

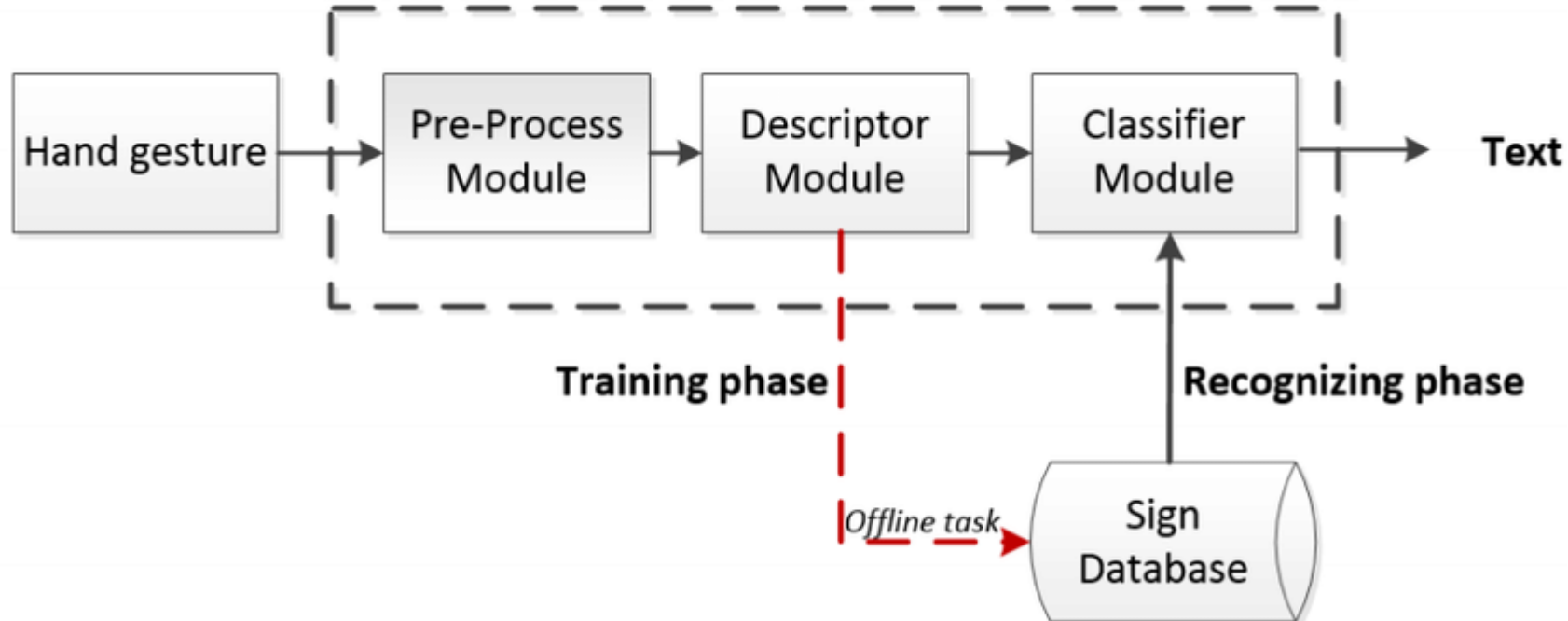
**Project Design Phase-II**  
**Data Flow Diagram & User Stories**

Date	04 November 2023
Team ID	Team-591587
Project Name	ASL- Alphabet Image Recognition
Maximum Marks	4 Marks

**Data Flow Diagrams:**

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

## STATIC GESTURE RECOGNITION CORE



### User Stories

Use the below template to list all the user stories for the ASL - Alphabetic Image Recognition

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release

As a language learner	Recognition of ASL alphabetic signs through image input	USN-1	As a user, I want to be able to take a photo of an ASL alphabetic sign using the app's camera feature.	The app should feature a camera interface for users to capture clear, focused images, and prompt them to confirm before processing.	High	Sprint-1
As a parent of a child with hearing impairments	Interactive learning experience for ASL alphabets	USN-2	As a parent, I want the app to have interactive games or quizzes to help my child learn and practice ASL alphabets.	The app should feature interactive, engaging, and intuitive games for children learning ASL alphabets, with progress tracking to track their learning journey.	Medium	Sprint-1
As a teacher of a deaf education class	Comprehensive ASL dictionary integration	USN-3	As a teacher, I want the app to have an extensive ASL dictionary where I can search for signs and access their meanings, usage, and variations.	The app should offer a searchable database of ASL signs, complete with video demonstrations, descriptions, and usage examples, allowing users to easily navigate and access information.	High	Sprint-2
As a developer integrating the ASL recognition API	API documentation and integration support	USN-4	As a developer, I want clear and comprehensive documentation for the ASL recognition API, including sample code and integration guidelines.	The API documentation should cover endpoints, parameters, and response formats, provide sample code snippets for popular programming languages, and offer support resources like forums or	Medium	Sprint-2

				technical assistance.		
As a user in a noisy environment	Improved image recognition in varied conditions	USN-5	As a user, I want the app to have robust image recognition capabilities that can accurately identify ASL alphabets even in low light or noisy environments.	The app should be versatile, able to handle various lighting conditions and backgrounds, and provide accurate recognition despite potential noise or interference, ensuring consistent and reliable user experience.	High	Sprint-3
As a student learning ASL independently	Practice mode for ASL fingerspelling	USN-6	As a user, I want the app to have a practice mode specifically for ASL fingerspelling where I can practice recognizing and reproducing signs.	The practice mode should offer random fingerspelling exercises, provide feedback on accuracy and speed, and allow users to adjust difficulty levels.	Medium	Sprint-3
As a researcher studying ASL linguistics	Data export functionality	USN-7	As a user, I want the ability to export data or results generated by the app for research or analysis purposes.	The app should facilitate data export in common file formats like CSV and JSON, include relevant metadata, and provide comprehensive and organized data for easy	High	Sprint-4

				analysis.		
As a user with accessibility needs	Integration with screen reader software	USN-8	As a user, I want the app to be compatible with screen reader software to ensure accessibility for visually impaired users.	The app should be designed to be compatible with screen reader software, with all functionalities easily accessible through screen reader navigation, and provide clear labeling and descriptions for screen reader users.	High	Sprint-4
As a language enthusiast exploring ASL	Social sharing of learned signs	USN-9	As a user, I want to be able to share learned ASL signs on social media platforms directly from the app.	The app features easy sharing of learned signs through integration with popular social media platforms, with clear and intuitive functionality for users.	Medium	Sprint-5
As a teacher organizing ASL lessons	Customizable lesson plans	USN-10	As a teacher, I want the ability to create and customize lesson plans within the app for my ASL classes.	The app should enable lesson structure creation with specific sign sequences, provide customization options for lesson duration, difficulty, and content, and allow for saving and reusing customized plans.	High	Sprint-5

