

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

|               |   |
|---------------|---|
| Date          | 03 October 2022   |
| Team ID       | PNT2022TMID34274  |
| 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.

| FR No. | Functional Requirement      | Sub Requirements  |
|--------|-----------------------------|---|
| FR-1   | <b>User Registration</b>    | Registration through Form<br>Registration through Gmail.  |
| FR-2   | <b>User confirmation</b>    | Confirmation via Email<br>Confirmation via OTP  |
| FR-3   | <b>System</b>               | Desktop with high resolution camera   |
| FR-4   | <b>Authorization Levels</b> | There are two levels of authorization namely standard access level and advanced access level.           |
| FR-5   | <b>External interface</b>   | Ethernet, Wi-Fi, USB to provide internet facility to access the resources with real time communication. |
| FR-6   | <b>Reporting</b>            | If any issues found in the application, automatically it will be notified to the developer.             |

**Non-functional Requirements:**

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

| FR No. | Non-Functional Requirement | Description   |
|--------|----------------------------|---|
| NFR-1  | <b>Usability</b>           | To convey a message to normal people, as well as convert speech into understandable sign language for the deaf and dumb people.                                   |
| NFR-2  | <b>Security</b>            | Converted information using signs into speech is accessed only by the user.   |
| NFR-3  | <b>Reliability</b>         | Provides insight into potential issues for desktop applications on managed devices.   |
| NFR-4  | <b>Performance</b>         | The time for converting signs into speech should be faster for the real time communication.   |
| NFR-5  | <b>Availability</b>        | Provides automatic recovery as much as possible.  |
| NFR-6  | <b>Scalability</b>         | This app enables deaf and dumb people to convey their information using signs which get converted to human-understandable language and speech is given as output. |