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| **Project ID** | **Student Name(s)** | **Registration Number** | **Section (A/B/C)** | **Instructor Remarks** |
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**Domain Name:** Software

**Problem Statement:**

Real-Time Sign Language Translation System

To develop a real-time system that converts speech or text into sign language gestures, ensuring

seamless communication between non-sign language users and individuals who rely on sign

language. The system will integrate deep learning techniques for speech recognition, natural

language processing (NLP), and 3D gesture visualization.

**Summary:**

We will be working on a Real-Time Sign Language Translation System aimed at converting speech or text into sign language gestures to enhance communication between individuals who use and do not use sign language. The system integrates deep learning models, natural language processing (NLP), and 3D gesture rendering for seamless interaction. Information retrieval plays a crucial role in gathering the vast dataset and training data needed for the system, while software engineering ensures the development of a reliable, efficient, and scalable application. Techniques like speech-to-text, tokenization, and gesture rendering are essential components for real-time performance, emphasizing the intersection of machine learning and software architecture