Project Design Phase-II
Data Flow Diagram & User Stories

Date	03 November 2023
Team ID	591915
Project Name	Image Caption generation
Maximum Marks	4 Marks

Data Flow Diagrams with Architecture:

A classic visual depiction of the information flows inside a system is a data flow diagram (DFD). An orderly and understandable DFD can graphically represent the appropriate amount of system requirement. It displays the locations of data storage facilities, how data is changed, and how it enters and exits the system.

source 1

source 2

source 3

Image data

Load data

Data Preprocessing

Train Data

DenseNet
Model

Prediction

UI

User 1

User N

miro

Image

p0   p1   p2   pn

softmax   softmax   softmax   softmax

LSTM   LSTM   LSTM   LSTM

CNN   Linear

p0   p1   pn-1

IMAGE CAPTION

Training Data
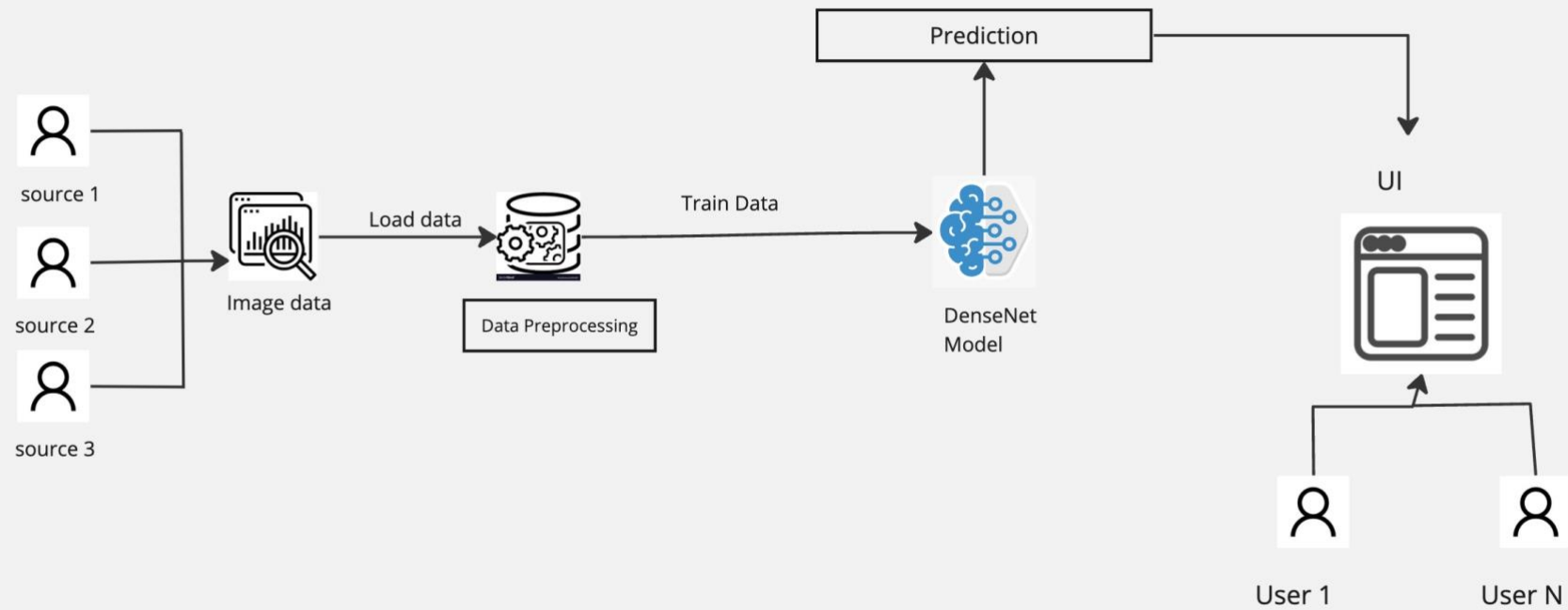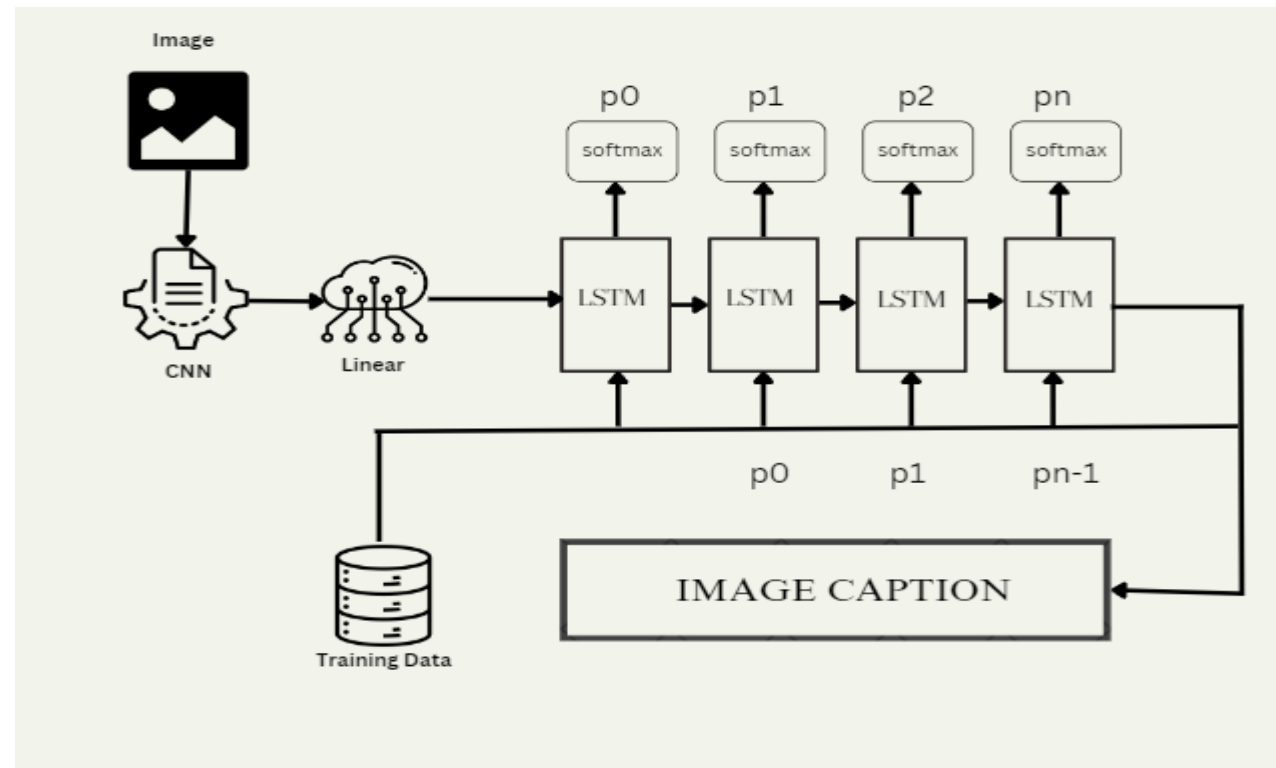
User Stories :

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
End User	Registration	USN-1	I can input photos to the picture caption generator software, and it will create insightful captions for them. The captions ought to be clear and pertinent to the content of the images.	I may categorize the object and view the generated descriptions for the picture.	High	Sprint-1
End User		USN-2	I can change the captions that the software generates as an end user to make them more precise or unique. The generated captions should be swapped out with the altered ones.	Suitable for object classification as well	High	Sprint-1
End User		USN-3	I can store the created or modified captions and the related photos as an end user for further use. The app ought to provide access to saved captions.	Captions can be edited	Low	Sprint-2
System Admin		USN-4	I may make the trained image captioning model available to end users through the app by deploying it to a production environment in my capacity as a system administrator.	Other models can potentially make use of this dataset.	Medium	Sprint-1
System Admin	Login	USN-5	I can keep an eye on the picture caption generator's performance as a system administrator to make sure it functions properly. Any problems or mistakes must be fixed right away.	This model may be used to different datasets, and it can be trained as needed.	High	Sprint-1
System Admin	Dashboard	USN-6	I can scale the infrastructure as a system administrator to meet growing user demand, ensuring that the software stays available and	The model can be modified based on accuracy.	High	Sprint-1

			responsive.			
Web User	Login	USN-7	I can input photographs for caption generating through a web portal that I can access as a user. The program should process the uploaded photos and create captions for them.	Web users can create an account and login to the dashboard.	High	Sprint-1
Web User	Dashboard	USN-8	I can access and see the produced captions for the photos I've submitted using the online interface as a user.	Anybody who has the login information can access the account.	High	Sprint-1
Web User		USN-9	I can modify the captions created for photos I've submitted using the online interface as a user. The generated captions should be swapped out with the altered ones.		High	Sprint-1
Git User	Git registration	USN-10	I can create a Git repository for the picture caption generator project because I use Git. Project files, scripts, and documentation for team development should all be included in the repository.	Anyone can access the resources and collaborate with the teammates	High	Sprint-2
Git User		USN-11	I can work with other team members on the picture caption generator project by branching, committing, and merging code changes as a Git user. Git is the preferred tool for efficiently managing version control.	Available for open source and can be developed further	High	Sprint-2
Git User		USN-12	I can start and take part in code reviews as a Git user to guarantee code quality and adherence to coding standards in the project including the image caption generator. Project code should be improved as a result of code reviews.		High	Sprint-2