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

| Date         | 15 May 2023   |
|--------------|---|
| Team ID      | NM2023TMID21570   |
| Project Name | Empowering the Future: A literacy Rate Analysis for a Better Tomorrow |

## **Functional Requirements:**

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement  | Sub Requirement (Story / Sub-Task)  |
|--------|-------------------------|---|
|        |                         |   |
| FR-1   | Data Input              | The system accepts literacy rate data as input.   |
|        |                         |   |
| FR-2   | Data Processing         | It processes the input data to calculate literacy rates.  |
|        |                         |   |
| FR-3   | Data Visualization      | It provides visual representations of the literacy rates through charts or graphs.                        |
| TIC-3  | Data Visualization      | Charts of graphs.   |
|        |                         |   |
| FR-4   | Statistical Analysis    | It performs statistical analysis on the literacy rate data, such as mean, median, and standard deviation. |
|        |                         |   |
|        | User Authentication and | It supports user authentication and access control to ensure  |
| FR-5   | Authorization           | data security.  |
|        |                         |   |
| FR-6   | Reporting               | It generates reports summarizing the literacy rate analysis results.                                      |
| TK-0   | Reporting               | resurts.  |
|        |                         |   |
| FR-7   | Scalability             | It allows for the system to handle increasing amounts of data and users.                                  |
|        |                         |   |
| FR-9   | Maintenance and Support | It includes a maintenance and support plan for the system's   |

## **Non-functional Requirements:**

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

| NFR No. | Non-Functional<br>Requirement | Description   |
|---------|-------------------------------|---|
| NFR-1   | Usability                     | It is designed to be user-friendly and intuitive for users with varying levels of technical expertise.            |
| NFR-2   | Security                      | It adheres to strict privacy and security protocols to protect the confidentiality of sensitive literacy data.    |
| NFR-3   | Reliability                   | The system operates consistently without failure or downtime, and it can recover quickly from unexpected issues.  |
| NFR-4   | Performance                   | The system can efficiently process a large volume of literacy data with minimal delays and errors.                |
| NFR-5   | Quality                       | It provides accurate and reliable results for literacy rate analysis, minimizing false positives and negatives.   |
| NFR-6   | Scalability                   | The system can scale up or down to handle varying volumes of literacy data as needed.                             |
| NFR-7   | Maintainability               | It is easy to maintain, update, and upgrade the system to ensure ongoing functionality and accuracy.              |
| NFR-8   | Compatibility                 | The system is compatible with various hardware and software platforms, enabling integration with different tools. |