Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	06 May 2023
Team ID	NM2023TMID20397
Project Name	Estimation and prediction of hospitalization and medical care cost

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Data Collection	Demographics, training, and performance of individual athletes, the rules, format, and history of each Olympic event, the economic, social, and cultural factors that impact sports participation and performance in different countries, past Olympic games, including participation and performance data, to identify patterns and trends over time.
FR-2	Data Processing	The system should be able to process the collected data and generate predictions for predictions, performance analysis, demographic analysis, training and preparation analysis, economic analysis, and social and cultural analysis. By using data-driven insights, stakeholders can make informed decisions to improve participation and performance in Olympic sports.
FR-3	Visualization	The system should be able to provide easy-tounderstand visualizations of the predictions, including graphs, charts, and other visual aids.
FR-4	Inteface with web	The visualizations are integrated with web application

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The usability of data-driven insights on Olympic sports participation and performance is significant. These insights can provide stakeholders with valuable information and recommendations for improving participation and performance in Olympic sports. Coaches and athletes can use these insights to make informed decisions about training, preparation, and competition strategies. Governments and sports organizations can use these insights to allocate resources effectively, improve facilities, and promote sports participation. Sponsors and advertisers can use these insights to identify athletes and events with the greatest potential for exposure and revenue generation. Overall, data-driven insights on Olympic

		sports participation and performance can help to promote sports excellence and increase global interest in the Olympic Games.
NFR-2	**Security**	Olympic sports participation and performance, data encryption should be implemented, access control should be restricted to authorized users, backups and a disaster recovery plan should be in place, and compliance with regulations such as GDPR and HIPAA should be ensured. These measures are important to protect the data and ensure its privacy and security.
NFR-3	**Reliability**	The reliability of data-driven insights on Olympic sports participation and performance depends on the quality and accuracy of the data used to generate the insights, as well as the validity of the methods and models used for analysis. If the data is incomplete, inconsistent, or biased, the insights may be inaccurate or misleading. Therefore, it is essential to ensure the data used for analysis is of high quality and to use appropriate methods and models to generate reliable insights. Additionally, insights are only as reliable as the data available, so updating data regularly can help ensure ongoing reliability.
NFR-4	**Performance**	The performance of data-driven insights on Olympic sports participation and performance depends on the quality of the data collected, the accuracy of the analysis, and the relevance of the insights generated. If the data is accurate and relevant, and the analysis is conducted appropriately, data-driven insights can help stakeholders make informed decisions to improve participation and performance in Olympic sports.
NFR-5	**Availability**	The availability of data-driven insights on Olympic sports participation and performance depends on the availability and quality of the data, as well as the data analytics tools and expertise used to process the data. While some data may be publicly available, other data may be proprietary or difficult to obtain. Additionally, generating meaningful insights requires expertise in data analytics and sports performance analysis. However, as more data becomes available and data analytics tools continue to evolve, the potential for data-driven insights on Olympic sports participation and performance will continue to increase.
NFR-6	**Scalability**	Scalability of data-driven insights on Olympic sports participation and performance depends on factors such as data management, processing power, expertise, and flexibility. To ensure scalability, the system must be able to handle large and diverse data sets, perform complex analytics tasks, involve skilled analysts, and be adaptable to changing requirements and technologies.