

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

Date	10 November 2022
Team ID	PNT2022TMID44997
Project Name	News Tracker Application
Maximum Marks	4 Marks

**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	<ul style="list-style-type: none"><li>• Registration through online</li><li>• Registration through Gmail</li><li>• Registration through mobile phone</li></ul>
FR-2	User installation	<ul style="list-style-type: none"><li>• Application can download by play store</li><li>• Or it can be viewed through website</li></ul>
FR-2	User Confirmation	<ul style="list-style-type: none"><li>• Confirmation via Email</li><li>• Confirmation via OTP</li></ul>
FR-3	User login	<ul style="list-style-type: none"><li>• Login through email</li><li>• Login through OTP</li><li>• Login by username and password</li></ul>
FR-4	User information	<ul style="list-style-type: none"><li>• It can pop up their preferred news article by setting the application settings</li></ul>

### Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	<ul style="list-style-type: none"><li>• The option of filtering the content based on different category should be incorporated in the app to provide the audience wide taste and sensibilities. So, the users can read news that matters to them.</li><li>• This will help the users to share news on various platforms such as Twitter and Facebook. This will not only give an amazing user experience and also will also increase the views.</li><li>• When a user is not online due to some reason, he/she should have to access to the internet. Whenever the user is online the news content is downloaded in the cache memory of the app, this is how a user can access to the content offline.</li></ul>
NFR-2	<b>Security</b>	<ul style="list-style-type: none"><li>• Authorised person can only manage database which contains the news article</li><li>• The information about the users is secured safely.</li><li>• People cannot watch news who are not registered with the application.</li></ul>
NFR-3	<b>Reliability</b>	<ul style="list-style-type: none"><li>• This application publishes only the reliable content only with the help of API</li><li>• How much time it takes to solve an issue</li></ul>
NFR-4	<b>Performance</b>	<ul style="list-style-type: none"><li>• Application performance refers to how well an app runs on a mobile device under various loads and circumstances.</li><li>• It might require measuring how long an app takes to load, mitigating crashes during peaks in user activity, or monitoring battery usage.</li><li>• App performance is an essential component of app development.</li><li>• Potential users won't just uninstall an app when annoyed; they will likely seek a competitor to address their needs.</li></ul>

		<ul style="list-style-type: none"> <li>Improving app performance includes but is not limited to optimizing network and device reliabilities for the app</li> </ul>
NFR-5	<b>Availability</b>	<ul style="list-style-type: none"> <li>Testing for availability means running an application for a planned period of time, collecting failure events and repair times, and comparing the availability percentage to the original service level agreement.</li> <li>It provides notifications, alerts, and other important information when issues arise.</li> <li>Hence, we can define web application availability monitoring as the process of checking the application's online availability, functionalities, speed, and performance</li> </ul>
NFR-6	<b>Scalability</b>	<ul style="list-style-type: none"> <li>Designing scalability tests Come up with possible user scenarios. You can modify them in various ways ...</li> <li>Design a load test with a set number of virtual users.</li> <li>Run your test to simulate user requests.</li> <li>Application scalability refers to the capacity of an app to handle growth, especially in handling more users and evolving concurrently with your application needs.</li> <li>Specifically, scalability relates to the app's backend and database and the servers they are hosted on.</li> </ul>