Project Design Phase

Solution Architecture

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Team ID	592869
Project Name	Lip Reading using Deep Learning
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Solution Architecture:

The system architecture for lip reading using deep learning comprises the following components: Video inputs capture lip movements, which undergo preprocessing to extract relevant visual features. A hybrid deep learning model combines Convolutional Neural Networks (CNNs) to analyze visual data with Long Short-Term Memory networks (LSTMs) to process sequential information. This model interprets lip movements to generate text representations of spoken words, providing the final text output.

In addition, a user-friendly website serves as the primary interface for users to interact with the system. This architecture prioritizes data privacy, security, and a seamless user experience.

Solution Architecture Diagram: