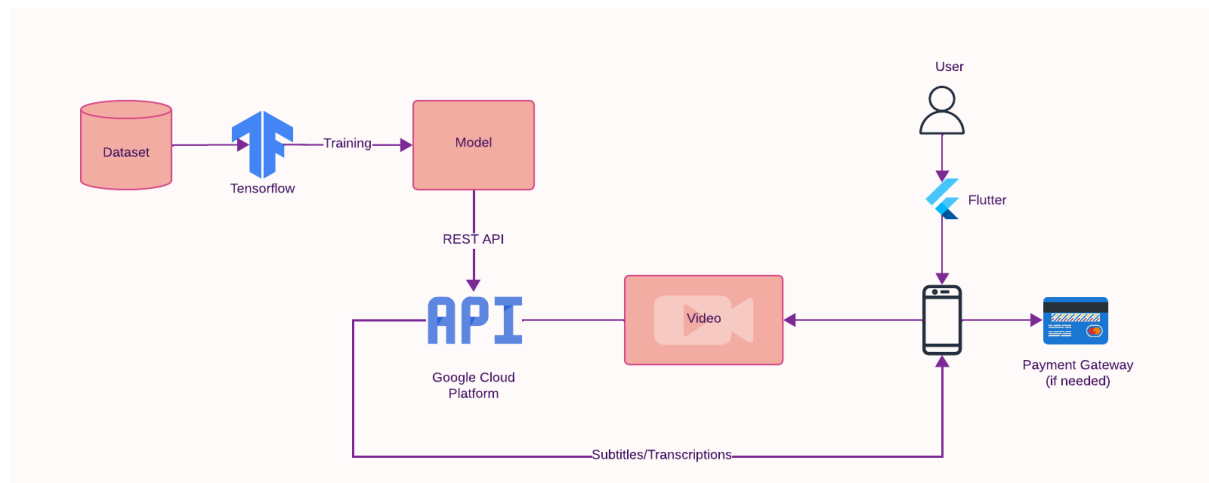| Date	23 October 2023
Team ID	Team-591621
Project Name	Project - Lip Reading using Deep Learning
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.

- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.

- Define features, development phases, and solution requirements.

- Provide specifications according to which the solution is defined, managed, and delivered.

Solution Architecture Diagram:

Architecture:

User Interface (UI) Layer:

- Component: Flutter Mobile App.
- Interaction: Users interact with the mobile app to upload videos and view real-time subtitles.

Application Layer:

- Components: Flutter Mobile App, Real-Time Transcription Engine (Python with TensorFlow), REST API (Google Cloud Platform).
- Interaction: The Flutter mobile app communicates with both the local Real-Time Transcription Engine (built using TensorFlow) and the remote REST API hosted on Google Cloud Platform for real-time word detection and transcription.

Cloud Infrastructure:

- Component: Google Cloud Platform (GCP - for REST API hosting).
- Interaction: The REST API is hosted on GCP for model access.

Monetization and Business Logic:

- Component: Payment Gateway (Razorpay).
- Interaction: Payments are processed via the Razorpay payment gateway.