**Project Design Phase-II Solution Requirements (Functional)**

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| Date | 16 October 2022 |
| Team ID | PNT2022TMID12805 |
| Project Name | Personal Assistance For Seniors Who Are Self-Reliant |

Functional Requirements:

Following are the functional requirements of the proposed solution.

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| **FR no** | **Functional requirement** | **Sub requirement** |
| **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** | User input | input as program of  robot |
| **FR 4** | Processing of user input | Image acquisition, pre-processing,  image segmentation |
| **FR 5** | Feature extraction of user image | Machine learning algorithms, image classification, data mapping |
| **FR 6** | Result of user input | Display the disease name and fertilizer lack for the issues |

**PROJECT FLOW:**

Through a web application, users can set the time and name of the medication. The IBM Cloudant DB will house all of the medication- related information. At the chosen time, the online application will communicate the drug name to the IoT device. The device will voice out the medication name after receiving the name using IBM text to speech service to remind the user to take the medication.

To accomplish this, we have to complete all the activities and tasks listed below:

* Construct and set up IBM Cloud Services
* Create an IoT device and setup the IBM Watson IoT Platform. Create a Node-RED service.
* To store information about medications, create a database in Cloudant DB. To create a web application, use the Node-RED Service.
* Create a Python script to sign up for IBM's IoT platform and produce audio notifications.