

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

|               |  |
|---------------|--|
| Date          | 10 October 2022  |
| Team ID       | PNT2022TMID39730   |
| Project Name  | Project – Real Time Communication System<br>Powered by AI for Specially Abled. |
| Maximum Marks | 4 Marks  |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

|      | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task)  |
|------|-------------------------------|---|
| FR-1 | User Registration             | <b>LOW VISION:</b><br>As a user who has trouble reading due to low vision, I want to be able to make the text larger on the screen so that I can read it.<br><b>Registration through Gmail</b>      |
| FR-2 | User Confirmation             | <b>IMPAIRED USER:</b><br>As a user who is hearing -impaired, I want a turn on video captions so that I can understand what is being said in videos.<br><b>Confirmation via Email</b>                |
| FR-3 | User Registration             | <b>COLOR BLINDNESS:</b><br>As a user who is color blind, I want to links to be distinguishable on the page so that I can find the links and navigate the site.<br><b>Registration through Gmail</b> |

**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>• Visual and Audio Help</li><li>• Text size scaling</li><li>• Reverse contrast</li></ul>   |
| NFR-2  | <b>Security</b>            | Important information: <ul style="list-style-type: none"><li>• Walking in single file or in narrow space.</li><li>• Steps, Stairs and Slope.</li><li>• Kerbs and Roads.</li></ul>                    |
| NFR-3  | <b>Reliability</b>         | To determine reliability measures are: <ul style="list-style-type: none"><li>• Test-Retest Repeatability</li><li>• Individual Repeatability</li></ul>  |
| NFR-4  | <b>Performance</b>         | To determine predictors of success in reading with low vision aids, in terms of reading acuity, optimum acuity reserve, and maximum reading speed, for observers with low vision for various causes. |
| NFR-5  | <b>Availability</b>        | Lack of adequate low vision services and barriers to their provision and uptake impact negatively on efforts to prevent visual impairment and blindness.   |
| NFR-6  | <b>Scalability</b>         | There is a large selection of device to help people with low vision. Some are “Optical”, glass lenses such as magnifying glasses and telescopes.   |