**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 18 October 2022 |
| Team ID | PNT2022TMID31228 |
| Project Name | Project - Detecting Parkinson’s Disease using Machine Learning. |
| Maximum Marks | 4 Marks |

# Functional Requirements:

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | Home Page | * Description of Parkinson's disease and its symptoms. * If new user, REGISTER * If the user exists, LOGIN |
| FR-2 | User Registration Page | Registration through the form - Username,  Email id, Password, and Phone number. |
| FR-3 | Confirmation step | Confirmation via OTP. |
| FR-4 | Login page | Users enter their Phone number and password to log in. |
| FR-5 | Test inputs | Provide the details asked on the webpage and  get the results. |
| FR-6 | Results | * If POSITIVE - Consult a doctor, it can't be cured completely but can be treated with Leison surgery, deep brain stimulation, and neural grafting or tissue transplants. * If NEGATIVE - Preventive measures can be given.   NOTE: The treatment can also vary from person to person depending on their specific symptoms. |

# Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | The application is useful in detecting  disease, even illiterate people can access the form. |
| NFR-2 | **Security** | Only the user and the admin can view  patient details so that the details are secured. |
| NFR-3 | **Reliability** | Patients' details are better protected  from identity theft. Accuracy of the ML model is higher, so the prediction is accurate. |
| NFR-4 | **Performance** | Reduces the overall load time of  prediction and the interactivity with the user. |
| NFR-5 | **Availability** | Currently, there is no cure for Parkinson's  disease but we can control it through some treatment with early detection by this application. |
| NFR-6 | **Scalability** | Describe the ability to properly handle  upbringing workload. |