**Project Design Phase-II**

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

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| Date | 25 October 2022 |
| Team ID | PNT2022TMID18306 |
| Project Name | News Tracker Application |
| 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 |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | User login | Login through browser directly by entering  Username and password  Login through email |
| FR-4 | User interaction | Done through user interface between client and server  User goes through the filtered news provided by application |
| FR-5 | User Account Settings | User can update account credentials, update interests and choices of news and report any issues |

**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 easily navigable, it has an interface which is user-friendly. The login/register page has simple terms which can be filled by a user who has not done it before. The user interface navigates the user to the home page and asks for interests.  The settings can be quickly accessed by the user by going to the account settings, where the credentials and interests can be changed anytime. |
| NFR-2 | **Security** | The application uses Google Auth 2.0 / Auth0 for User authentication. |
| NFR-3 | **Reliability** | The application should be able to perform without failure in 95 percent of all use cases during a month since the IBM cloud doesn’t face down time so often. |
| NFR-4 | **Performance** | Performance is the core non-functional requirements no system can do without. It defines how fast a software system or a particular piece of it responds to certain user actions under a certain workload. In most cases, this metric explains how long a user must wait before the target operation happens (the page renders, a transaction is processed, etc.) given the overall number of users at the moment.  The application’s news feed page has a loading time of 6 seconds. |
| NFR-5 | **Availability** | Availability describes how likely the system is accessible to a user at a given point in time.  The application must be available to the users at least 99% of the time in a month. |
| NFR-6 | **Scalability** | Scalability assesses the highest workloads under which the system will still meet the performance requirements. There are two ways to enable your system scale as the workloads get higher: horizontal and vertical scaling.  The application should be able to handle up to 10,000 users at a time considering the cloud factors. |