**Project Design Phase-II**

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

|  |  |
| --- | --- |
| Date | 06 May 2023 |
| Team ID | NM2023TMID20436 |
| Project Name | Project – Unleashing the potential of youth student performance analysis |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

|  |  |  |
| --- | --- | --- |
| **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 |  |  |
| FR-4 |  |  |
|  |  |  |
|  |  |  |

**Non-functional Requirements:**

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

|  |  |  |
| --- | --- | --- |
| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | 1. User-friendly interface: The interface used to analyze student performance should be easy to use and navigate, with clear and concise instructions. This will help students, teachers, and administrators to easily access the data and analyze it. |
| NFR-2 | **Security** | 1. Data encryption: Student performance data should be encrypted while it is being transmitted and stored to ensure that it cannot be accessed by unauthorized parties. 2. Access controls: Access to student performance data should be restricted to only authorized personnel, such as teachers, administrators, and other staff members. Access controls can be implemented through the use of usernames and passwords, multi-factor authentication, and role-based access controls. |
| NFR-3 | **Reliability** | Reliability is an important factor when it comes to analyzing student performance data. Here are some ways in which reliability can be considered for student performance analysis:   1. Consistency in data collection: The data used for analyzing student performance should be collected consistently, using the same methods and procedures. This can help to ensure that the data is reliable and can be compared across different time periods and groups. |
| NFR-4 | **Performance** | 1. Timeliness: Student performance data should be analyzed in a timely manner to provide prompt feedback to teachers, students, and administrators. This can help to identify areas where improvements are needed, and provide opportunities for intervention and support. 2. Actionable insights: The data analysis should provide actionable insights that can inform decisions about curriculum development, teaching methods, and other educational initiatives. This can help to improve student learning outcomes and academic success. |
| NFR-5 | **Availability** | 1. Data accessibility: Institutions should ensure that student performance data is easily accessible to authorized personnel, such as teachers, administrators, and other staff members. This can help to ensure that the data can be used to inform decisions about curriculum development, teaching methods, and other educational initiatives. 2. Data integration: Institutions should consider integrating student performance data from multiple sources, such as assessments, attendance records, and demographic data. This can provide a comprehensive view of student performance, and allow for more informed decision-making. |
| NFR-6 | **Scalability** | some ways in which scalability can be considered for student performance analysis:   1. Technology infrastructure: Institutions should ensure that their technology infrastructure can support the collection, storage, and analysis of large amounts of student performance data. This may involve upgrading hardware, software, and network capacity as needed. |