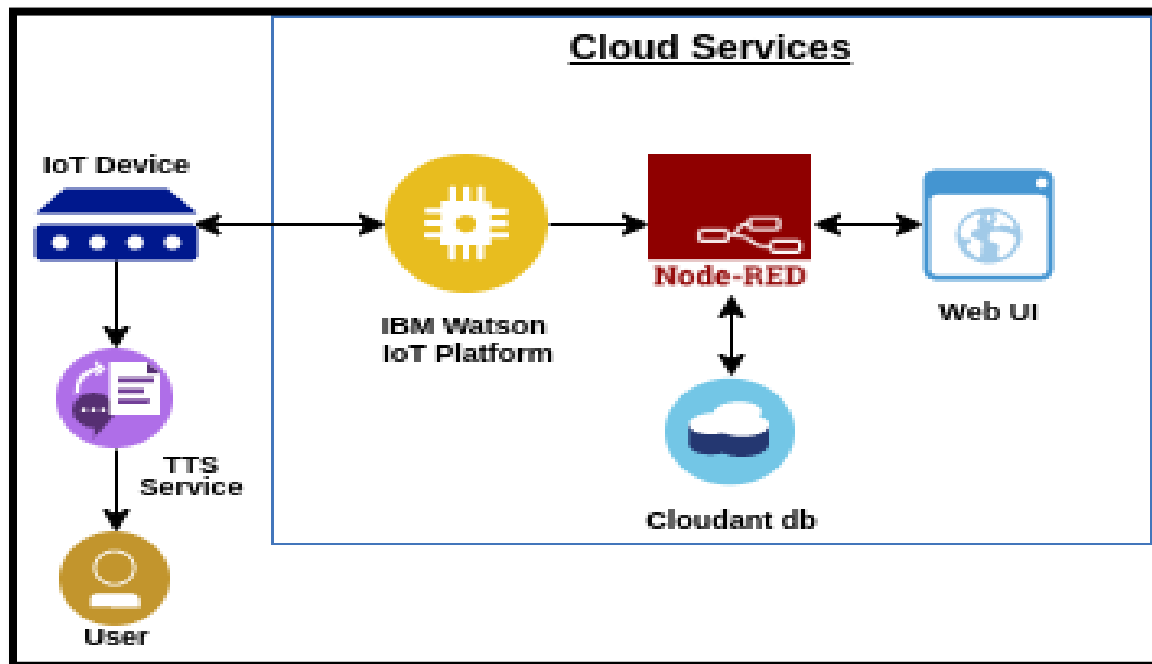
Date	19 September 2022
Team ID	PNT2022TMID54420
Project Name	Project – personal assistance for senior who are self-reliant
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Seniors who are trying to be self-reliant will have the greater use of medicine reminder app.

- This application can be customized to medicine reminder with voice alert, sms alert with all necessary details needed.

- And it is difficult for doctors/caretakers to monitor the patients around the clock. To avoid this problem, this medicine reminder system is developed.
- An app is built for the user (caretaker) which enables him to set the desired time and medicine. These details will be stored in the IBM Cloudant DB.
- If the medicine time arrives the web application will send the medicine name to the IoT Device through the IBM IoT platform.
- The device will receive the medicine name and notify the user with voice commands.

Solution architecture diagram :

The process may involve :

- Creating and using the IBM cloud services

- Integrating them with the node-red services

- Develop an application (medicine reminder) which can be comprehensible to all seniors .

Example flow :

```
                                          ┌─────────────────┐
                                          │  info found on  │
                                          │  cloud service  │
                          ┌──────────────┐└─────────────────┘
                          │ medicine     │
                          │ reminder     │┌─────────────────┐
                          │ application  ││ access provided │
┌──────────────┐          └──────────────┘│ for both senior │
│ senior who   │                          │   and doctor    │
│ are          │                          └─────────────────┘
│ self-reliant │          ┌──────────────┐
└──────────────┘          │ notifying    │┌─────────────────┐
                          │ doctors for  ││ doctors update  │
                          │ changing     ││ the info and it │
                          │ dosages      ││ reaches the     │
                          └──────────────┘│ senior          │
                                          └─────────────────┘
```

senior who are self-reliant

medicine reminder application

info found on cloud service

access provided for both senior and doctor

notifying doctors for changing dosages

doctors update the info and it reaches the senior