CHP 4:

ARCHITECTURE DIAGRAM:

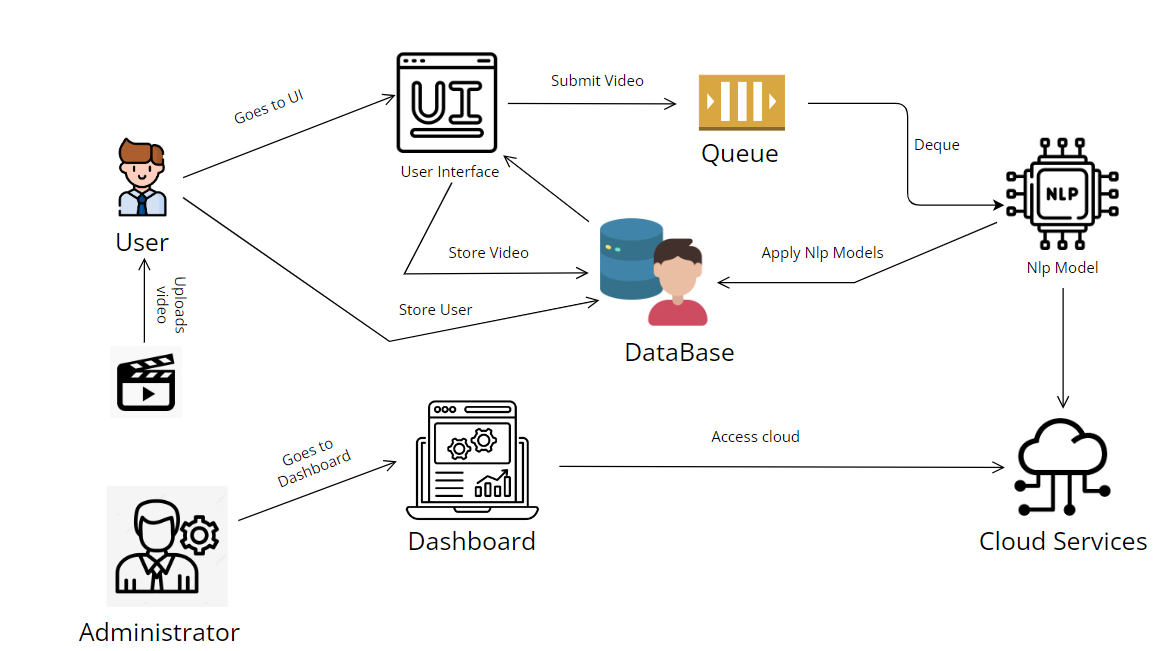
This architecture diagram outlines the components of a Sign Language Transcription System:

1. **User**: Represents individuals interacting with the system, providing user data and submitting sign language videos.
2. **SignLanguageVideo**: Represents videos of sign language submitted by users.
3. **UserDatabase**: Stores user information and sign language videos.
4. **UserInterface**: Web interface for users to interact with the system, displaying user information, and submitting sign language videos.
5. **MessageQueue**: Manages the queue of sign language videos for processing.
6. **TranslationService**: Utilizes NLP models to process sign language videos and generate text.
7. **CloudServices**: Integrates the message queue and translation service.
8. **Administrator**: Represents administrators with access to system management.
9. **AdministratorInterface**: Web interface for administrators to access the dashboard, select actions, and apply changes.

Key Interactions:

* Users submit sign language videos through the UserInterface.
* User data and videos are stored in the UserDatabase.
* MessageQueue manages the queue of videos for processing.
* TranslationService processes videos using NLP models.
* CloudServices integrate the message queue and translation service.
* Administrators manage the system through the AdministratorInterface.

This architecture facilitates the transcription of sign language videos into text, promoting inclusivity and accessibility.



ERD: