**Project Design Phase-II**

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

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| Date | 19 June 2025 |
| Team ID | LTVIP2025TMID60014 |
| Project Name | Health AI- Intelligent Healthcare Assistant Using IBM Granite |
| 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 | User Registration | Registration through Form  Registration through Gmail  Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | Health Data Input | Manual input of patient vitals  Secured upload of medical reports and images |
| FR-4 | AI-driven health analysis | Disease prediction based on symptoms and patient data  Personalized treatment based on patient profiles |
| FR-5 | Data security& privacy | Encrypting patient data  Implementing role based access to limit data access |
| FR-6 | Reporting &analytics | Develop interactive dashboards to visualize key health metrics  Allow users to generate custom reports based on specific criteria |

**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 ease with which healthcare professionals and patients can interact with the AI system, including clear instructions and minimal training requirements for effective use in clinical settings |
| NFR-2 | **Security** | The protection of sensitive patient data and system integrity from unauthorized access, breaches and cyber threats, ensuring compliance with regulations like HIPAA and maintaining patient privacy |
| NFR-3 | **Reliability** | The consistent and accurate functioning of the AI-system, providing dependable results and predictions without errors or downtime, which is crucial for critical healthcare decisions and patient safety |
| NFR-4 | **Performance** | The speed and efficiency of the AI system in processing data, generating insights and delivering responses, treatment planning and operational tasks in healthcare |
| NFR-5 | **Availability** | The continuous accessibility of the AI system to authorized users whenever needed, minimizing downtime and ensuring that critical healthcare operations are not interrupted due to system unavailability |
| NFR-6 | **Scalability** | The ability of the Ai system to handle increasing amount of data, users, and functionalities without compromising performance or stability, allowing for expansion and adaption to growing healthcare demands |