

## PROJECT DESIGN PHASE-II

### SOLUTION REQUIREMENTS (FUNCTIONAL & NON-FUNCTIONAL)

|              |   |
|--------------|---|
| TEAM ID      | PNT2022TMID51066                                      |
| PROJECT NAME | AI-POWERED NUTRITION ANALYZER FOR FITNESS ENTHUSIASTS |

#### FUNCTIONAL REQUIREMENTS:

Following are the functional requirements for the proposed solution.

| FR NO.            | FUNCTIONAL REQUIREMENTS(EPIC) | SUB REQUIREMENT(STORY/SUBTASK)   |     |      |        |        |        |                   |                 |     |                   |                  |
|-------------------|-------------------------------|--|-----|------|--------|--------|--------|-------------------|-----------------|-----|-------------------|------------------|
| FR-1              | USER REGISTRATION             | -Registration through Gmail<br>-Registration through Mobile Number   |     |      |        |        |        |                   |                 |     |                   |                  |
| FR-2              | USER CONFIRMATION             | Confirmation via Email<br>Confirmation via OTP   |     |      |        |        |        |                   |                 |     |                   |                  |
| FR-3              | USER DETAILS                  | PERSONAL DETAILS   FOOD DETAILS <table><tr><td>Age</td><td>Food</td></tr><tr><td>Height</td><td>Recipe</td></tr><tr><td>Weight</td><td>Added ingredients</td></tr><tr><td>Diseases if any</td><td>Age</td></tr><tr><td>Conditions is any</td><td>Allergies is any</td></tr></table>  | Age | Food | Height | Recipe | Weight | Added ingredients | Diseases if any | Age | Conditions is any | Allergies is any |
| Age               | Food                          |  |     |      |        |        |        |                   |                 |     |                   |                  |
| Height            | Recipe                        |  |     |      |        |        |        |                   |                 |     |                   |                  |
| Weight            | Added ingredients             |  |     |      |        |        |        |                   |                 |     |                   |                  |
| Diseases if any   | Age                           |  |     |      |        |        |        |                   |                 |     |                   |                  |
| Conditions is any | Allergies is any              |  |     |      |        |        |        |                   |                 |     |                   |                  |
| FR-4              | USER REQUIREMENTS             | -The user simply inputs recipe ingredients and amounts. The software will instantly produce an accurate readout of your dish in terms of nutritional analysis in a readable format that consumers are familiar with.<br>-With already given details the system can alert the consumer if any content of their allergies ,it can alert the consumer |     |      |        |        |        |                   |                 |     |                   |                  |

## NON-FUNCTIONAL REQUIREMENTS:

Following are the functional requirements for the proposed solution.

| FR.NO | NON-FUNCTIONAL REQUIREMENTS | DESCRIPTION   |
|-------|-----------------------------|---|
| NFR-1 | USABILITY                   | <ul style="list-style-type: none"><li>• It should be user friendly and comfortable.</li><li>• The results should be loaded within 30 seconds.</li><li>• The results should be self explanatory so that it can be understood by common people.</li><li>• The image capture process should be quick and painless.</li></ul>   |
| NFR-2 | SECURITY                    | <ul style="list-style-type: none"><li>• AI powered nutrition analyzer for fitness should contain more security in which our data which entered or maintained should be more secured.</li><li>• With the help of the username and password it provides more security by which it can ensure access of the data that are private.</li><li>• It should be socio-economic which should access to sufficient and safe to use.</li></ul>  |
| NFR-3 | RELIABILITY                 | <ul style="list-style-type: none"><li>• It should be reliable.</li><li>• It is necessary that the AI powered nutrition analyzer for fitness should have proper data and information in which we can get a correct information about it and also get a proper guidance about it.</li><li>• With the proper guidance we can get required nutrition properly and proper fitness plan.</li><li>• It should also provides the information on nutrition and health which it should prevent from diseases, health risks and prevention guidelines. For more reliable it can also contains the calorie information, balanced diet plans, what</li></ul> |

|       |              |   |
|-------|--------------|---|
|       |              | type food can consumed at what time etc..... So, by this way it can reliable.   |
| NFR-4 | PERFORMANCE  | <ul style="list-style-type: none"> <li>• It should provide more number of users to consume at any time and at any place.</li> <li>• It should provide Reliability, Scalability, Security and Usability.</li> <li>• It should contain minimum data while over-paging the websites or application</li> <li>• While consuming the page it should provide fast response</li> <li>• The connection should e properly maintained so that it can use while travelling or in remote places.</li> <li>• The nutritious food to meet their dietary needs and the food preferences for an active and healthy life.</li> <li>• It should be consistently access, availability and affordability of foods and beverages that promote well-being and prevent from diseases.</li> <li>• It should suitable in all situations that exists to all people, at all times.</li> </ul> |
| NFR-5 | AVAILABILITY | <ul style="list-style-type: none"> <li>• Easy to access Data.</li> <li>• Avoids Data redundancy and inconsistency.</li> <li>• Fast and Efficient.</li> <li>• User Friendly.</li> </ul>  |
| NFR-6 | SCALABILITY  | <ul style="list-style-type: none"> <li>• It provides the clear procedure of daily consumption of food and helps the user to maintain a healthy diet.</li> <li>• According to their tracking system implemented in architecture provide the proper mechanism to the every individual of their nutrients intake which can be increased or decreased.</li> </ul>   |