Project Design Phase-II

Solution Requirements (Functional & Non-functional)

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| Date | 15 November 2022 |
| Team ID | PNT2022TMID29172 |
| Project Name | Project – Real-Time Communication System Powered by AI for Specially Abled |
| 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 Requirement | Converting sign language into speech that can be understand by normal people using an application. |
| FR-2 | User Registration | Manual Sign up using the application or Gmail. |
| FR-3 | User Confirmation | OTP authentication through phone messages, email, notices, paper and confirmation. |
| FR-4 | Product Implementation | Install the dataset to recognise and translate hand  gestures and voice for the real-time communication by using the application. |
| FR-5 | Payment Option | Bank transfer, Debit cards, UPI method, if pro version required. |
| FR-6 | Product Feedback | Through the application, phone conversation and Gmail. |

# 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** | It is used to describe the application and easy to access the application with the guidelines. |
| NFR-2 | **Security** | It ensures the security of the application by building a firewall and two step verification support.  Accessed only by authorised person by given user ID and password or OTP verification. |
| NFR-3 | **Reliability** | To maintain the application conditions and update the version of the application. System update and software update are possible to increase various  features and durability based on technology. |
| NFR-4 | **Performance** | This application collects the datasets of hand gestures to provide accurate prediction. Using this method, we can communicate easily at anytime. This  application is user friendly and can be accessed by both specially abled and normal people. |
| NFR-5 | **Availability** | Depending on the requirements of the user, all required functions will be offered. When the user  requests any features, the features are made available in places where users like to know about it. |
| NFR-6 | **Scalability** | As based on application, real-time communication is accessed on a compatible devices. The application is based on voice conversion system, hand gesture  recognition and translation. |